DAC Bond

REOFFERING CIRCULAR – Book-Entry Only **RATINGS: See "Ratings of the Reoffered Bonds" herein**

At the time of the original issuance and delivery of the Reoffered Bonds, Bond Counsel delivered its opinion (the "Original Opinion") to the effect that, as of the date of issuance of the Reoffered Bonds, under then existing law, and assuming compliance with certain requirements of the Internal Revenue Code of 1986, as amended (the "Code") and covenants regarding the use, expenditure and investment of Reoffered Bond proceeds, interest on the Reoffered Bonds would be excluded from gross income of the owners of the Reoffered Bonds for federal income tax purposes. The Original Opinion has not been updated or reissued in connection with the Credit Enhancement Changes (as described and defined herein) and the remarketing of the Reoffered Bonds. On October 22, 2009, Bond Counsel will deliver an opinion to the effect that the Credit Enhancement Changes will not in and of themselves adversely affect the exclusion of interest on the Reoffered Bonds from gross income for purposes of federal income taxation. Bond Counsel will not express an opinion regarding the current status of such interest for federal income tax purposes. See "TAX MATTERS" herein.

$145,495,000
THE PITTSBURGH WATER AND SEWER AUTHORITY

$72,750,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008
(CUSIP 725304 RD3)
$72,745,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008
(CUSIP 725304 RE1)

Dated: Date of Delivery Price: 100% Due: September 1, 2039

The Pittsburgh Water and Sewer Authority (the "Authority" or "PWSA") is reoffering its (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008 (the "Series 2008B Bonds") in two sub-series consisting of $72,750,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 (the "Series 2008B-1 Bonds") and $72,745,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008 (the "Series 2008B-2 Bonds" and together with the Series 2008B-1 Bonds, the "Reoffered Bonds"). **See "REMARKETING PLAN".**

The Reoffered Bonds are dated the date of delivery and were originally issued pursuant to a Trust Indenture dated as of October 15, 1993 (the "First Lien Indenture"), as amended and supplemented, including a Seventh Supplemental Indenture dated as of June 1, 2008, as amended (the "Seventh Supplemental Indenture"), each by and between the Authority and The Bank of New York Mellon Trust Company, N.A., as Trustee (in such capacity, the "Trustee"). The Reoffered Bonds will be issued in book-entry form registered in the name of Cede & Co., the nominee of The Depository Trust Company, New York, New York ("DTC"). The payment of the principal of and premium, if any, and interest on the Reoffered Bonds will be made by the Trustee directly to Cede & Co., as nominee for DTC, a registered owner of the Reoffered Bonds, to be subsequently disbursed to DTC Participants and thereafter to beneficial owners of the Reoffered Bonds, all as described herein. Purchasers of the Reoffered Bonds will not receive physical delivery of certificates representing their ownership interest in the Reoffered Bonds. See "BOOK-ENTRY ONLY SYSTEM". The Reoffered Bonds will initially be issued in fully registered form in minimum denominations of $100,000 and integral multiples of $5,000 in excess thereof.

The Reoffered Bonds will be reoffered in the Weekly Mode and will bear interest at the Weekly Rates initially established by the respective Remarketing Agents from their reoffering date to but excluding the first day of the next Weekly Rate Period. Thereafter, for each Weekly Rate Period, the Reoffered Bonds will bear interest at the respective Weekly Rate determined by the respective Remarketing Agent for each sub-series of Reoffered Bonds in accordance with the procedures detailed herein. Interest on the Reoffered Bonds will be payable on November 1, 2009 and on each Interest Payment Date (as defined herein) thereafter until maturity or earlier redemption or unless and until converted to the Fixed Mode, as described herein. See "THE REOFFERED BONDS – Rate Modes". **This Reoffering Circular describes the terms and provisions of the Reoffered Bonds while in the Weekly Mode only.**

The Reoffered Bonds are subject to redemption prior to maturity and to optional and mandatory tender for purchase as herein described. See "THE REOFFERED BONDS – Redemption Prior to Maturity" and " – Optional Tender and Mandatory Tender".

The Reoffered Bonds are limited obligations of the Authority payable from the Receipts and Revenues (as defined in the Indenture) pledged thereto on a parity with other First Lien Bonds issued pursuant to the provisions of the Indenture, as described herein.

Each sub-series of the Reoffered Bonds is also payable from funds drawn by the Trustee under separate irrevocable direct pay letters of credit (collectively, the "Letters of Credit") issued by:

Bank of America Merrill Lynch (Series 2008B-1 Bonds)

PNC BANK (Series 2008B-2 Bonds)

Bank of America, N.A. ("BOA") will provide the Series 2008B-1 Letter of Credit and PNC Bank, National Association ("PNC") will provide the Series 2008B-2 Letter of Credit. Each Letter of Credit, which will expire on October 22, 2011, unless extended or earlier terminated, will entitle the Trustee to draw up to (a) the principal amount of the applicable sub-series of Reoffered Bonds for payment of the principal of such Reoffered Bonds when due by reason of maturity, redemption or acceleration, or the purchase price of such Reoffered Bonds tendered to the Trustee and not remarketed equal to the principal amount of such Reoffered Bonds, plus (b)(i) an amount equal to interest on the Series 2008B-1 Bonds for up to 50 days (computed at the Maximum Interest Rate), for payment of interest on the Series 2008B-1 Bonds when due or (ii) an amount equal to interest on the Series 2008B-2 Bonds for up to 34 days (computed at the Maximum Interest Rate) for payment of interest on the Series 2008B-2 Bonds when due, or as part of the Purchase Price of such sub-series of Reoffered Bonds, all as described herein. A Letter of Credit may be replaced with an Alternate Liquidity Facility and the Letter of Credit may be terminated before its expiration date, all as described herein.

BOA's obligation to provide credit and liquidity support for the Series 2008B-1 Bonds is a separate obligation from PNC's obligation to provide credit and liquidity support for the Series 2008B-2 Bonds. PNC's obligation to provide credit and liquidity support for the Series 2008B-2 Bonds is a separate obligation from BOA's obligation to provide credit and liquidity support for the Series 2008B-1 Bonds.

THE REOFFERED BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY PAYABLE FROM THE RECEIPTS AND REVENUES (AS DEFINED IN THE INDENTURE) PLEDGED THERETO. NEITHER THE CITY OF PITTSBURGH NOR THE COMMONWEALTH OF PENNSYLVANIA NOR ANY POLITICAL SUBDIVISION (OTHER THAN THE AUTHORITY) THEREOF IS OBLIGATED TO PAY THE PRINCIPAL, REDEMPTION PRICE OF, OR INTEREST ON, THE REOFFERED BONDS, AND NEITHER THE FULL FAITH, CREDIT NOR TAXING POWER OF THE CITY OF PITTSBURGH OR THE COMMONWEALTH OF PENNSYLVANIA OR ANY OTHER POLITICAL SUBDIVISION (OTHER THAN THE AUTHORITY) THEREOF IS PLEDGED TO SUCH PAYMENT. THE AUTHORITY HAS NO TAXING POWER.

The Reoffered Bonds are reoffered when, as and if issued by the Authority and received by the Remarketing Agents, subject to the receipt of the approving legal opinion of Pepper Hamilton LLP, Bond Counsel. Certain legal matters will be passed upon for the Authority by Thorp, Reed & Armstrong, LLP and for the Remarketing Agents by its counsel Nixon Peabody LLP. The Authority expects that delivery of the Reoffered Bonds in definitive form will be made in New York, New York, on or about October 22, 2009.

Merrill Lynch & Co.
(Remarketing Agent for the 2008B-1 Bonds)

J.P. Morgan
(Remarketing Agent for the 2008B-2 Bonds)

October 16, 2009

THE PITTSBURGH WATER AND SEWER AUTHORITY
Don Walko, Chairman
Robert P. Jablonowski, Vice Chairman
Scott Kunka, Treasurer
Henry C. Blum, Secretary
Margaret L. Lanier, Assistant Secretary/Assistant Treasurer
Dan Deasy, Member
Patrick Dowd, Member
Michael P. Kenney, Executive Director

AUTHORITY COUNSEL
Thorp, Reed & Armstrong, LLP
Pittsburgh, Pennsylvania

AUTHORITY CONSULTING ENGINEER
Chester Engineers
Pittsburgh, Pennsylvania

FINANCIAL ADVISOR AND SWAP ADVISOR
PNC Capital Markets LLC
Pittsburgh, Pennsylvania

REMARKETING AGENTS
Merrill Lynch, Pierce, Fenner & Smith Incorporated (for the Series 2008B-1 Bonds)
J. P. Morgan Securities Inc. (for the Series 2008B-2 Bonds)

BOND COUNSEL
Pepper Hamilton LLP
Pittsburgh, Pennsylvania

REMARKETING AGENTS' COUNSEL
Nixon Peabody LLP
New York, New York

TRUSTEE AND PAYING AGENT
The Bank of New York Mellon Trust Company, N.A.
Pittsburgh, Pennsylvania

LETTER OF CREDIT PROVIDERS

For the Series 2008B-1 Bonds:
Bank of America, N.A.
Philadelphia, Pennsylvania

For the Series 2008B-2 Bonds:
PNC Bank, National Association
Pittsburgh, Pennsylvania

COUNSEL TO LETTER OF CREDIT PROVIDERS
Buchanan Ingersoll & Rooney PC
Pittsburgh and Philadelphia, Pennsylvania

No dealer, broker, salesperson or other person has been authorized by the Authority to give any information or to make any representation in connection with the Reoffered Bonds or the matters described herein, other than those contained in this Reoffering Circular, and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Reoffering Circular does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the Reoffered Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

All quotations from and summaries and explanations of provisions of laws herein do not purport to be complete and reference is made to said laws for full and complete statements of their provisions.

This Reoffering Circular is not to be construed as a contract or agreement between the Authority and the purchasers or holders of any of the Reoffered Bonds. Any statements made in this Reoffering Circular involving matters of opinion, whether or not expressly so stated, are intended merely as opinion and not as representations of fact. The information contained herein is subject to change without notice and neither the delivery of this Reoffering Circular nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority since the date hereof.

The order and placement of materials in this Reoffering Circular, including the Appendices, are not to be deemed to be a determination of relevance, materiality or importance, and this Reoffering Circular, including the Appendices, must be considered in its entirety.

The Authority has deemed this Reoffering Circular to be final for the purposes of Securities and Exchange Commission Rule 15c2-12(b)(3) promulgated under the Securities Exchange Act.

Other than with respect to the information regarding Bank of America, N.A. and PNC Bank, National Association (together, the "LOC Banks") contained in APPENDIX F, none of the information in this Reoffering Circular has been supplied or verified by the LOC Banks, and the LOC Banks make no representation or warranty, express or implied as to: (i) the accuracy or completeness of such information; (ii) the validity of the Reoffered Bonds; or (iii) the tax-exempt status of the interest on the Reoffered Bonds.

The Remarketing Agents have reviewed the information in this Reoffering Circular in accordance with, and as a part of, their responsibilities to investors under federal securities law, as applied to the facts and circumstances of this transaction, but the Remarketing Agents do not guarantee the accuracy or completeness of such information.

THE REOFFERED BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, NOR HAS THE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE REGISTRATION OR QUALIFICATION OF THE REOFFERED BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE SECURITIES LAWS OF THE STATES, IF ANY, IN WHICH THE REOFFERED BONDS HAVE BEEN REGISTERED OR QUALIFIED AND THE EXEMPTION FROM REGISTRATION OR QUALIFICATION IN CERTAIN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF. NEITHER THESE STATES NOR ANY OF THEIR AGENCIES HAVE PASSED UPON THE MERITS OF THE REOFFERED BONDS OR THE ACCURACY OR COMPLETENESS OF THIS REOFFERING CIRCULAR. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

[THIS PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

INTRODUCTION 1
THE AUTHORITY 2
DEBT OF THE AUTHORITY 2
PLAN OF FINANCE 3
THE REOFFERED BONDS 4
REGISTRATION, TRANSFER AND EXCHANGE OF THE REOFFERED BONDS 10
BOOK-ENTRY ONLY SYSTEM 10
ESTIMATED SOURCES AND USES OF FUNDS 13
SECURITY FOR THE REOFFERED BONDS 13
LETTERS OF CREDIT 14
FLOW OF FUNDS 14
RATE COVENANT 15
INTEREST RATE SWAP AGREEMENTS 16
CERTAIN BONDHOLDERS' RISKS 17
LITIGATION 20
TAX MATTERS 20
THE TRUSTEE 21
LEGAL OPINIONS 21
INDEPENDENT AUDITORS 21
RATINGS OF THE REOFFERED BONDS 21
CONTINUING DISCLOSURE; DISCLOSURE DISSEMINATION 22
REMARKETING 24
FINANCIAL ADVISOR AND SWAP ADVISOR 25
CERTAIN RELATIONSHIPS 25
MISCELLANEOUS 26

APPENDIX A – Certain Information Regarding the Authority and Water and Sewer System
APPENDIX B – Summary of the Indentures
APPENDIX C – Authority Financial Statements as of December 31, 2008 and December 31, 2007
APPENDIX D – Certain Information Regarding the City of Pittsburgh
APPENDIX E – Consulting Engineer's Annual Report as of March 2009
APPENDIX F – Information Regarding the Letter of Credit Banks
APPENDIX G – Summary of the Letters of Credit and Reimbursement Agreements
APPENDIX H – Form of Alternate Liquidity Facility Bond Counsel Opinions and Initial Approving Opinion

SUMMARY INFORMATION

THIS SUMMARY STATEMENT IS SUBJECT IN ALL RESPECTS TO THE MORE COMPLETE INFORMATION CONTAINED IN THIS REOFFERING CIRCULAR AND REOFFERING OF THE REOFFERED BONDS TO THE POTENTIAL PURCHASERS IS MADE ONLY BY MEANS OF THIS REOFFERING CIRCULAR. NO PERSON IS AUTHORIZED TO DETACH THIS SUMMARY FROM THE REOFFERING CIRCULAR OR OTHERWISE TO USE THE SAME WITHOUT THE ENTIRE REOFFERING CIRCULAR.

Issuer.....	The Pittsburgh Water and Sewer Authority (the "Authority" or "PWSA").
Reoffered Bonds	The Pittsburgh Water and Sewer Authority, $72,750,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 and $72,745,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008.
Date of Bonds	Date of Delivery.
Denomination.....	Initially, $100,000 and integral multiples of $5,000 in excess thereof.
Maturity	September 1, 2039.
Interest	Payable on the first Business Day of each month commencing November 1, 2009.
Security	The Reoffered Bonds are secured (along with all other bonds issued pursuant to the Indenture, certain Periodic Payments due under Qualified Interest Rate Swap Agreements and obligations due under the Reimbursement Agreements (as defined herein)) by a first lien pledge of the Receipts and Revenues of the Authority after payment of the Current Expenses, together with certain funds held by the Trustee under the Indenture as provided therein. (See "SECURITY FOR THE REOFFERED BONDS – Pledge of Receipts and Revenues" herein).
Letters of Credit	Concurrently with the remarketing of the Reoffered Bonds, the Authority will cause to be delivered to the Trustee separate irrevocable, direct-pay Letters of Credit issued by BOA and PNC (each an "LOC Bank" and together, the "LOC Banks") in connection with the reoffering of the Reoffered Bonds. BOA will issue its irrevocable, direct-pay letter of credit supporting payment of the Series 2008B-1 Bonds (the "2008B-1 Letter of Credit") and PNC will issue its irrevocable, direct-pay letter of credit supporting payment of the Series 2008B-2 Bonds (the "2008B-2 Letter of Credit"). The Trustee will be entitled under each respective Letter of Credit to (a) draw up to the principal amount of the applicable sub-series of Reoffered Bonds to enable the Trustee to pay the principal amount of such sub-series of Reoffered Bonds when due by reason of maturity, redemption or acceleration, plus (b)(i) an amount equal to interest on the Series 2008B-1 Bonds for up to 50 days (computed at the Maximum Interest Rate), for payment of interest on the Series 2008B-1 Bonds when due or (ii) an amount equal to interest on the Series 2008B-2 Bonds for up to 34 days (computed at the Maximum Interest Rate) for payment of interest on the Series 2008B-2 Bonds when due, or to pay the Purchase Price of such sub-series of Reoffered Bonds tendered to it and not remarketed by the applicable Remarketing Agent. (See "LETTERS OF CREDIT"). **BOA's obligation to provide credit and liquidity support pursuant to the 2008B-1 Letter of Credit is a separate obligation from PNC's obligation to provide credit and liquidity support pursuant to the 2008B-2 Letter of Credit. PNC's obligation to provide credit and liquidity support pursuant to the 2008B-2 Letter of Credit is a separate obligation from BOA's obligation to provide credit and liquidity support pursuant to the Series 2008B-1 Letter of Credit.**
Use of Proceeds.....	The proceeds of the Reoffered Bonds will be used to pay the Purchase Price of the Reoffered Bonds.
Redemption.....	The Reoffered Bonds are subject to optional and mandatory redemption, and extraordinary optional redemption prior to maturity. (See "THE REOFFERED BONDS — Redemption Prior to Maturity" herein).
Bond Ratings.....	The following ratings on the Reoffered Bonds are based solely upon the creditworthiness of the LOC Banks: Moody's: "Aaa" / "VMIG 1" Standard & Poor's: "AAA" / "A-1" Unenhanced ratings on the Reoffered Bonds are as follows: Moody's: "Baa1" Standard & Poor's: "A"
Trustee & Paying Agent.....	The Bank of New York Mellon Trust Company, N.A.

$145,495,000

THE PITTSBURGH WATER AND SEWER AUTHORITY

(Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008

consisting of:

$72,750,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008
and
$72,745,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008

INTRODUCTION

The purpose of this Reoffering Circular, which includes this introductory statement, the cover page, the summary information and the Appendices hereto, is to set forth certain information pertaining to The Pittsburgh Water and Sewer Authority (the "Authority" or "PWSA"), a body corporate and politic duly created and existing under the Pennsylvania Municipality Authorities Act, 53 Pa. C.S.A. §5601 et seq. (the "Act"), and the reoffering by the Authority of its (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series of 2008, consisting of (i) $72,750,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 (the "Series 2008B-1 Bonds") and (ii) $72,745,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008 (the "Series 2008B-2 Bonds," and together with the Series 2008B-1 Bonds, the "Reoffered Bonds").

The Reoffered Bonds are being reoffered pursuant to a Trust Indenture dated as of October 15, 1993 (the "First Lien Indenture"), as amended and supplemented by a First Supplemental Indenture dated as of July 15, 1995, a Second Supplemental Indenture dated as of March 1, 1998, a Third Supplemental Indenture dated as of March 1, 2002, a Fourth Supplemental Indenture dated as of September 15, 2003, a Fifth Supplemental Indenture dated as of June 1, 2005, a Sixth Supplemental Indenture dated as of March 1, 2007 and a Seventh Supplemental Indenture dated as of June 1, 2008, as amended, including as amended by the Amending Supplement to the Initial First Lien Indenture and the Seventh Supplemental Indenture, dated as of October 15, 2009 (collectively, the "Indenture") by and between the Authority and The Bank of New York Mellon Trust Company, N.A., as Trustee (the "Trustee").

The Reoffered Bonds will initially be reoffered in the Weekly Mode as more fully described herein. The Indenture provides for conversion of the Reoffered Bonds to a Fixed Mode. If converted from the Weekly Mode to the Fixed Mode, the Reoffered Bonds will be purchased from the existing Bondholders pursuant to the mandatory tender provisions of the Indenture on the Conversion Date. **This Reoffering Circular provides information with respect to the Reoffered Bonds in the Weekly Mode only and does not provide information with respect to the Reoffered Bonds in the Fixed Mode.** If the Authority converts any one or more sub-series of the Reoffered Bonds from the Weekly Mode to the Fixed Mode, a supplement to this Reoffering Circular or a new offering document describing the Fixed Mode, as applicable, will be prepared.

All capitalized terms not otherwise defined herein shall have the same meanings ascribed to them in the definitions set forth in APPENDIX B — "SUMMARY OF THE INDENTURE - Definitions of Certain Terms." All references herein to the Act, the Reoffered Bonds, the Indenture, the Letters of Credit, the Reimbursement Agreements, the Remarketing Agreements and the Continuing Disclosure Agreement are qualified in their entirety by reference to the complete texts thereof. Copies of drafts of such documents may be obtained during the initial offering period from the principal offices of the Remarketing Agents and thereafter, executed copies may be obtained from the Trustee. All statements in this Reoffering Circular involving matters of opinion, estimates, forecasts, projections or the like, whether or not expressly so stated, are intended as such and not as representations of fact. No representation is made that any of such statements will be realized.

THE AUTHORITY

The Authority is a body corporate and politic organized and existing under the Act pursuant to Resolution No. 36 of the Council of the City of Pittsburgh (the "City"), duly enacted on February 6, 1984, approved by the Mayor on February 8, 1984, and effective February 16, 1984. The Secretary of the Commonwealth of Pennsylvania approved the Authority's Articles of Incorporation and issued a Certificate of Incorporation on February 17, 1984. Articles of Amendment were approved and a Certificate of Amendment was issued by the Pennsylvania Department of State on December 11, 1989, to include, among authorized projects, low head dams and facilities for generating surplus electric power. Articles of Amendment were approved and a Certificate of Amendment was issued by the Pennsylvania Department of State on May 9, 2008, to extend the term of existence of the Authority to May 21, 2045.

Under its Articles of Incorporation, the Authority is specifically authorized to acquire, hold, construct, finance, improve, maintain, operate, own and lease, either as lessor or lessee, projects of the following kinds and character: sewers, sewer systems or parts thereof, waterworks, water supply works, and water distribution systems, low head dams and facilities for generating surplus power.

The Authority was established in February 1984 by the City for the purpose of assuming responsibility for the operation of the City's water supply and distribution and wastewater collection systems (the "Water and Sewer System"). Pursuant to a lease and management agreement dated March 29, 1984 between the Authority and the City (the "Lease and Management Agreement"), the Water and Sewer System was leased to the Authority. In 1995, the Lease and Management Agreement was terminated and the Authority was granted the option to acquire the portion of the Water and Sewer System owned by the City pursuant to a Capital Lease Agreement dated as of July 15, 1995 between the Authority and the City (the "Capital Lease Agreement"). (See APPENDIX A — "CERTAIN INFORMATION REGARDING THE AUTHORITY AND WATER AND SEWER SYSTEM — Capital Lease Agreement with the City of Pittsburgh.")

The Water and Sewer System provides water, wastewater collection and transmission service to approximately 250,000 customers. The Water and Sewer System does not include wastewater treatment facilities; such facilities are the responsibility of Allegheny County Sanitary Authority ("ALCOSAN"), a separate and distinct legal entity. Rates and charges established by the Authority are not subject to the approval of any department, board or agency of the Commonwealth of Pennsylvania or the City.

See APPENDIX A for a description of the Authority.

DEBT OF THE AUTHORITY

First Lien Debt

In addition to the Reoffered Bonds, the Authority has previously issued under the Indenture seven (7) other series of bonds that have a parity claim to the Receipts and Revenues of the Authority, which together with any additional bonds which are hereafter issued under the Indenture are referred to herein collectively as the "First Lien Bonds". As of September 1, 2009, the Authority had $661,230,000 aggregate principal amount of First Lien Bonds Outstanding (of which $361,865,000 is Fixed Rate and $299,365,000 is Variable Rate).

Subordinated Debt

In addition to the First Lien Bonds the Authority has outstanding one series of subordinate revenue bonds issued pursuant to the Authority's Subordinate Trust Indenture, dated as of July 15, 1995, as supplemented and amended, by and between the Authority and The Bank of New York Mellon Trust Company, N.A., as successor trustee (the "Subordinate Lien Indenture") in an aggregate principal amount of $103,795,000, the (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 2008 (the "Series 2008C Bonds").

In connection with certain outstanding First Lien Bonds and Subordinate Bonds, the Authority has entered into letter of credit and standby bond purchase agreements, as more fully described under APPENDIX A. The Authority also has other obligations outstanding through the Pennsylvania Infrastructure Investment Authority ("PENNVEST"). See APPENDIX A — "Other Obligations".

PLAN OF FINANCE

Remarketing Plan For the Series 2008 B Bonds

The Authority has decided to replace the Municipal Bond Insurance Policy (the "Policy") of Financial Security Assurance Inc. providing credit support and the Standby Bond Purchase Agreement (the "Standby Purchase Agreement") with Dexia Credit Local, acting through its New York branch, providing liquidity support for the Reoffered Bonds with separate letters of credit providing both credit and liquidity support for each sub-series of the Reoffered Bonds. The Authority expects to enter into firm remarketing agreements with J. P. Morgan Securities Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated on or prior to October 22, 2009, in connection with the remarketing of the Reoffered Bonds. On October 22, 2009 (the "Delivery Date"), (i) the Policy and the Standby Purchase Agreement relating to the Reoffered Bonds will each be terminated; (ii) Bank of America, N.A. ("BOA"), will issue its irrevocable direct-pay letter of credit providing liquidity and credit support for the Series 2008B-1 Bonds as described herein and (iii) PNC Bank, National Association ("PNC"), will issue its irrevocable direct-pay letter of credit providing liquidity and credit support for the Series 2008B-2 Bonds as described herein ((ii) and (iii), together, the "Credit Enhancement Changes") The Policy issued in connection with the original issuance of the Reoffered Bonds will be terminated on the Delivery Date and registered owners of the Reoffered Bonds will have no claim against such insurance policy. The Authority is also amending the First Lien Indenture and the Seventh Supplemental Indenture delivered in connection with the original issuance of the Series 2008B Bonds (a) to reflect that the Policy has been terminated and will no longer be in effect after the Delivery Date and (b) to modify the terms and provisions of the Reoffered Bonds to reflect the terms and provisions described herein. *By acceptance of a confirmation of purchase on the Reoffered Bonds, each beneficial owner will be deemed to have acknowledged (i) the cancellation and termination of the Policy, (ii) that such beneficial owner will have no recourse to the Policy for payment of interest or principal on the Reoffered Bonds, and (iii) that the amendments to the First Lien Indenture and the Seventh Supplemental Indenture reflecting such termination and incorporating the terms and provisions of the Reoffered Bonds described herein will be applicable to such Reoffered Bonds.*

Pursuant to a Remarketing Agreement, by and between the Authority and Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "2008B-1 Remarketing Agreement"), Merrill Lynch, Pierce, Fenner & Smith Incorporated has been appointed Remarketing Agent for the Series 2008B-1 Bonds (the "2008B-1 Remarketing Agent"). Pursuant to a Remarketing Agreement, by and between the Authority and J. P. Morgan Securities Inc (the "2008B-2 Remarketing Agreement"), J. P. Morgan Securities Inc has been appointed Remarketing Agent for the Series 2008B-2 Bonds (the "2008B-2 Remarketing Agent").

Proposed Restructuring of the 2008 Series C-1 Bonds

The Authority intends to restructure the $51,910,000 outstanding principal amount of the Series 2008C-1 subseries (the "2008 Series C-1 Bonds") of the Series 2008C Bonds due to the expiration of the liquidity facility for such bonds currently provided by Dexia Credit Local (acting through its New York branch). The Authority intends to divide the Series 2008C-1 Bonds into four separate subseries: Series C-1A of 2008, Series C-1B of 2008, Series C-1C of 2008 and Series C-1D of 2008 and to convert those bonds from the Weekly Mode to a Term Mode. It is expected that the Series C-1A of 2008, Series C-1B of 2008 and Series C-1C of 2008 bonds in the estimated aggregate principal amount of $25,000,000 will be supported by individual irrevocable direct-pay letters of credit (collectively, the "LOC Banks Letters of Credit") by Northwest Bancorp, Inc., ESB Bank and Washington Federal Savings Bank, respectively, and that the Federal Home Loan Bank of Pittsburgh will issue confirming letters of credit relating to the LOC Banks Letters of Credit. The Authority expects that the Series C-1D bonds will not be supported by a direct-pay letter of credit or liquidity facility. The Authority anticipates completing the restructuring of the 2008 C-1 Bonds in November, 2009.

THE REOFFERED BONDS

General

The Reoffered Bonds will be dated the date of delivery and will bear interest from the date of the first authentication and delivery thereof. The Reoffered Bonds will initially be issued in fully registered form in the minimum denomination of $100,000 or any integral multiple of $5,000 above such amount. The Reoffered Bonds shall bear interest from the Interest Payment Date to which interest has been paid next preceding the date of authentication, unless the date of authentication (i) is an Interest Payment Date to which interest has been paid, in which event the Reoffered Bonds shall bear interest from the date of authentication, or (ii) is on or prior to the Regular Record Date for the first Interest Payment Date for the Reoffered Bonds, in which event such Reoffered Bonds shall bear interest from the Issue Date, or (iii) is after a Regular Record Date and on or before the succeeding Interest Payment Date, in which event the Reoffered Bonds shall bear interest from the succeeding Interest Payment Date. Interest on the Reoffered Bonds shall be paid on each Interest Payment Date. Each Reoffered Bond shall bear interest on overdue principal at the rate of 6% per annum during the period such principal is overdue. Both principal and interest shall, however, be payable out of the Receipts and Revenues of the Authority derived from the Water and Sewer System and shall be payable at the designated corporate trust office of the Trustee in lawful money of the United States of America. Principal of and interest payable at Maturity will be payable to the owner of the Reoffered Bonds at the designated trust office of the Trustee upon the surrender for cancellation of the Reoffered Bonds.

Notwithstanding the foregoing, interest payable on the Reoffered Bonds on any Interest Payment Date shall accrue from and including the last interest Payment Date on which interest has been paid through and including the day next preceding the next Interest Payment Date. The foregoing notwithstanding, no interest shall accrue on any Reoffered Bonds prior to their date of initial reoffering and delivery or after the maturity thereof or after the redemption date for such Reoffered Bond (provided the redemption price is paid or provided for in accordance with the provisions of the Indenture).

See "REGISTRATION, TRANSFER AND EXCHANGE OF THE REOFFERED BONDS" and "BOOK-ENTRY ONLY SYSTEM" for a description of provisions relating to the registration, transfer and exchange of the Reoffered Bonds.

Rate Modes

Each Reoffered Bond shall bear interest at the Weekly Rate or the Fixed Rate, as described below. Each sub-series of the Reoffered Bonds shall bear interest in the same Rate Mode. Each sub-series of the Reoffered Bonds shall initially be reoffered in the Weekly Mode and may be converted to a Fixed Mode, as provided in the Indenture.

This Reoffering Circular provides information with respect to the Reoffered Bonds while bearing interest at a Weekly Rate only. Upon conversion of the Reoffered Bonds to the Fixed Rate, a supplement to this Reoffering Circular or a new offering document will be prepared and distributed by the Authority.

Interest Payment Dates and Computation of Interest Accrual

Interest shall be payable in arrears, with respect to (i) interest on any Reoffered Bond payable at the Weekly Rate, on the first Business Day of each month (beginning November 1, 2009 in the case of the initial delivery of the Reoffered Bonds) while such Reoffered Bond bears interest at a Weekly Rate, interest on any Reoffered Bond payable at the Fixed Rate commencing on the effective date of conversion of such Reoffered Bond from the Weekly Mode to the Fixed Mode, interest shall be payable on March 1 and September 1 of each year.

Interest at the Weekly Rate shall be computed on the basis of a 365-day or 366-day year, as the case may be, for the actual number of days elapsed. Interest at the Fixed Rate shall be computed on the basis of a 360-day year of twelve 30 day months.

Record Date for Interest Payments

The interest payable on any Reoffered Bond on any Interest Payment Date will be paid to the person in whose name such Reoffered Bond is registered at the close of business on the Regular Record Date for such interest, which shall be the close of business of the Business Day immediately prior to the Interest Payment Date with respect to Reoffered Bonds in the Weekly Mode. While in a Fixed Mode the record date will be the close of business on the 15th day of the calendar month immediately preceding the Interest Payment Date. Any interest not paid on the regular Interest Payment Date will cease to be payable to the registered Bondholder on such Regular Record Date and shall be paid to the person in whose name the Reoffered Bond is registered at the close of business on a Special Record Date for the payment of such defaulted interest to be fixed by the Trustee, notice of such Special Record Date being given to Bondholders of the Reoffered Bonds not less than 10 days prior to the Special Record Date.

Method of Payment

The Reoffered Bonds are available in book-entry form only. See "BOOK-ENTRY ONLY SYSTEM." So long as Cede & Co. is the registered owner of the Reoffered Bonds, as nominee of The Depository Trust Company, New York, New York ("DTC"), references herein to the owners of the Reoffered Bonds mean Cede & Co. and not the Beneficial Owners (as defined hereafter) of the Reoffered Bonds.

The principal of and interest on the Reoffered Bonds will be payable by the Trustee to Cede & Co.

Weekly Rate

The Weekly Rate shall be a fluctuating rate per annum determined weekly by the respective Remarketing Agent (initially, Merrill Lynch, Pierce, Fenner & Smith Incorporated with respect to the 2008B-1 Bonds and J. P. Morgan Securities Inc. with respect to the Series 2008B-2 Bonds) while any sub-series of the Reoffered Bonds is in the Weekly Mode, subject to the following terms and conditions:

(1) The Weekly Rate with respect to any Reoffered Bond shall be determined on or before the date of initial reoffering of the Reoffered Bonds (the "Issue Date") and thereafter on the last Business Day before each Thursday.

(2) Interest accrual at the Weekly Rate determined on the Issue Date shall begin on (and shall include) the Issue Date and shall continue at such Weekly Rate until (but not including) the next Thursday. Thereafter, interest accrual at the Weekly Rate shall begin on each Thursday (based on the Weekly Rate determined on the immediately preceding Wednesday or, if such Wednesday is not a Business Day, on the first Business Day preceding such Wednesday) and shall continue at such rate until (and including) the next Wednesday; provided, however, that if a Remarketing Agent fails to determine the Weekly Rate on any such determination date, the Weekly Rate for that Weekly Rate Period shall be equal to the Weekly Rate in effect for the immediately preceding Weekly Rate Period. The Weekly Rate for any consecutive succeeding Weekly Rate Period for which a Remarketing Agent does not determine a Weekly Rate shall be determined in accordance with the Indenture.

(3) The Weekly Rate with respect to a Reoffered Bond shall be determined by the applicable Remarketing Agent and shall be the lowest interest rate that would, in the opinion of such Remarketing Agent, result in the market value of such Reoffered Bond being 100% of the principal amount thereof on the date of such determination, taking into account relevant market conditions and credit rating factors as they exist on such date; provided, however, that the Weekly Rate may never exceed the Maximum Rate (12% per annum or any other maximum interest rate, but not in excess of 12%, for which coverage is provided under the applicable Liquidity Facility).

(4) On each Weekly Rate determination date with respect to a Reoffered Bond the applicable Remarketing Agent shall give written notice to the Trustee, the Authority, the Counterparties under the Swap Agreements, as hereinafter defined, and the applicable LOC Bank of the Weekly Rate so determined. Upon the written request of the Holder or LOC Bank of a subseries of the Reoffered Bonds, or the Authority, the applicable Remarketing Agent shall confirm the Weekly Rate then in effect. The determination of the Weekly Rate by the Remarketing Agents shall be conclusive and binding upon the

Authority, the Trustee, the Remarketing Agents, the applicable LOC Bank, and the Bondholders of such sub-series of Reoffered Bonds.

(5) If for any reason a Remarketing Agent does not determine a Weekly Rate for any Weekly Rate Period as aforesaid, or if a court of competent jurisdiction holds a rate for any Weekly Rate Period to be invalid or unenforceable, the Weekly Rate for that Weekly Rate Period shall be equal to the Weekly Rate in effect for the immediately preceding Weekly Rate Period. The Weekly Rate for any consecutive succeeding Weekly Rate Period for which the Remarketing Agent does not determine a Weekly Rate, or a court of competent jurisdiction holds a rate to be invalid or unenforceable, shall be: the 30-day tax-exempt commercial paper rate published for that Weekly Rate Period by Munifacts Wire System. Inc. (or a replacement publisher of a tax-exempt commercial paper rate designated in writing by the Authority to the Trustee and Remarketing Agent and acceptable to the applicable LOC Bank) representing, as of the publication date, the average 30-day yield evaluations at par of tax-exempt securities rated by each Rating Service in its highest commercial paper rating category; provided that if Munifacts Wire System, Inc. or such replacement publisher does not publish such a tax-exempt commercial paper rate on a day on which a Weekly Rate is to be set, the Weekly Rate shall be 75% of the interest rate for 30-day taxable commercial paper (prime paper placed through dealers) announced on such day by the Federal Reserve Bank of New York.

Conversion of Rate Mode

All of the Bonds of each sub-series of the Reoffered Bonds shall bear interest in the same Rate Mode. The Authority may effect a conversion of the Rate Mode on one or all sub-series of the Reoffered Bonds from a Weekly Rate to a Fixed Mode (once converted to a Fixed Mode, the Reoffered Bonds may not, thereafter, be converted to another Rate Mode) at its option with prior notice to the Remarketing Agents, LOC Banks and the Counterparties (defined hereinafter), subject to certain terms and conditions in the Indenture. On the Conversion Date, the Reoffered Bonds subject to conversion must be purchased by the LOC Banks pursuant to the Mandatory Tender provisions of the Indenture referred to below.

In the case of such a conversion from the Weekly Mode, the Trustee shall give notice by first class mail to the Bondholders of the applicable sub-series of Weekly Rate Reoffered Bonds to be converted not less than 30 days prior to the proposed Conversion Date stating (i) that the Rate Mode for the particular series of Weekly Rate Reoffered Bonds will be converted to the Fixed Mode (ii) the proposed Conversion Date, (iii) that the Authority may determine not to convert the particular series of Weekly Rate Reoffered Bonds not later than 10 days prior to the proposed Conversion Date in which case the Trustee shall notify the Bondholders in writing to such effect, and (iv) that all Outstanding Weekly Rate Reoffered Bonds of such sub-series will be subject to a mandatory purchase on the Conversion Date, or if such Conversion Date is not a Business Day, the first Business Day immediately following such Conversion Date, at a price of par plus accrued interest.

The Reoffered Bonds are subject to Mandatory Tender on the Conversion Date. See "THE REOFFERED BONDS - Mandatory Tenders."

Optional Tenders

The Bondholders of Reoffered Bonds bearing interest at variable rates in a Weekly Rate Period may elect to have their Reoffered Bonds or portions thereof in whole multiples of Authorized Denominations ($100,000 and whole multiples of $5,000 in excess of $100,000) (any tender of less than all of the Bondholders' Reoffered Bonds shall be made in such a manner that all Reoffered Bonds held by such Bondholder after such tender are in Authorized Denominations) purchased at a purchase price equal to 100% of the principal amount of the Reoffered Bonds (or portion thereof) tendered plus accrued interest to the specified Purchase Date. During a Weekly Rate Period, Reoffered Bonds may be tendered for purchase on any Business Day upon oral or written notice of tender to the Trustee and Remarketing Agent not later than 2:00 p.m., prevailing Eastern time, on a Business Day not less than seven (7) days prior to the Purchase Date.

Any such notice of Optional Tender must be duly executed by the Bondholder of the Reoffered Bond and must specify (i) the principal amount of the Reoffered Bond to which the notice relates, (ii) that the Bondholder irrevocably demands purchase of such Reoffered Bond (or a specified portion thereof in an amount equal to a whole

multiple of $5,000 but not less than $100,000), (iii) the date on which such Reoffered Bond (or specified portion) is to be purchased, and (iv) payment instructions with respect to the Purchase Price. The written notice of Optional Tender must be substantially as set forth in the Indenture. Upon delivery of a written notice of Optional Tender, the election to tender shall be irrevocable and binding upon such Bondholder and may not be withdrawn. The Trustee shall, in its sole discretion, determine whether, with respect to any Reoffered Bond, the Bondholder thereof shall have properly exercised the option to have his Reoffered Bond purchased, and such determination shall be conclusive and binding on such Bondholder,

Any Reoffered Bond subject to Optional Tender shall be tendered by the Bondholder thereof for purchase on the Purchase Date, by delivering such Reoffered Bond to the Delivery Office of the Trustee. If only a portion of such Reoffered Bond is to be purchased (as a result of the exercise of the Optional Tender right only with respect to such portion), the Authority shall execute and the Trustee shall authenticate and deliver to the Bondholder of such Reoffered Bond, without service charge, a new Reoffered Bond or Reoffered Bonds of the same Maturity and interest rate and of any Authorized Denomination or Denominations as requested by such Bondholder in aggregate principal amount equal to and in exchange for the unpurchased portion of the principal amount of the Reoffered Bond surrendered. Any Reoffered Bond (or portion thereof) that is subject to purchase but that is not so delivered to the Trustee ("Undelivered Reoffered Bond") shall nevertheless be deemed to have been tendered by the Bondholder thereof on the Purchase Date.

On each Purchase Date the Trustee shall pay the Purchase Price to the Bondholder of each Reoffered Bond (or portion thereof) properly tendered for purchase. Funds for payment of the Purchase Price of such Reoffered Bonds shall be drawn by the Trustee from the Remarketing Proceeds Purchase Account or the Liquidity Facility Purchase Account, as applicable, as provided in the Indenture. If sufficient funds are not available for the purchase of all tendered Reoffered Bonds, no purchase shall be consummated.

If the Trustee is in receipt of the Purchase Price of any Undelivered Reoffered Bond, such Undelivered Reoffered Bond shall be deemed to have been tendered for purchase and purchased from the Bondholder thereof on such Purchase Date and registration thereof shall be transferred to the purchaser of such Undelivered Reoffered Bond. Any Bondholder who fails to deliver a Reoffered Bond subject to tender (i) shall have no further rights thereunder, except the right to receive the Purchase Price thereof upon presentation and surrender of such Undelivered Reoffered Bond to the Trustee properly endorsed for transfer in blank and with all signatures guaranteed to the satisfaction of the Trustee and (ii) shall thereafter hold such Undelivered Reoffered Bond as agent for the Trustee. The Bondholder of such Undelivered Reoffered Bond shall not be entitled to receive interest on such Undelivered Reoffered Bond for any period on and after the Purchase Date. The Trustee shall, as to any tendered Reoffered Bonds which are Undelivered Reoffered Bonds, (i) promptly notify the Remarketing Agent of such non-delivery and (ii) place a stop transfer against such Reoffered Bonds until they are delivered to the Trustee. Upon such delivery, the Trustee shall pay, or cause to be paid, the Purchase Price of such Undelivered Reoffered Bond to the Bondholder thereof and make any necessary adjustments to the Register.

Mandatory Tenders

The Bondholder of each Reoffered Bond shall be required to tender such Reoffered Bond to the Trustee for purchase on the following dates (each such date being herein called a "Mandatory Tender Date"):

(1) the Conversion Date with respect to such Reoffered Bond;

(2) on the second (2nd) Business Day preceding the expiration date of the Liquidity Facility then in effect for such Reoffered Bonds in the event the Trustee shall not have received from the provider thereof, at least 25 days prior to such expiration date, a written commitment to extend such Liquidity Facility, such extension to be effective on and as of such stated expiration date:

(3) on the day on which the Liquidity Facility is replaced with an Alternate Liquidity Facility pursuant to the Indenture (with the Purchase Price being paid with moneys drawn on the existing Liquidity Facility); or

(4) the Business Day selected in writing by the Trustee, at least one Business Day prior to such mandatory tender, in the event that the LOC Banks direct the Trustee to call the Reoffered Bonds for mandatory purchase after an Event of Default under the Liquidity Facility has occurred and is continuing.

The Trustee shall promptly give notice of mandatory tender for purchase by first-class mail to the Bondholders of all Reoffered Bonds not less than 10 calendar days prior to the Mandatory Tender Date. Such notice of Mandatory Tender shall state that all Outstanding Bonds are subject to mandatory tender for purchase pursuant to the provisions thereof and the provisions of the Indenture and will be purchased on the Mandatory Tender Date (which date shall be set forth in such notice) by payment of a Purchase Price equal to the principal amount thereof plus accrued interest.

Any Reoffered Bond subject to Mandatory Tender shall be tendered by the Bondholder thereof for purchase on the Mandatory Tender Date, by delivering such Reoffered Bond to the Delivery Office of the Trustee. Any such Reoffered Bond that is subject to purchase, but that is not so delivered to the Trustee on the Mandatory Tender Date ("Undelivered Reoffered Bond"), shall nevertheless be deemed to have been tendered for purchase by the Bondholder thereof on the Mandatory Tender Date.

On the Mandatory Tender Date with respect to any Reoffered Bond, the Trustee shall pay the Purchase Price to the Bondholder of such Reoffered Bond. Funds for payment of the Purchase Price of such Reoffered Bond shall be drawn by the Trustee from the Remarketing Proceeds Purchase Account or the Liquidity Facility Purchase Account, as applicable, as provided in the Indenture. If sufficient funds are not available for the purchase of all tendered Reoffered Bonds, no purchase shall be consummated.

If the Trustee is in receipt of the Purchase Price of any Undelivered Reoffered Bond, such Undelivered Reoffered Bond shall be deemed to have been tendered for purchase and purchased from the Bondholder thereof on such Mandatory Tender Date and the Bondholder of such Undelivered Reoffered Bond shall not be entitled to receive interest on such Undelivered Reoffered Bond for any period on and after the Mandatory Tender Date. The Trustee shall, as to any tendered Reoffered Bonds which are Undelivered Reoffered Bonds, (i) promptly notify the Remarketing Agent of such non-delivery and (ii) place a stop transfer against such Reoffered Bonds until they are delivered to the Trustee. Upon such delivery, the Trustee shall pay, or cause to be paid, the Purchase Price of such Undelivered Reoffered Bond to the Bondholder thereof and make any necessary adjustments to the Register.

Redemption Prior to Maturity

The Reoffered Bonds shall be subject to redemption prior to Maturity as follows:

Mandatory Sinking Fund Redemption

The Series 2008B-1 Bonds are subject to mandatory sinking fund redemption at a redemption price of 100% of the principal amount redeemed plus accrued interest to the redemption date, on the dates and in the principal amounts specified in the redemption schedule set forth below:

Redemption Date September 1	**Principal Amount**
2035	$13,435,000
2036	17,010,000
2037	17,760,000
2038	18,545,000
2039*	6,000,000

*Final Maturity

The Series 2008B-2 Bonds are subject to mandatory sinking fund redemption at a redemption price of 100% of the principal amount redeemed plus accrued interest to the redemption date, on the dates and in the principal amounts specified in the redemption schedule set forth below:

Redemption Date September 1	Principal Amount
2035	$13,435,000
2036	17,010,000
2037	17,760,000
2038	18,540,000
2039*	6,000,000

*Final Maturity

Optional Redemption

While the Reoffered Bonds are in the Weekly Mode, the Reoffered Bonds may be redeemed by the Authority in whole at any time or in part on any Interest Payment Date, prior to maturity, at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

Extraordinary Optional Redemption

The Reoffered Bonds are subject to extraordinary redemption prior to maturity at the option of the Authority in whole or in part at any time in the event of condemnation, damage or destruction of all or a substantial portion of the Water and Sewer System, from moneys deposited with or held by the Trustee for such purpose, upon payment of 100% of the principal amount thereof being redeemed, together with interest accrued to the date fixed for redemption.

Partial Redemption

If less than all Reoffered Bonds of a sub-series are to be redeemed, the particular Reoffered Bonds of a sub-series to be redeemed shall be selected by the Trustee by lot or by such other method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of portions (in Authorized Denominations) of the principal of Reoffered Bonds in a denomination larger than the smallest Authorized Denomination.

Effect of Redemption

Reoffered Bonds (or portions thereof as aforesaid) for which redemption and payment provision is made in accordance with the Indenture shall cease to bear interest from and after the date fixed for redemption.

Notice of Redemption

Any notice of redemption shall he given by registered or certified mail, mailed not less than 30 days (15 days in the case of Reoffered Bonds bearing interest in the Weekly Mode) prior to the redemption date, to each Bondholder of Reoffered Bonds to be redeemed, at his address appearing in the Register. So long as DTC is effecting book-entry transfers of the Reoffered Bonds, the Trustee shall provide the notices specified under this heading only to DTC. It is expected that DTC shall, in turn, notify its Participants and that the Participants, in turn, will notify or cause to be notified the beneficial owners. Any failure on the part of DTC or a Participant, or failure on the part of a nominee of a beneficial owner of a Reoffered Bond to notify the beneficial owner of the Reoffered Bond so affected, shall not affect the validity of the redemption of such Reoffered Bond.

REGISTRATION, TRANSFER AND EXCHANGE OF THE REOFFERED BONDS

The Trustee has been appointed bond registrar and as such shall keep the bond register at its designated office. The Person in whose name any Reoffered Bond shall be registered on the bond register shall be deemed and regarded as the absolute owner of such Reoffered Bond for all purposes, and payment of or on account of the principal of and redemption premium, if any, and interest on any such Reoffered Bond shall be made only to or upon the order of the Registered Owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy, and discharge the liability upon such Reoffered Bond, including the interest thereon, to the extent of the sum or sums so paid.

Any Reoffered Bond may be transferred only upon the bond register upon surrender thereof to the Trustee duly endorsed for transfer or accompanied by an assignment duly executed by the Registered Owner or his attorney or legal representative in such form as shall be satisfactory to the Trustee. Upon any such transfer, the Authority shall execute and the Trustee shall authenticate and deliver in exchange for such Reoffered Bond a new Reoffered Bond or Reoffered Bonds, registered in the name of the transferee, of any authorized denomination and of the same maturity and series and bearing interest at the same rate.

The Trustee may charge an amount sufficient to reimburse it for any tax, fee or other governmental charge required to be paid in connection with any such transfer, registration, conversion or exchange. The Trustee shall not be required to (i) transfer or exchange any Reoffered Bond during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of such Reoffered Bond and ending at the close of business on the day of such mailing, or (ii) transfer or exchange any Reoffered Bond so selected for redemption in whole or in part, or (iii) during a period beginning at the opening of business on any Record Date for such Reoffered Bond and ending at the close of business on the relevant Interest Payment Date therefor. See also "BOOK-ENTRY ONLY SYSTEM" herein for further information regarding registration, transfer and exchange of the Reoffered Bonds.

BOOK-ENTRY ONLY SYSTEM

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Reoffered Bonds (the "Securities"). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for each sub-series of the Securities, each in the aggregate principal amount of each maturity of such issue, and will be deposited with DTC.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 2.2 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instrument from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC, in turn, is owned by a number of Direct Participants of DTC and Members of the National Securities Clearing Corporation Fixed income Clearing Corporation, and Emerging Markets Clearing Corporation (NSCC, FICC, and EMCC, also subsidiaries of DTCC), as well as by the New York Stock Exchange. Inc., the American Stock Exchange LLC, and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has Standard & Poor's highest rating: AAA. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com and www.dtc.org.

Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.

To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities: DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications to Direct Participants by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will he governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Securities may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners, in the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the Securities unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from Authority or Trustee ("Agent") on payable date in accordance with their respective holdings shown on DTC's records, Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC. nor its nominee, Agent, or Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. for such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Securities at any time by giving reasonable notice to Authority or Agent. Under such circumstances, in the event that a successor securities depository is not obtained, Security certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's hook-entry system has been obtained from sources that Authority believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Reoffered Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Reoffered Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium and interest payments on the Reoffered Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participant's accounts upon DTC's receipt of funds and corresponding detail information from the Authority, on the payment date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name" and will be the responsibility of such Participant and not of DTC, the Trustee or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time, Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payment to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

THE AUTHORITY AND THE TRUSTEE WILL HAVE NO RESPONSIBILITY OR OBLIGATION TO THE DIRECT PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE ACCURACY OF THE RECORDS OF DTC, ITS NOMINEE OR ANY DIRECT PARTICIPANT PERTAINING TO OWNERSHIP IN THE REOFFERED BONDS OR THE PAYMENTS TO, OR THE PROVIDING OF NOTICE FOR, TO THE DIRECT PARTICIPANTS, OR THE INDIRECT PARTICIPANTS OR THE BENEFICIAL OWNERS.

SO LONG AS CEDE & CO., AS NOMINEE OF DTC, IS THE REGISTERED OWNER OF THE REOFFERED BONDS, REFERENCES HEREIN TO THE HOLDERS OF THE REOFFERED BONDS, OR OWNERS OF THE REOFFERED BONDS, SHALL MEAN CEDE & CO., AND SHALL NOT MEAN THE BENEFICIAL OWNERS.

Discontinuation of Book-Entry Only System

DTC may determine to discontinue providing its service with respect to the Reoffered Bonds at any time by giving notice to the Authority and the Trustee and discharging its responsibilities with respect thereto under applicable law. Upon the giving of such notice, the book-entry only system for the Reoffered Bonds will be discontinued unless a successor securities depository is appointed by the Authority.

If the Authority and the Trustee concur that it would be in the best interests of the Holders of the Reoffered Bonds for the book-entry only system to be discontinued (in whole or in part), such book-entry only system shall be discontinued (in whole or in part) in accordance with the provisions of the applicable procedures of DTC.

ESTIMATED SOURCES AND USES OF FUNDS[1]

SOURCES OF FUNDS	
Principal	$145,495,000
TOTAL	$145,495,000
USES OF FUNDS	
Deposit to Remarketing Proceeds Purchase Account	$145,495,000
TOTAL	$145,495,000

SECURITY FOR THE REOFFERED BONDS

Limited Obligations

THE REOFFERED BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY. THE REOFFERED BONDS DO NOT PLEDGE THE GENERAL CREDIT OR TAXING POWER OF THE CITY OF PITTSBURGH (THE "CITY"), THE COMMONWEALTH OF PENNSYLVANIA (THE "COMMONWEALTH") OR ANY POLITICAL SUBDIVISION THEREOF; NOR SHALL THE REOFFERED BONDS BE DEEMED AN OBLIGATION OF THE CITY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE AUTHORITY); NOR SHALL THE CITY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE AUTHORITY) BE LIABLE FOR PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE REOFFERED BONDS. THE AUTHORITY HAS NO TAXING POWER.

Pledge of Receipts and Revenues

The Reoffered Bonds, together with the other First Lien Bonds and the Authority's obligation to make Periodic Payments under Qualified Interest Rate Swap Agreements related to such First Lien Bonds, if any, and the Authority's obligations under the Reimbursement Agreements are secured, on a parity basis, by a first lien pledge of the Receipts and Revenues of the Water and Sewer System after payment of Current Expenses, each as defined in the Indenture, together with cash and investments from time to time held in certain funds pursuant to the Indenture. Any other amounts due and payable by the Authority under a Qualified Interest Rate Swap Agreement relating to any First Lien Bond, including any termination payments, shall be subordinate to debt service payments on First Lien Bonds and Periodic Payments related thereto, to the Authority's obligations under the Reimbursement Agreements, to debt service payments on Subordinate Bonds and Periodic Payments related thereto, and to the requirement to replenish shortfalls in the Debt Service Reserve Fund. (See "DEBT OF THE AUTHORITY" and APPENDIX B — "Summary of the Indenture".)

Debt Service Reserve Fund

The Indenture requires that a Debt Service Reserve Fund be funded in an amount equal to the maximum annual debt service requirements on the First Lien Bonds, subject to restrictions of federal tax laws. The Authority currently maintains a surety bond to fund the Debt Service Reserve Fund in an amount sufficient, together with amounts on deposit therein, to equal the maximum annual debt service requirements on the First Lien Bonds. Currently, the Debt Service Reserve Fund for such First Lien Bonds is fully funded as required under the First Lien Indenture and is comprised of Municipal Bond Debt Service Reserve Fund Policies issued by Financial Security Assurance Inc. ("FSA").

---

[1] The Authority intends to pay from funds on hand costs related to the reoffering of the Reoffered Bonds including fees for bond counsel, trustee, financial advisor, ratings, letter of credit fees, remarketing agents, counsel to the remarketing agents, authority counsel and printing.

Additional Debt

The Authority may issue additional bonds on parity with the Reoffered Bonds for the purposes of financing the cost of acquiring, constructing or completing capital additions or refunding outstanding indebtedness.

Covenants of the Authority

Under the First Lien Indenture the Authority covenants, among other things: (1) to insure the property of the Water and Sewer System in accordance with customary practice, (2) to employ a consulting engineer to make recommendations annually concerning, among other things, the proper maintenance, repair and operation of the Water and Sewer System, (3) to maintain the Water and Sewer System in good repair, working order and condition, (4) to maintain its rates and charges at a specified level, and (5) limiting the disposition of assets and encumbering assets with liens. (See "RATE COVENANT" and APPENDIX B — "Summary of the Indenture").

LETTERS OF CREDIT

Concurrently with the delivery of the Reoffered Bonds, the Authority will cause to be delivered to the Trustee separate irrevocable, direct-pay Letters of Credit issued by BOA and PNC (each an "LOC Bank" and together, the "LOC Banks") in connection with the reoffering of the Reoffered Bonds. BOA will issue its irrevocable, direct-pay letter of credit supporting payment of the 2008B-1 Bonds (the "2008B-1 Letter of Credit") and PNC will issue its irrevocable, direct-pay letter of credit supporting payment of the 2008 B-2 Bonds ("the 2008 B-2 Letter of Credit"). With respect to the Reoffered Bonds, the Trustee will be entitled under the Letters of Credit to draw up to (a) the principal amount of the applicable sub-series of Reoffered Bonds to enable the Trustee to pay the principal amount of the applicable sub-series of Reoffered Bonds when due by reason of maturity, redemption or acceleration, or to pay the Purchase Price of the applicable sub-series of Reoffered Bonds delivered to it as tender agent and not remarketed by the remarketing agent pursuant to the applicable remarketing agreement equal to the principal amount of such sub-series of Reoffered Bonds, plus (b) (i) an amount equal to interest on the Series 2008B-1 Bonds for up to 50 days (computed at the Maximum Interest Rate) for payment of interest on the Series 2008B-1 Bonds when due, or as part of the Purchase Price of the Series 2008B-1 Bonds or (ii) an amount equal to interest on the Series 2008B-2 Bonds for up to 34 days (computed at the Maximum Interest Rate) for payment of interest on the Series 2008B-2 Bonds when due, or as part of the Purchase Price of the Series 2008B-2 Bonds. **The 2008B-1 Letter of Credit secures only the Series 2008B-1 Bonds and the 2008B-2 Letter of Credit secures only the Series 2008B-2 Bonds.** (See APPENDIX G — "Summary of the Letters of Credit and Reimbursement Agreements".)

FLOW OF FUNDS

The Authority has heretofore established a special fund (the "Revenue Fund") with Authorized Depositories into which it deposits its Receipts and Revenues. The Authority will withdraw from the Revenue Fund for deposit to the credit of the following funds in the order, on the dates and for the following purposes:

1. *Operation and Maintenance Fund* - Established Under First Lien Indenture

   On or before the first day of each month, the Authority shall transfer from the Revenue Fund to the Operation and Maintenance Fund an amount equal to the amount budgeted by the Authority for that month for payment of the Current Expenses as the same become due.

2. *Operating Reserve Account*- Established Under First Lien Indenture

   There is a special account within the Operation and Maintenance Fund called the "Operating Reserve Account," which is held by the Trustee under the First Lien Indenture, There shall be maintained in the Operating Reserve Account one-sixth of the amount equal to the Authority's budgeted Current Expenses for the current Fiscal Year. Amounts in the Operating Reserve Account shall be applied to pay the Current Expenses of the Authority to the extent that the amounts on deposit in the Operation and Maintenance Fund are insufficient.

3. *Debt Service Fund* - Established Under First Lien Indenture

After making the foregoing transfers, on or before each Interest Payment Date and Periodic Payment Date, moneys in the amount of the interest to come due on the First Lien Bonds on such Interest Payment Date, Periodic Payments owed, if any, to such Counterparty under a Qualified Swap Agreement related to any First Lien Bonds on such Periodic Payment Date, and obligations owed under the Reimbursement Agreements, and on or before the first day of each month moneys in the amount of 1/12 of the principal to come due on the First Lien Bonds on the next principal payment date are to be transferred to the Debt Service Fund of the First Lien Indenture.

4. *Debt Service Reserve Fund and Deficiency in Operating Reserve Account* – Established Under First Lien Indenture

Next, on the first day of each month in which there is a deficiency in the Debt Service Reserve Fund or the Operating Reserve Account, both established under the First Lien Indenture, or if there has been a draw on the surety bond held in the Debt Service Reserve Fund of the First Lien Indenture, amounts sufficient to repay any deficiency or repay any such draw, together with expenses due, in not more than 12 equal monthly payments shall be transferred, as applicable, to the Debt Service Reserve Fund or the Operating Reserve Account or paid to the surety provider.

5. *Renewal and Replacement Fund*-- Established Under First Lien Indenture

After the foregoing transfers, on the dates and in the amounts set forth in the annual consulting engineer's report moneys are to be transferred to the Renewal and Replacement Fund held pursuant to the First Lien Indenture.

6. *Debt Service for Subordinated Debt* – Held under the Subordinated Indenture

After making the foregoing transfers, on the first day of each month moneys shall be transferred in amounts sufficient to make all payments due on Subordinate Bonds and Periodic Payments on Qualified Interest Rate Swap Agreements related to any Subordinate Bonds.

7. *Debt Service Fund* – Established Under First Lien Indenture and the Subordinated Indenture

Any payments, other than Periodic Payments, due under any Qualified Interest Rate Swap Agreements relating to Authority Bonds, including, without limitation, termination payments.

8. *Depreciation Reserve Account* – Held outside of the First Lien Indenture

On December 1 of each year, after making the foregoing transfers, moneys shall be transferred to the Depreciation Reserve Account held by an Authorized Depository as an account within the Revenue Fund required to be established by the First Lien Indenture, in an amount equal to the excess of the depreciation on the Water and Sewer System during such year over the principal payments on the Bonds outstanding during such year and the amount of Capital Additions funded from the Authority's Gross Revenues during such year. Moneys in the Depreciation Reserve Account may be used by the Authority to pay (i) principal on the Bonds of the Authority; (ii) Capital Additions; and (iii) the costs of construction, acquisition and improvements to the Water and Sewer System.

RATE COVENANT

Under the Indenture the Authority has covenanted with the owners of the Bonds to adopt rates complying with either (1) or (2) of the following in each fiscal year:

(1) The Authority will maintain, charge and collect, so long as any Bonds are outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due

and reasonable allowances for contingencies and a margin of error in the estimates) together with other Receipts and Revenues, including any unrestricted cash and investments accumulated in the Revenue Fund at the beginning of each Fiscal Year, shall be at all times at least sufficient to provide annually:

(a) Amounts sufficient to pay all of the Current Expenses of the Authority; and

(b) An amount equal to 120% of the debt service requirements with respect to the Authority Bonds (i.e., the First Lien Bonds and Subordinate Bonds) and other Authority Long Term Indebtedness during the then current fiscal year of the Authority.

(2) The Authority will maintain, charge and collect, so long as any Bonds are outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due and reasonable allowances for contingencies and a margin of error in the estimates), together with other Receipts and Revenues, for the then current fiscal year (exclusive of interest income earned by the Authority on funds other than the Debt Service Reserve Fund; provided, however, that earnings on the construction acquisition funds may also be included during any construction period, but only to the extent such earnings are expressly required to be either retained in the construction acquisition funds and may be used to pay debt service on the Authority Bonds or other Authority Long Term Indebtedness or are applied directly to payment of debt service on the Authority Bonds or other Authority Long Term Indebtedness), shall be at all times at least sufficient to provide annually:

(a) Funds to pay all of the Current Expenses of the Authority; and

(b) An amount equal to 100% of the debt service requirements with respect to the Authority Bonds and other Authority Long Term Indebtedness during the then current fiscal year of the Authority.

Calculation of compliance with the covenant shall be made on the following basis: (a) operating revenue, construction/acquisition fund income, earnings on the Debt Service Reserve Fund, expenses, required deposits to replenish any withdrawals from the Debt Service Reserve Fund and the Renewal and Replacement Fund which have not been capitalized shall be accounted for on the accrual basis; (b) costs of issuance of the Authority Bonds and other Authority Long Term Indebtedness may be treated as if such amounts are amortized over the life of the Authority Bonds and other Authority Long Term Indebtedness irrespective of any shorter period over which such costs are actually amortized; and (c) depreciation is specifically excluded from the calculation. In the event that any Policy Costs are due and owing at the time of the calculation of the rate covenant, Gross Revenues of the Authority shall be reduced by the amount of any Policy Costs then due and owing.

The Authority also covenants with the holders of the Reoffered Bonds that if at any time the revenues collected shall not be sufficient to enable the Authority to comply with the provisions set forth above, it will promptly revise its water or sewer rates, rents and other charges so that the Authority will be in compliance and so that any deficiencies in transfers of funds required to be made pursuant to the Indenture will be remedied before the end of the next ensuing fiscal year.

INTEREST RATE SWAP AGREEMENTS

The Authority has previously entered into Qualified Interest Rate Swap Agreements relating to outstanding bonds, including Series 2008B Bonds. The Authority in connection with the remarketing of the Reoffered Bonds will amend one or more international Swaps and Derivatives Association (ISDA) Master Agreements, and will also enter into one or more supporting schedules and confirmations (the "Swap Agreement"), with JPMorgan Chase Bank, National Association, and with Merrill Lynch Capital Services, Inc, (each a "Counterparty" and together, the "Counterparties").

The Swap Agreements provide, in general, that the Authority will pay to the respective Counterparties periodic fixed amounts ("Periodic Payments") based on a fixed percentage on an aggregate notional amount equal to the Authority's aggregate outstanding amount of Reoffered Bonds) and that the respective Counterparties will pay to the Authority periodic floating amounts based on the Securities Industry and Financial Market Association ("SIFMA") Municipal Swap Index times the same notional amount until September 1, 2040, unless earlier terminated. The execution and delivery of the Swap Agreements does not alter the Authority's obligation to pay the principal of, premium, if any, and interest on the Reoffered Bonds. However, as the Swap Agreements will be

"Qualified Interest Rate Swap Agreements" as defined in the Indenture, the obligations of the Authority to make Periodic Payments (but not Settlement Amounts (defined below) payable under the Swap Agreements) will be secured on parity with the Authority's obligations to make payments on the related sub-series of the Reoffered Bonds and other Bonds issued under the Indenture.

The Authority has adopted a policy relating to interest rate management agreements ("Swap Policy") to establish guidelines for the use and management of all interest rate management agreements, including, but not limited to, interest rate swaps, swaptions, caps, collars and floors (collectively "Swaps" or "Agreements") incurred in connection with the incurrence of debt. The Authority may change the Swap Policy at any time in its sole discretion.

The Swap Policy authorizes the Authority to use swaps to hedge interest rate movement, basis risk and other risks, to lock-in a fixed rate or, alternatively, to create synthetic variable rate debt. Swaps may also be used to produce interest rate savings, limit or hedge variable rate payments, alter the pattern of debt service payments, manage exposure to changing market conditions in advance of anticipated bond issues (through the use of anticipatory hedging instruments) or for asset/liability matching purposes. The Swap Policy includes provisions relating to the credit quality of counterparties, the term and notional amount of Swaps, monitoring of existing Swaps, the engagement of advisors to assist the Authority in monitoring the Swaps, disclosure and reporting of amounts, value and issues relative to existing Swaps, and other related matters. Pursuant to the Swap Policy, the Authority will actively monitor the degree of risk and exposure associated with Swaps to which it is a party but can offer no assurances that compliance with its Swap Policy will prevent the Authority from suffering adverse financial consequences as a result of these transactions.

See "Interest Rate Swap Agreements" under Appendix A for a list of outstanding swap agreements.

CERTAIN BONDHOLDERS' RISKS

Investment in the Reoffered Bonds may involve certain risks and each investor should carefully consider the risks involved to determine whether to purchase any of the Reoffered Bonds. Each prospective investor should carefully examine this Reoffering Circular and his or her own financial condition (including the diversification of his or her investment portfolio) in order to make a judgment as to whether the Reoffered Bonds are an appropriate investment.

The Authority has identified and summarized below certain "bondholders' risks" that could adversely affect the finances of the Authority, the operation of the Water and Sewer System and/or the funds available for payment of the Reoffered Bonds, which should be considered by prospective investors. The following discussion is not intended to be exhaustive, but includes certain major factors, which should be considered along with other factors set forth elsewhere in this Reoffering Circular, including the Appendices hereto.

Certain Environmental Matters

The Authority is subject to a variety of federal, state and local environmental laws and regulations governing discharges to air and water, conveyance of sanitary/storm wastewaters and possibly the storage and disposal of solid waste materials. The Sewer System conveys wastewater generated within the City boundaries, and from certain other municipalities connected to the Sewer Conveyance Systems to ALCOSAN interceptors located along the rivers and streams of the City for conveyance to ALCOSAN's wastewater treatment facility for processing prior to discharge into the Ohio River. The Combination Sewer System is designed so that during wet weather, a portion of the collected storm water and diluted wastewater is discharged to natural watercourses by diversion chambers located throughout the PWSA Sewer Systems and at connections to the ALCOSAN interceptors. The Sewer System operates satisfactorily and has adequate capacity for the dry weather wastewater flows; during wet weather, however, the Sewer System is often taxed beyond its treatment capacity, resulting in certain overflows, bypassing and flooding. See APPENDIX A — "DESCRIPTION OF THE AUTHORITY AND WATER AND SEWER SYSTEM— *Government Regulation*" and "— *The Sewer System.*"

The U.S. Environmental Protection Agency ("USEPA") has adopted regulations governing discharges to surface bodies of water under the Federal Clean Water Act, coupled with a Combined Sewer Overflow Policy (the "CSO Policy") regarding overflows from combined sewers during wet weather events that result in the discharge to

receiving water of untreated sanitary sewage. These combined sewer overflows ("CSOs") contain pollutants that are present in domestic and industrial wastewater, as well as those in the urban storm water runoff that enter the combined sewer system. 73% of the 1,234 miles of the Authority's sewers are combined sewers and there are 194 Permitted CSOs within the Authority's Sewer System including connections to ALCOSAN's interceptors. The CSO Policy requires owners of any sewer system having CSOs to acquire National Pollutant Discharge Elimination System ("NPDES") discharge permits for each overflow site. On January 29, 2004, pursuant to a resolution adopted by its Board on December 19, 2003, the Authority entered into the Order regarding alleged wet weather sewer overflows within the City of Pittsburgh, Allegheny County, Pennsylvania. The other signatories to the Order are the City of Pittsburgh, the Pennsylvania Department of Environmental Protection ("DEP") and the Allegheny County Health Department ("ACHD").

The Order was developed as part of a two-year process of negotiation and consensus-building among the DEP, the ACHD, the Authority and eighty-two other municipalities and municipal authorities whose sewage is ultimately treated by ALCOSAN at its Woods Run Sewage Treatment Plant. In the negotiations and consensus-building, the participants developed proposed orders to be used by the municipalities served by ALCOSAN to address regional concerns regarding wet weather sewer overflows.

Generally, the Order requires the Authority and the City to assess the combined and separate sanitary sewers within the City in order to develop a plan to address alleged wet weather sewer overflows within the City. The assessment activities required under the Order include performing: (1) a physical survey and visual inspection of manholes; (2) sewer line cleaning and closed circuit television internal inspections; (3) sewer system mapping; (4) sewer system dye testing; (5) a system of hydraulic characterization; and (6) flow monitoring. The Order provides a very specific schedule for the completion of assessment activities. Most assessment activities for critical sewers and the separate sanitary portion of the sewer system are to be completed in 2010. Assessment activities for non-critical sewers are to be completed on a longer schedule with some tasks to be completed in 2012.

In addition to assessment activities, the Order requires the Authority and the City to implement the Nine Minimum Controls for the control of CSOs, and to perform repairs and maintenance to the deficiencies in the sewer system revealed by the assessment activities. Such deficiency corrections include eliminating the conveyance of streams by the sewer system and repairing or replacing sewer lines that restrict flows causing unpermitted overflows. Generally, deficiency corrections in the critical sewers and the separate sanitary sewer system are to be completed in 2010. Deficiency corrections in the assessed, non-critical sewers are to be completed by 2012.

The Order called for collection system investigations, repairs and further studies. The collection system investigation and repairs are reflected in the Capital Improvement Program. Included within this program for the 2009 period are approximately $2.54 million for sewer televising, $3.35 million to gunite sewers $7.61 million to conduct cured-in-place pipe linings, and $5.28 million to conduct point repairs and address deteriorated sewers.

The Authority is currently developing a feasibility study in conjunction with ALCOSAN to address the combined sewer overflow issue and achieve compliance with water quality standards and the Clean Water Act and expects to submit its feasibility study to DEP and ALCOSAN by January 2010.

Ultimately, an ALCOSAN Regional Long Term Control Plan must be developed for the elimination of sanitary sewer overflows and the reduction of combined sewer overflows to acceptable levels. The Regional Long Term Control Plan developed by ALCOSAN must be submitted to the regulatory agencies by 2012. The Authority's share is estimated to cost $300,000,000, but will be more accurately determined when the Regional Long Term Control Plan is finally approved. The amount is dependent, in part, on coordination with other regional providers and ALCOSAN. According to the ALCOSAN Consent Decree, the construction of all wet weather facilities is to be completed by 2026.

The DEP has issued to the Authority and the City a National Pollutant Discharge Elimination System ("NPDES") permit regarding the CSOs within the City. The Authority is permitted for a total of 194 CSOs in the sewage collection system. Of these, the Authority operates and maintains 40 of the CSOs. The remainder of CSOs are operated and controlled by the regional treatment provider, ALCOSAN.

Water Supply

Although the quantity of water available from the Authority's sole source of water, the Allegheny River, is believed to be adequate, it is possible that circumstances could change this condition. The total flow of the river could, for example he limited by drought conditions, and any constraints that may be imposed on withdrawals in drought conditions, such as pass-by flow conditions designed to leave sufficient water in the stream for navigation and fisheries.

Geographic Concentration

The number of customers using the Water and Sewer System may be adversely affected by regional and local economic conditions, competitive conditions, changes in population and general market conditions. There can be no assurance that the Water and Sewer System will be able to maintain the current number of existing users, if there are changes in the resident and/or commercial population of the service area.

Insurance and Legal Proceedings

The Authority carries property and general liability insurance in amounts deemed adequate by the Board and consistent with industry practices. Since January 1, 2002, the Authority has been self-insured as to general liability claims. While there are no current claims in excess of liability limits, there can be no assurance that future claims will be covered by applicable insurance coverage. A claim against the Authority not covered by, or in excess of, the Authority's insurance could have a material adverse effect upon the financial affairs of the Authority.

Governmental Regulation

The federal and local governments significantly regulate providers of water and sewer systems. Future regulations and conditions affecting the acquisition, development ownership and operation of the Water and Sewer System could increase the operating expenses of the Water and Sewer System or could otherwise have a material adverse effect on the financial condition of the Authority. See APPENDIX A — "DESCRIPTION OF THE AUTHORITY AND WATER AND SEWER SYSTEM — Government Regulation."

Swap Agreements

Under the Indenture and Subordinate Lien Indenture, the Authority is also a party to seven separate variable to fixed interest rate exchange agreements in the combined aggregate outstanding notional amount as of September 1, 2009 of $403,160,000 with respect to certain Series of Bonds issued under the Indenture and the Subordinate Lien Indenture (collectively, the "Swap Agreements"). See "SWAP AGREEMENTS" herein.

Collateral Posting Requirements

The Authority has entered into various swap agreements as described under "Swap Agreements" herein. Under certain circumstances (including certain events of default with respect to the Authority or either of the Counterparties), the Swap Agreements could terminate in whole or in part prior to their respective stated termination dates. Following any such early termination of the Swap Agreements, either the Authority or the Counterparties, as applicable may owe a termination payment ("Settlement Amounts") to the other, depending upon market conditions. If at the time of an early termination of the Swap Agreements long-term interest rates are significantly lower than they were when the Swap Agreements were executed and delivered, the Authority could owe substantial Settlement Amounts to the Counterparties. The Authority's obligation to pay any Settlement Amounts with respect to Qualified Interest Rate Swap Agreements relating to any First Lien Bonds will be subordinate to the Authority's obligation to make all payments due and owing on the Reoffered Bonds, any other outstanding First Lien Bonds and Periodic Payments due under the Swap Agreements, and to any of the Authority's obligation to make any payments on any Subordinate Bonds and any Periodic Payments under Qualified interest Rate Swap Agreements related to such Subordinate Bonds.

The Authority's payment obligation with respect to Periodic Payments, but not any Settlement Amounts, under the Swap Agreements will be guaranteed by FSA under one or more swap insurance policies. The provider of the swap insurance policy will be given certain rights under the Swap Agreements, including rights to consent to the

designation of an early termination date (which may result in the payment of a Settlement Amount) upon the occurrence of certain events and the right to designate an early termination date with respect to the Authority, if an event of default under the Swap Agreements occurs with respect to the Authority as the defaulting party.

There are a number of risks associated with the Swap Agreements that could affect the value of the Swap Agreements, the ability of the Authority to accomplish its objectives in entering into the Swap Agreements and the ability of the Authority to meet its obligations under the Swap Agreements and with respect to the Reoffered Bonds. These risks include, among others, the following:

(i) counterparty risk - the failure of the Counterparty to make required payments;

(ii) credit risk - the occurrence of an event modifying the credit rating of the Authority or the respective Counterparties;

(iii) termination risk - the need to terminate the transaction in a market that dictates a payment of a Settlement Amount by the Authority; and

(iv) basis risk - the mismatch between actual variable rate debt service on the Authority's variable rate bonds and variable rate indices used to determine swap payments.

In addition, the Swap Agreements require the posting of collateral from one counterparty to the other counterparty based on the market to market calculations when such calculations result in an amount that exceeds certain thresholds set forth in the contract. Collateral posting may be required if there is a change in the ratings of either counterparty. As of the date of this offering, the Authority has not had to post collateral under these agreements.

Liquidity Support for the Authority's Variable Rate Bonds

In connection with the issuance of certain First Lien Bonds and Subordinate Bonds, the Authority entered into various credit agreements which are subject to renewal. Please refer to APPENDIX A — "OUTSTANDING CREDIT AGREEMENTS" for more information.

LITIGATION

In the opinion of Authority Counsel, there is no litigation pending or threatened seeking to enjoin the issuance, sale or delivery of the Reoffered Bonds or affecting the security pledged therefor.

There are no pending claims or actions against the Authority arising from the operation and maintenance of the Water and Sewer System, that, if determinations or settlements were made adverse to the Authority, and upon consideration of available insurance coverage, would have, in the opinion of the Authority's Counsel, a material adverse effect on the Authority 's financial position.

TAX MATTERS

In connection with the original issuance of the Reoffered Bonds, Bond Counsel delivered an opinion (the "Original Opinion") that concluded that under then existing law, interest on the Reoffered Bonds was excluded from the gross income of the owners of the Reoffered Bonds for federal income taxation, assuming compliance with certain requirements of the Code and covenants regarding the use, expenditure and investment of Reoffered Bonds proceeds. The Original Opinion further concluded that, under then existing law, interest on the Reoffered Bonds would not be an item of tax preference for purposes of computing the alternative minimum tax liabilities of individuals and corporations; however, interest on the Reoffered Bonds could be indirectly subject to the alternative minimum tax imposed on corporations because of its inclusion in the earnings and profits of a corporate holder.

On October 22, 2009, Bond Counsel will deliver its opinion to the effect that the Credit Enhancement Changes (as described and defined herein; See "PLAN OF FINANCE") will not in and of themselves adversely affect the exclusion of interest on said Reoffered Bonds from gross income for purposes of federal income taxation.

The form of such opinion to be delivered by Bond Counsel is contained in APPENDIX H to this Reoffering Circular. Consistent with customary procedures involving substitutions of credit facilities and liquidity facilities securing outstanding bonds and related changes to documents authorizing the issuance of such bonds and setting forth the terms of such bonds, Bond Counsel has not been asked to conduct and has not conducted any review of facts and circumstances relating to the tax status of interest on the Reoffered Bonds and expresses no opinion as to whether interest on the Reoffered Bonds is currently excluded from gross income for federal income tax purposes.

THE TRUSTEE

The obligations and duties of the Trustee are described in the Indenture, and the Trustee has undertaken only those obligations and duties which are expressly set out in the Indenture. The Trustee has not independently passed upon the validity of the Reoffered Bonds, the security therefor, the adequacy of the provisions for payment thereof or the tax-exempt status of the interest on the Reoffered Bonds. The Trustee has relied upon the opinion of Bond Counsel for the validity and tax-exempt status of the interest on the Reoffered Bonds. The Indenture expressly provides that the Trustee shall not be responsible for any loss or damage resulting from any action or inaction taken in good faith in reliance upon an opinion of counsel.

Under the terms of the Indenture, the Trustee is liable only for those damages caused by its gross negligence or willful misconduct. Under the Indenture, the Trustee is not required to take notice and is not deemed to have notice, of any default under the indenture, except failure by the Authority to cause to be made any of the payments required to be made for payment of principal of the Reoffered Bonds, when due at maturity or earlier redemption, or interest on the Reoffered Bonds, or unless the Trustee has been specifically notified in writing of such default by the Authority or the owners of at least 25% in aggregate principal amount of the Outstanding Bonds affected by such default. All notices or other instruments required by the Indenture to be delivered to the Trustee must be delivered at the corporate trust office of the Trustee in Pittsburgh, Pennsylvania. In the absence of any such notice, the Trustee may conclusively assume no Event of Default (as defined in the Indenture) exists, except as expressly stated above and in the Indenture.

LEGAL OPINIONS

The remarketing of the Reoffered Bonds by the Remarketing Agents is subject to the receipt of the approving legal opinion of Pepper Hamilton LLP, Pittsburgh, Pennsylvania, Bond Counsel. The unqualified approving opinion of Bond Counsel will be substantially in the form attached to this Reoffering Circular as APPENDIX H. Certain legal matters for the Authority will be passed upon by its counsel, Thorp, Reed & Armstrong, LLP, Pittsburgh, Pennsylvania, for the Remarketing Agents by its counsel Nixon Peabody LLP, New York, New York. Certain legal matters will be passed upon by Buchanan Ingersoll & Rooney PC, Pittsburgh and Philadelphia, Pennsylvania, which has been retained by, and acts as counsel to the LOC Banks.

INDEPENDENT AUDITORS

The audited financial statements of the Authority, as of and for the years ended December 31, 2008 and 2007, included in APPENDIX C — "Authority Financial Statements" have been audited by Maher Duessel, independent certified public accountants, as indicated in their report with respect thereto, which report also appears in APPENDIX C.

RATINGS OF THE REOFFERED BONDS

In connection with the remarketing of the Reoffered Bonds, Moody's Investors Service ("Moody's") and Standard & Poor's, a Division of The McGraw-Hill Companies Inc. ("S&P") are expected to assign (i) their long-term municipal bond ratings of "Aaa" and "AAA", respectively, to the Reoffered Bonds, in each case based jointly upon the long-term underlying municipal bond rating of the Reoffered Bonds (as described below) and the support provided by the Letters of Credit issued by BOA securing the Series 2008 B-1 Bonds and PNC securing the Series 2008 B-2 Bonds; and (ii) their short-term municipal bond ratings of "VMIG 1" and "A-1", respectively, in each case based solely upon the issuance of the Letter of Credits by the Bank.

Moody's and S&P have also assigned their long-term underlying municipal bond ratings of "Baa1" and "A", respectively, to the Reoffered Bonds.

The long-term municipal bond ratings and the short-term municipal bond ratings based on the support provided by the Letters of Credit will expire on the respective Expiration Dates of the Letters of Credit unless such ratings are withdrawn, reduced or extended prior to the Expiration Dates of the Letters of Credit.

Each of the aforementioned ratings reflect only the respective views of such organizations, and an explanation of the significance of a rating may be obtained only from the rating agency furnishing the same. A rating is not a recommendation to buy, sell or hold securities. There is no assurance that such ratings will be retained for any given period of time or that they will not be revised downward or withdrawn entirely by Moody's or S&P, respectively, if, in their judgment, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the Reoffered Bonds.

CONTINUING DISCLOSURE; DISCLOSURE DISSEMINATION

Pursuant to Securities and Exchange Commission Rule 15c2-12 under the Securities Exchange Act of 1934, as amended (the "Rule"), the Authority undertook upon the original issuance of the Series 2008B Bonds, for the benefit of the holders of such Bonds, to provide certain financial information and operating data on an annual basis (the "Annual Report") and to provide notice of certain enumerated events if such events are determined to be material under the federal securities laws.

The Authority entered into a Disclosure Dissemination Agent Agreement ("Disclosure Dissemination Agreement") with Digital Assurance Certification, L.L.C. ("DAC"), under which the Authority has designated DAC as Disclosure Dissemination Agent (the "Disclosure Dissemination Agent"). The Annual Report is to be filed by the Disclosure Dissemination Agent not later than 200 days after the end of the Authority's fiscal year to the Municipal Securities Rulemaking Board ("MSRB") through EMMA. Notices of material events are to be filed with MSRB through EMMA and any State Information Depository established by the Commonwealth under the Rule, if any ("SID"). The Authority has complied with its continuing disclosure obligations under the Rule since 1995.

Annual Information. The Annual Information concerning the Authority shall consist of (1) audited financial statements or the disclosure of the absence of such an audit, prepared in accordance with generally accepted accounting principles ("GAAP"), or accompanied by a quantified explanation of material deviations from GAAP or a full explanation of the accounting principles used, and a certificate regarding annual debt service coverage; (2) operating data regarding the Authority substantially of the type included in the tables appearing under the following headings and subheadings of this Reoffering Circular or in APPENDIX A hereto entitled "Water and Sewer Rates," "Water Consumption by Customer Classification," and "Survey of 10 Largest Users"; and (3) a narrative discussion that analyzes the Authority's financial condition and results of operations, as well as facts likely to have a material impact on the Authority.

Notice of Material Events. The notices to be provided under the Rule, which the Authority will undertake to provide as described above, include written or notice of the occurrence of any of the following events, if material, with respect to the Reoffered Bonds:

(i) Principal and interest payment delinquencies;
(ii) Non-payment related defaults;
(iii) Unscheduled draws on debt service reserves reflecting financial difficulties;
(iv) Unscheduled draws on credit enhancements reflecting financial difficulties; Substitution of credit or liquidity providers, or their failure to perform;
(v) Adverse tax opinions or events affecting the tax-exempt status of the Reoffered Bonds; Modifications to rights of holders of the Reoffered Bonds;
(vi) Bond calls (other than mandatory sinking fund redemptions);
(vii) Defeasances;
(viii) Release, substitution or sale of property securing repayment of the Reoffered Bonds; and
(ix) Rating changes.

The Securities and Exchange Commission requires the listing of (i) through (ix), although some of such events may not be applicable to the Reoffered Bonds.

Amendments. The Disclosure Dissemination Agreement may be amended, without the consent of the holders of the Reoffered Bonds, but only upon the Authority obtaining an opinion of counsel expert in federal securities laws acceptable to both the Authority and the Disclosure Dissemination Agent to the effect that such amendment, and giving effect thereto, will not materially impair the interests of the holders of the Reoffered Bonds and would not, in and of itself, cause the undertakings therein to violate the Rule; provided neither the Authority nor the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto. Notwithstanding the foregoing, the Disclosure Dissemination Agent shall have the right to adopt amendments to the Disclosure Dissemination Agreement necessary to comply with modifications to and interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission from time to time by giving not less than 20 days written notice of the intent to do so together with a copy of the proposed amendment to the Authority. Not such amendment shall become effective if the Authority shall, within 10 days following the giving of such notice, sends a notice to the Disclosure Dissemination Agent in writing that it objects to such amendment.

Termination. The continuing obligation of the Authority and the Disclosure Dissemination Agent under the Disclosure Dissemination Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Reoffered Bonds, when the Authority is no longer an Obligated Person with respect to the Reoffered Bonds, or upon delivery by the Authority to the Disclosure Dissemination Agent of an opinion of nationally recognized bond counsel to the effect that continuing disclosure is no longer required.

Obligated Persons. At this time, only the Authority is an "Obligated Person" for annual reporting purposes under the criteria described in the Disclosure Agreement.

Any failure by the Authority to comply with the provisions of the Disclosure Dissemination Agreement shall not be an event of default with respect to the Reoffered Bonds (although any available remedy in equity may be pursued to compel the Authority's compliance). Nevertheless such failure must he reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Reoffered Bonds in the secondary market. Consequently, any such failure may adversely affect the transferability and liquidity of the Reoffered Bonds and their market price.

The Authority has not failed to comply with any prior such undertaking under the Rule. A failure by the Authority to comply with the Disclosure Dissemination Agreement will not constitute an Event of Default under the Indenture (although Bondholders will have any available remedy at law or in equity). Nevertheless, such a failure must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Reoffered Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Reoffered Bonds and their market price.

Bondholders are advised that the Disclosure Dissemination Agreement, copies of which are available at the office of the Authority, should be read in its entirety for more complete information regarding its contents.

The Disclosure Dissemination Agent has only the duties specifically set forth in the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described in the Disclosure Dissemination Agreement is limited to the extent the Authority has provided such information to the Disclosure Dissemination Agent as required by the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent has no duty with respect to the content of any disclosures or notice made pursuant to the terms of the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent has no duty or obligation to review or verify any information in the Annual Report, Audited Financial Statements, notice of Notice Event or Voluntary Report (as defined in the Disclosure Dissemination Agreement), or any other information, disclosures or notices provided to it by the Authority and shall not be deemed to be acting in any fiduciary capacity for the Authority, the holders of the Reoffered Bonds or any other party. The Disclosure Dissemination Agent has no responsibility for the Authority's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine or liability for failing to determine whether the Authority has complied with the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent may conclusively rely upon certifications of the Authority at all times.

REMARKETING

Pursuant to the Indenture, Merrill Lynch, Pierce, Fenner & Smith Incorporated has been appointed initially as exclusive Remarketing Agent for the 2008B-1 Bonds and J. P. Morgan Securities Inc. has been appointed initially as exclusive Remarketing Agent for the 2008B-2 Bonds (together, the "Remarketing Agents"). J.P. Morgan Securities Inc. (the "Firm Remarketing Agent") has agreed to purchase the Reoffered Bonds for an aggregate purchase price of par, plus accrued interest. The Firm Remarketing Agent will purchase all the Reoffered Bonds if any are purchased. Merrill Lynch, Pierce, Fenner & Smith Incorporated, the Remarketing Agent on the 2008B-1 Bonds, and the Bank of America, N.A., the letter of credit provider on the 2008B-1 Bonds, are both wholly-owned, indirect subsidiaries of Bank of America Corporation.

Subject to certain conditions, upon the delivery or deemed delivery of Reoffered Bonds tendered for purchase by any owners thereof in accordance with the provisions of the Indenture, the Firm Remarketing Agent will offer for sale such tendered Reoffered Bonds, any such remarketing to be made on the date such tendered Reoffered Bonds are to be purchased, at a price equal to 100% of the principal amount thereof plus accrued interest, if any. Remarketing Agents may be removed or replaced by the Authority and the Remarketing Agents may also resign in accordance with the provisions of the Indenture.

The Remarketing Agents are Paid by the Authority

The responsibility of each Remarketing Agent includes determining the interest rate from time to time and remarketing Reoffered Bonds that are optionally or mandatorily tendered by the owners thereof (subject, in each case, to the terms of the Remarketing Agreement), all as further described in this Reoffering Circular. Each Remarketing Agent is appointed by the Authority and is paid by the Authority for its services. As a result, the interests of the Remarketing Agent may differ from those of existing holders and potential purchasers of Reoffered Bonds.

The Remarketing Agents Routinely Purchase Bonds for their Own Account

The Remarketing Agents act as remarketing agents for a variety of variable rate demand obligations and, in its sole discretion, routinely purchases such obligations for its own account in order to achieve a successful remarketing of the obligations (i.e. because there are otherwise not enough buyers to purchase the obligations) or for other reasons. The Remarketing Agents are permitted, but not obligated, to purchase tendered Reoffered Bonds for its own account and, if it does so, it may cease doing so at any time without notice. The Remarketing Agents may also make a market in the Reoffered Bonds by routinely purchasing and selling Reoffered Bonds other than in connection with an optional or mandatory tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agents are not required to make a market in the Reoffered Bonds. The Remarketing Agents may also sell any Reoffered Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the Reoffered Bonds. The purchase of Reoffered Bonds by the Remarketing Agents may create the appearance that there is greater third party demand for the Reoffered Bonds in the market than is actually the case. The practices described above also may result in fewer Reoffered Bonds being tendered in a remarketing.

Bonds May be Offered at Different Prices on Any Date Including an Interest Rate Determination Date

Pursuant to the Remarketing Agreements, the Remarketing Agents are required to determine the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of the applicable sub-series of Reoffered Bonds bearing interest at the applicable interest rate at par plus accrued interest, if any, on and as of the applicable Rate Determination Date. The interest rate will reflect, among other factors, the level of market demand for the Reoffered Bonds (including whether the Remarketing Agent is willing to purchase Reoffered Bonds for its own account). There may or may not be Reoffered Bonds tendered and remarketed on a Rate Determination Date, the Remarketing Agents may or may not be able to remarket any Reoffered Bonds tendered for purchase on such date at par and the Remarketing Agents may sell Reoffered Bonds at varying prices to different investors on such date or any other date. The Remarketing Agent is not obligated to advise purchasers in a remarketing if it does not have third party buyers for all of the Reoffered Bonds at the remarketing price. In the event a Remarketing Agent owns any Reoffered Bonds for its own account, it may, in its sole discretion in a secondary market transaction outside the tender process, offer such Reoffered Bonds on any date, including the Rate Determination Date, at a discount to par to some investors.

The Ability to Sell the Bonds other than through Tender Process May Be Limited

The Remarketing Agents may buy and sell Reoffered Bonds other than through the tender process. However, they are not obligated to do so and may cease doing so at any time without notice and may require holders that wish to tender their Reoffered Bonds to do so through the Tender Agent with appropriate notice. Thus, investors who purchase the Reoffered Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their Reoffered Bonds other than by tendering the Reoffered Bonds in accordance with the tender process.

Under Certain Circumstances, a Remarketing Agent May Be Removed, Resign or Cease Remarketing the Bonds, Without a Successor Being Named

Under certain circumstances a Remarketing Agent may be removed or have the ability to resign or cease its remarketing efforts, without a successor having been named, subject to the terms of the Remarketing Agreements.

FINANCIAL ADVISOR AND SWAP ADVISOR

PNC Capital Markets LLC has served as the financial advisor (the "Financial Advisor") to the Authority in connection with the preparation, authorization and reoffering of the Reoffered Bonds. PNC Capital Markets LLC has also provided additional advisory services to the Authority with respect to the Swap Agreements referenced herein (the "Swap Advisor"). With respect to its roles as financial advisor and swap advisor, PNC Capital Markets LLC has not offered, and has not been asked to offer, any advice, opinion or counsel with respect to the procurement of and the related terms of the letter of credit being provided by PNC Bank, National Association and that the Authority has sought whatever independent advice it deemed necessary with respect thereto. This situation may have also limited the scope of advice and counsel that PNC Capital Markets LLC provided with respect to the terms of the applicable bond series (Series 2008B-2) and of the related swap agreement. Neither the Financial Advisor nor the Swap Advisor are obligated to undertake, and neither has undertaken to make an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Reoffering Circular. The Financial Advisor and the Swap Advisor will each receive a fee for its respective services with regard to the reoffering of the Reoffered Bonds and the execution of the amendments to the Swap Agreements. See "INTEREST RATE SWAP AGREEMENTS" and "FUTURE INDEBTEDNESS — Future Refunding Transactions" herein.

CERTAIN RELATIONSHIPS

J. P. Morgan Securities Inc. is an underwriter and the initial Remarketing Agent for the 2008B-2 Bonds. JPMorgan Chase Bank, National Association is also acting as a Counterparty under certain of the Swap Agreements. J. P. Morgan Securities Inc. and JPMorgan Chase Bank, National Association are each wholly-owned subsidiaries of JPMorgan Chase & Co. Merrill Lynch, Pierce, Fenner & Smith Incorporated is an underwriter and the Remarketing Agent for the 2008B-1 Bonds. Merrill Lynch, Pierce, Fenner & Smith Incorporated is acting as a counterparty under certain of the Swap Agreements. See "INTEREST RATE SWAP AGREEMENTS" and "FUTURE INDEBTEDNESS – Future Refunding Transactions" herein. Merrill Lynch, Pierce, Fenner & Smith Incorporated, the Remarketing Agent on the Series 2008B-1 Bonds, and the Bank of America, N.A., the issuer of the 2008B-1 Letter of Credit, are both wholly-owned, indirect subsidiaries of Bank of America Corporation

PNC Capital Markets LLC has served as both Financial Advisor and Swap Advisor in connection with the reoffering of the Reoffered Bonds and the execution of the Swap Agreements. PNC Bank, National Association is providing a liquidity facility in the form of a Letter of Credit with respect to the 2008B-2 Bonds. From time to time in the normal course of business PNC Bank, National Association and/or affiliates of the same, may have a credit or other financial relationship with the Authority. See "FINANCIAL ADVISOR AND SWAP ADVISOR" herein.

With respect to its roles as financial advisor and swap advisor, PNC Capital Markets LLC has not offered, and has not been asked to offer, any advice, opinion or counsel with respect to the procurement of and the related terms of the letter of credit being provided by PNC Bank, National Association and that the Authority has sought whatever independent advice it deemed necessary with respect thereto. This situation may have also limited the scope of advice and counsel that PNC Capital Markets LLC provided with respect to the terms of the applicable bond series (Series 2008B-2) and of the related swap agreement.

MISCELLANEOUS

The references, excerpts and summaries of all documents referred to herein do not purport to be complete statements of the provisions of such documents, and reference is made to all such documents for full and complete statements of all matters of fact relating to the Reoffered Bonds, the security for the payment of the Reoffered Bonds and the rights of the owners thereof. All capitalized terms used herein are used with the meaning set forth in the Indenture unless otherwise so specified.

The information contained in this Reoffering Circular has been compiled from official and other sources deemed to be reliable and, while not guaranteed as to completeness or accuracy, is believed to be correct as of its date.

Any statement made in this Reoffering Circular involving matters of opinion or of estimates, whether or not expressly so stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Reoffering Circular nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority since the date hereof.

This Reoffering Circular has been duly executed and delivered on behalf of the Authority by an Authorized Representative.

THE PITTSBURGH WATER AND SEWER AUTHORITY

By: /s/ Don Walko
Chairman

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX A

CERTAIN INFORMATION REGARDING THE AUTHORITY AND WATER AND SEWER SYSTEM

[THIS PAGE INTENTIONALLY LEFT BLANK]

Governance

The Board of the Authority consists of seven (7) members with no fewer than six (6) members appointed by the Mayor of the City and approved by City Council. The terms of Office of the members commence on the date of appointment, and the members serve staggered five (5) year terms from the first Monday in January next succeeding the date of appointment or until appointment of a successor, whichever is later. The present members of the Board and officers of the Authority and their principal private affiliations are as follows:

Member	Occupation
Don Walko, Chairman	Member, 20th Legislative District, House of Representatives, PA
Robert P. Jablonowski, Vice Chairman	Retired Chemist, Duquesne Light Co.
Scott Kunka, Treasurer	Director of Finance, City of Pittsburgh
Henry C. Blum, Secretary	1st Vice President, Public Events Employees Union Local No. 188
Margaret L. Lanier, Asst. Sec./Asst. Treasurer	Treasurer, City of Pittsburgh
Dan Deasy, Member	Member, 27th Legislative District, House of Representatives, PA
Patrick Dowd, Member	Pittsburgh City Councilman

Organization Summary

The Authority is organized into three operating divisions: Administration, Water and Sewer Operations, and Engineering and Construction.

The Administration Division is responsible for the various administrative and support functions within the Authority. These include: customer service, billing and collections, personnel and finance, procurement, and management and data information systems.

The Water and Sewer Operations Division is responsible for the production and transmission of potable water and the collection and transmission of wastewater. Operating sections within this Division are: "Water Quality Operations" which ensures that the water produced meets all health and safety requirements; "Distribution and Collection" which is responsible for maintaining and repairing the water distribution system and repairing and maintaining the sewer collection system; "Treatment Process" which includes the water treatment plant and storage facilities; "Facilities Support" which is responsible for overseeing capital and scheduled facility repairs, system safety and security and "Stores Management" which is responsible for inventory.

The Engineering and Construction Division is responsible for developing, designing, initiating and monitoring all of the Authority's Capital Improvement Projects In addition, this Division is responsible for reviewing plans prior to issuing permits for any connection into, or modification of, the water and sewer system; and for the maintenance and updating of the Authority's geographical information system.

Key Management Personnel

Executive Director – Michael P. Kenney was appointed by the Board to the position of Executive Director in 2008 following over twenty-five years of service with the Municipal Authority of Westmoreland County, where Mr. Kenney served as Assistant Manager before his departure. While with the Municipal Authority of Westmoreland County, a southwestern Pennsylvania regional water and sewer authority spanning five counties, Mr. Kenney was responsible for the management of over 125,000 connections, servicing a population of over 400,000, and with a budget in excess of $50,000,000. Mr. Kenney also developed and implemented an annual capital improvement program of $8,000,000 and oversaw construction projects totaling $70,000,000. While with the Municipal Authority of Westmoreland County, Mr. Kenney directed a work force of 270 employees – 55 management and 215 bargaining unit employees.

Director of Finance -- Stephen Simcic joined the Authority's Administrative Division in September 2001. Mr. Simcic is responsible for the financial reporting of the Authority and reports directly to the Executive Director. The Director of Finance oversees the Finance and Accounting Departments consisting of Accounts Payable, Procurement, Receivables, Payroll, Budgets, Forecasts, Banking and Investor Relations, Capital Expenditures and Collections. Mr. Simcic came to the Authority with ten years experience in the corporate accounting field with two major energy companies followed by eight years as Controller with an environmental remediation engineering consulting firm subcontracting with the DOD and DOE. Mr. Simcic has a Bachelor of Science Degree in Business Administration from Robert Morris University, with a primary focus in Accounting. He is a member of the Government Financial Officer's Association.

Director of Water Quality and Production -- Stanley States, Ph.D., has been the Water Quality Manager for the Authority and its predecessor the City of Pittsburgh, Department of Water, since 1977. In 2009, he was appointed Director of Water Quality and Production. In his new role, he is responsible for the operation of the water treatment plant, including reservoirs and tanks; the laboratory; compliance with federal, state, and county water quality regulations; and the actual treatment process. He holds an MS in Forensic Chemistry and a Ph.D. in Environmental Biology from the University of Pittsburgh. Dr. States has conducted research and published extensively in the areas of water quality and treatment. He has served as an adjunct professor and has taught in the Graduate School of Public Health and the School of Engineering at the University of Pittsburgh. Most recently Dr. States has been involved in authoring and delivering counterterrorism security courses, to water and wastewater personnel across the nation, for the Department of Homeland Security and the Environmental Protection Agency. Dr. States is a member of the American Water Works Association, the Water Works Operators Association of Pennsylvania, the American Society for Microbiology, and the American Chemical Society.

Director of Engineering and Construction – Thomas M. Gigliotti, P.E., joined the Authority in 1996. after 12 years with Roberts and Schaefer Engineering and two years with the Mine Safety and Health Administration. Mr. Gigliotti is responsible for the overall coordination and management of the Engineering and Construction Division's involvement in the Capital Improvement Program. He has published articles in several periodicals including the Journal of American Waterworks Association, Trenchless Technology, Water Engineering and Management and presented at AWWA conferences. Mr. Gigliotti earned a Masters of Science, Civil and Environmental Engineering and a Bachelor of Science, Mining Engineering from the University of Pittsburgh. He is a Registered Professional Engineer in the Commonwealth of Pennsylvania and is a member of the Water Environment Federation, Water Works Operators Association of Pennsylvania, and American Water Works Association.

Capital Lease Agreement with the City of Pittsburgh

In 1984, pursuant to the Lease and Management Agreement, the Authority leased the Water and Sewer System from the City and assumed responsibility for establishing and collecting user fees and charges and for maintaining and improving the Water and Sewer System. The Lease and Management Agreement further provided that the Water and Sewer System was to be operated and maintained for the Authority by the City, subject to the general supervision of the Authority. In 1995, the Authority and the City terminated the Lease and Management Agreement, and the Authority has the option to acquire the Water and Sewer System pursuant to the terms of the Capital Lease Agreement. The Capital Lease Agreement, which has a term of thirty (30) years, provides for payments totaling Ninety-Six Million Seventeen Thousand Two Hundred Forty-Nine Dollars and Sixty Cents ($96,017,249.60), which, payments were made to the City during the initial three (3) years of said contract and further provides that on September 1, 2025, upon payment of One Dollar ($1.00), the Authority will acquire title to the Water and Sewer System.

Concurrently with entering into the Capital Lease Agreement, the City and the Authority entered into a Cooperation Agreement, dated as of June 15, 1995 (the "Cooperation Agreement"). Pursuant to the Cooperation Agreement, the City provides certain specified engineering, communications, vehicle maintenance, legal, information and financial services to the Authority on a fee for services basis and the Authority makes certain other payments to the City to reimburse it for costs and capital expenses incurred by the City in regard to the operation and maintenance of the Sewer System. The Cooperation Agreement may be terminated by either party, upon ninety (90) days written notice. The City and Authority are currently negotiating changes to the Cooperation Agreement to more accurately reflect changes in services the City and the Authority provide to each other and to adjust payments made by the Authority to the City thereunder.

The Water Supply and Distribution System

The water supply and distribution system (the "Water System") consists of a 117 million gallon per day rapid sand type treatment plant which was placed in service in 1969, 990 miles of mains and service lines, 25,900 valves, 7,180 fire hydrants, twelve pumping stations, one membrane filtration plant, five reservoirs, and eleven storage tanks. The total storage capacity of the reservoirs and tanks is approximately 455 million gallons. With consideration given to the pressure requirements of the distribution system, and storage capacities in each of the 15 pressure zones, PWSA stores enough finished water to provide a 2 to 3 day uninterrupted supply to all customers should it temporarily be unable to treat additional water from the Allegheny River. In the opinion of the Authority's Consulting Engineer, Chester Engineers, Inc. (the "Consulting Engineer"), the Water System's treated water quality exceeds all the current standards and levels of the federal Safe Drinking Water Act and the Pennsylvania Department of Environmental Protection (PADEP).

The sole source of water for the Water System is the Allegheny River for which the Authority and its predecessors have held withdrawal permits since 1943. In March 1989, the then Pennsylvania Department of Environmental Resources (now the "PADEP") issued the Authority a Water Allocation Permit under the 1939 Water Rights Act. This permit authorizes the withdrawal of up to 100 million gallons per day and the PADEP determined that this would cause no major

impact on navigation. The current average withdrawal of water from the Allegheny River is approximately 70.5 million gallons per day. The Authority's Consulting Engineer is of the opinion that the Allegheny River's water is of good quality, and that there is ample quantity to meet foreseeable demands given current allocation permit conditions and foreseeable river flow conditions.

The Water System currently provides approximately 86,000 residential, commercial, industrial and public customers with potable water and water for fire protection within the geographic boundaries of the City. This represents approximately 84 percent of the total population within the City with the balance served by three independent water purveyors.

No material decreases in customers or water usage are anticipated in the foreseeable future. The Authority's water treatment plant is capable of providing more water than is currently being used by its existing customers. The Authority has undertaken a marketing effort to sell potable water to municipalities and municipal authorities within the region. It is also investigating the opportunity to purchase existing water systems located in municipalities adjacent to its current service area. Sale of this available water to additional regional communities would be a source of new revenue to the Authority. To realize this potential revenue the Authority would be required to construct water lines or improve pumping facilities to serve some regional communities; and those communities would need to obtain subsidiary water allocation permits from PADEP.

The Authority's Consulting Engineer is of the opinion that the Water System is in adequate operating condition and has adequate capacity to meet demands in the foreseeable future, provided the Authority continues the rehabilitation and replacement program provided for in its ongoing Capital Improvement Program.

Drinking Water Quality Regulatory Requirements

The Authority monitors water drinking quality on a continuous basis, 365 days a year. Tests are conducted for contaminants that may be present in source water prior to treatment, during treatment and on finished water. The Authority meets or exceeds all current Federal and State water quality requirements and anticipates compliance with future proposed regulations, including the pending Stage 2 Disinfection Byproducts Rule and the Long-term Enhanced Surface Water Treatment Rule. Results of water quality measurements and regulatory compliance are reported annually in the Authority's Consumer Confidence Report.

The Authority operates an on site water quality laboratory capable of conducting analysis and detection on numerous contaminants. The PADEP has certified the laboratory to conduct and certify results for a number of these contaminants. The Authority routinely provides analysis for other water providers and the Allegheny County Health Department. The Federal Safe Drinking Act requires each state to prepare a comprehensive Source Water Protection Plan to identify potential sources of contaminants. The Authority, working with the PADEP, has prepared the plan for the Allegheny River.

The Pilot Plant

The pilot plant, located at the Pittsburgh Water Treatment Facility, was designed to simulate treatment and hydraulic conditions in the Authority's main plant. Constructed in 2000, the pilot plant enables the Authority to determine process control parameters and chemical applications and to conduct stress testing the plant to achieve the best effective and efficient plant operations to meet current and future regulatory compliance issues. The Authority has addressed the new regulations for Stage 1, the disinfection byproduct rule and the interim enhanced surface water treatment rule. The Authority has met the requirements for both rules. This was accomplished through studies by utilizing the pilot plant. The Authority is confident it will meet requirements for the pending long-term enhanced surface water treatment rule and Stage 2 disinfection byproducts rule, again through studies utilizing the pilot plant, once the requirements are finalized**.**

The Microfiltration Facility

Pennsylvania's Department of Environmental Protection Regulations based on the Federal Safe Drinking Water Act of 1984 required all finished drinking water reservoirs to be covered by December 31, 1995. In order that Highland #1 reservoir could remain uncovered for environmental and limited recreational considerations, a 20 million gallon a day Microfiltration Facility was designed to provide further treatment before water is put into distribution. Mircofiltration is a pressure-driven membrane process and consists of (0.1 micron pore size) membrane series for removal of suspended matter, turbidity, algae, fungi, protozoa, some microorganisms and cysts (including Cryptosporidum and Giardia). The membrane filtration plant is currently being expanded to produce 26 million gallons per day.

The Sewer System

The wastewater collection and transmission system (the "Sewer System") is part of a regional system that provides service to about 550,000 people, of whom nearly 325,000 live within the City. The total drainage area served by the regional system is approximately 80 square miles, of which the City comprises about 55 square miles, or nearly 70 percent of the total. The Sewer System is primarily a combined system designed to carry both storm and sanitary flows. The Sewer System is comprised of an extensive network of approximately 1,400 miles of sewer lines and four wastewater-pumping stations. The average age of the sewer lines is between 60 and 70 years old, with some portions reaching nearly 150 years in age.

The Sewer System conveys wastewater generated within the City boundaries to Allegheny County Sanitary Authority ("ALCOSAN") interceptors along the rivers of the City for conveyance to ALCOSAN's wastewater treatment facility for processing prior to discharge into the Ohio River. The ALCOSAN treatment facility, which is not part of the Water and Sewer System, is operated by ALCOSAN pursuant to the National Pollutant Discharge Elimination System ("NPDES").

The Sewer System also is utilized by 24 suburban municipalities pursuant to agreements with the City and/or the Authority to convey their wastewater to the ALCOSAN treatment facility. Many of the agreements with the suburban municipalities provide for the sharing of maintenance or reconstruction costs of the Sewer System. Typically, the sharing of maintenance costs applies only to the trunk sewer lines through which the wastewater flows to the ALCOSAN interceptor.

The Sewer System is designed so that during wet weather, a portion of the collected storm water and diluted wastewater is discharged to natural water courses by diversion chambers located throughout the Sewer System and at connections to the ALCOSAN interceptors. The Sewer System is in satisfactory operating condition and has adequate capacity for the dry weather wastewater flows; however, in the past during wet weather, the Sewer System has often been taxed beyond its capacity and has resulted in overflow, bypassing and flooding. Some of these conditions have been or will be eliminated through the implementation of the Authority's ongoing Capital Improvement Program. Federal and State Combined Sewer Overflow requirements are expected to have some future impact on the Authority and, so far as possible at this stage, this has been taken into account in the Authority's 5 year Business Plan. The Authority's Consulting Engineer is of the opinion that the Sewer System is in adequate operating condition but is in need of the ongoing Capital Improvement Program in order to correct existing deficiencies and maintain and upgrade the system to meet regulatory requirements (see discussion below under the heading "Government Regulation"). With the continuation of the Capital Improvement Program, it is anticipated that the Sewer System will be sufficient to meet foreseeable future demands and provide uninterrupted service to its users. See "CERTAIN BONDHOLDERS' RISKS, Certain Environmental Matters" above.

Description of Service Area

A description of the area served by the Water and Sewer System and selected demographics of the service area are set forth in APPENDIX D.

Water and Sewer Rates

The following tables present the Authority's Water and Sewer Rates and certain data with respect thereto and have been prepared by the Authority.

Historical Rates (1999–2009)

YEAR	Residential[1] Rate $	Residential[1] Increase[3] %	Commercial[1] Rate $	Commercial[1] Increase[3] %	Industrial[1] Rate $	Industrial[1] Increase[3] %	Wholesale[2] Rate $	Wholesale[2] Increase[3] %	Health & Education[1] Rate $	Health & Education[1] Increase[4] %
1999	3.95	2.5	3.88	2.5	3.63	2.5	2.65	2.5	5.31	(4)
2000	3.95	0	3.88	0	3.63	0	2.65	0	5.31	0
2001	3.95	0	3.88	0	3.63	0	2.65	0	5.31	0
2002	4.34	9.8	4.26	9.8	3.99	9.8	2.91	9.8	5.83	9.8
2003	4.64	7.0	4.56	7.0	4.26	7.0	3.11	7.0	6.24	7.0
2004	5.52	19.0	5.43	19.0	5.07	19.0	3.70	19.0	7.43	19.0
2005	6.46	17.0	6.35	17.0	5.93	17.0	4.33	17.0	8.69	17.0
2006	6.99	6.7	6.79	6.7	6.30	6.7	3.69	6.7	9.25	6.7
2007	7.50	5.4	7.19	5.4	6.74	5.4	3.69	--	9.83	5.4
2008	7.50	0	7.19	0	6.74	0	3.69	0	9.83	0
2009	7.50	0	7.19	0	6.74	0	3.69	0	9.83	0

(1) Rate per 1,000 gallons over minimum use per month.
(2) Up to 500,000 gallons
(3) Represents percentage increase over prior year
(4) New Rate Classification, rate per 1,000 gallons over minimum use per month.

2008 Water Consumption by Customer Classification (1)

Classification	Customers	Percentage of usage
Residential	77,863	36.97%
Commercial (2)	8,265	56.73%
Industrial	139	2.45%
Wholesale	16	3.85%
TOTAL	86,283	100.0%

(1) Excludes customers of other water purveyors.
(2) The "Commercial" category includes water usage by health and education sector, as well as various units of government.

10 Largest Users

	User	% of Total Usage for 2008
1.	Fox Chapel Water Authority	3.27%
2.	University of Pittsburgh	1.82
3.	UPMC Health System	1.68
4.	Bay Valley Foods	1.44
5.	Pittsburgh Housing Authority	1.03
6.	Allegheny County	0.84
7.	Allegheny County Sanitary Authority	0.73
8.	West Penn Hospital	0.70
9.	Carnegie Mellon University	0.70
10.	Borough of Millvale	0.61

Source: Pittsburgh Water and Sewer Authority

PWSA Water Rate Comparison (2009)

	Rate 1,000 Gal.	Minimum Monthly Charge	Minimum Gallons Per Month
Aspinwall Borough	$7.25		
Fox Chapel Authority	6.30		
Monroeville Authority	4.51	$27.06	6,000
Pittsburgh Water and Sewer Authority (1)	**5.00**	**14.67**	**1,000**
Plum Borough Municipal authority	6.58		
Richland Township Municipal Authority	4.50	8.00	
Shaler Township	3.66	20.50	
Penn Hills (Oakmont Residents)	3.44	20.19	
Westmoreland Authority – Forward Township	3.99	28.78	
Westmoreland Authority – McKeesport	6.77	13.54	
Westmoreland Authority – Truxall	3.99	44.98	

(1) Excluding $2.50 for Sewer Use Rate

Relations with Other Municipalities

In addition to the Authority's sales to residential, commercial and industrial customers, the Authority has entered into contracts with eight adjacent municipalities and one wholesale customer for the sale of water. The Authority is the primary source of water for three municipalities, pursuant to long-term contracts expiring in 2012 through 2015, which establish pricing structures with each municipality. Four municipalities and one wholesale customer each have entered into contracts with the Authority for peak capacity needs. Four of these contracts require monthly minimum charges to be received by the Authority and one is on an emergency basis only.

Prospective Water Sales and Sewer Services

The Authority is capable of producing up to 100 million gallons of potable water each day. With current demand (including the requirements (and reserves) of other municipalities) at 70.5 million gallons per day the Authority has available surplus capacity. Also, in order to comply with current regulatory requirements the Authority will be making enhancements to the Sewer System through the Capital Improvement Program. These Sewer System enhancements will involve interaction with other municipalities (See "The Sewer System" for additional detail) and in connection therewith the Authority is continuing an initiative to market its surplus water capacity and extend its sewer services to other municipalities and water authorities in the region.

Outstanding Bond

First Lien Debt

Upon issuance of the Reoffered Bonds, the Authority will have $661,230,000 aggregate principal amount of First Lien Bonds Outstanding (of which $361,865,000 is Fixed Rate and $299,365,000 is Variable Rate) as follows:

- $68,970,000 (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008 Taxable (the "Taxable 2008A Bonds");
- $145,495,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B1 of 2008 and Series B2 of 2008
- $24,665,000 (Fixed Rate) Water and Sewer System First Lien Revenue Bonds, Series D-1 of 2008 (the "2008D-1 Bonds");

- $71,225,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008 (the "2008D-2 Bonds");

- $119,840,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series of 2007 (the "2007 Bonds");

- $57,000,000 Water and Sewer System Revenue Refunding Bonds, Series of 2003 (the "2003 Bonds");

- $146,805,000 Water and Sewer System First Lien Revenue Bonds, Series B of 1998 (the "1998B Bonds"); and

- $27,230,000 Water and Sewer System Revenue Refunding Bonds, Series A of 1993 (the "1993A Bonds").

Subordinate Debt

The Authority has $103,795,000 Subordinate Debt outstanding as follows:

- $51,910,000 (Variable Rate) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008 (the "Subordinate 2008 C-1 Bonds");

- $51,885,000 (Variable Rate) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-2 of 2008 (the "Subordinate 2008 C-2 Bonds");

Other Obligations

In addition to its First Lien and Subordinate Bonds, the Authority has outstanding $14.2 million in loans with the Pennsylvania Infrastructure Investment Authority ("PENNVEST") which mature on September 1, 2025 and are subordinate to the First Lien and Subordinate Bonds.

Debt Service Requirements

The schedule on the following page sets forth the amount required during each Fiscal Year (ending December 31) shown below for the payment of the principal of and the interest on Outstanding First Lien Revenue Bonds and Outstanding Subordinate Revenue Refunding Bonds assuming all variable rate bonds bear interest at applicable swap rate through maturity.

Debt Service Requirements on First Lien and Subordinate Bonds

Yr	Debt Service on Outstanding First Lien Revenue Refunding Bonds[1]	Debt Service on Outstanding Subordinate Revenue Refunding Bonds[2]	Debt Service on First Lien Revenue Refunding Bonds Series B-1and B-2 of 2008[3]	Total Debt Service on First Lien Revenue Refunding Bonds and Subordinate Revenue Refunding Bonds[4]
2010	$33,341,086.42	$4,149,724.10	$5,875,088.10	$43,365,898.62
2011	32,062,836.42	4,149,724.10	5,875,088.10	42,087,648.62
2012	28,716,217.66	4,224,724.10	5,875,088.10	38,816,029.86
2013	29,735,048.92	4,206,725.60	5,875,088.10	39,816,862.62
2014	30,052,748.92	4,144,326.80	5,875,088.10	40,072,163.82
2015	30,117,398.92	4,144,326.80	5,875,088.10	40,136,813.82
2016	30,163,423.92	4,144,326.80	5,875,088.10	40,182,838.82
2017	29,846,023.92	4,144,326.80	5,875,088.10	39,865,438.82
2018	29,831,187.16	4,144,326.80	5,875,088.10	39,850,602.06
2019	29,846,203.46	4,144,326.80	5,875,088.10	39,865,618.36
2020	29,870,837.76	4,144,326.80	5,875,088.10	39,890,252.66
2021	29,883,984.46	4,144,326.80	5,875,088.10	39,903,399.36
2022	29,919,925.56	4,144,326.80	5,875,088.10	39,939,340.46
2023	30,084,007.36	4,144,326.80	5,875,088.10	40,103,422.26
2024	30,288,357.96	4,144,326.80	5,875,088.10	40,307,772.86
2025	30,771,285.36	4,144,326.80	5,875,088.10	40,790,700.26
2026	31,259,363.56	4,144,326.80	5,875,088.10	41,278,778.46
2027	31,278,353.96	4,144,326.80	5,875,088.10	41,297,768.86
2028	31,251,164.76	4,144,326.80	5,875,088.10	41,270,579.66
2029	31,264,565.36	4,144,326.80	5,875,088.10	41,283,980.26
2030	27,981,982.96	7,084,326.80	5,875,088.10	40,941,397.86
2031	15,680,520.56	19,371,785.60	5,875,088.10	40,927,394.26
2032	6,208,648.36	28,918,292.50	5,875,088.10	41,002,028.96
2033	6,357,918.76	28,868,602.60	5,875,088.10	41,101,609.46
2034	6,371,307.70	28,980,132.10	5,875,088.10	41,226,527.90
2035	2,753,728.46	5,979,885.00	32,745,088.10	41,478,701.56
2036	2,753,728.46	-	38,810,077.50	41,563,805.96
2037	2,753,728.46	-	38,936,349.90	41,690,078.36
2038	2,753,728.46	-	39,067,052.30	41,820,780.76
2039	29,428,728.46	-	12,484,560.00	41,913,288.46
2040	42,099,253.20	-	-	42,099,253.20
Total	$ 754,727,295.66	$ 202,243,151.30	$ 308,920,330.30	$1,265,890,777.26

[1] Interest on the Series 1993A, 1998B, 2003, 2007A, 2008 A Taxable and 2008 D1 First Lien (Fixed Rate) Bonds calculated at fixed rate. Interest on 2007 B-1, 2007 B-2 and 2008 D2 First Lien (Variable Rate) Bonds calculated at the associated swap rate of 3.93% and 4.10%, respectively.

[2] Interest on the 2008 C1 Subordinate Lien (Variable Rate) Bonds based on the associated swap rate of 4.00%. With the expiration of the Dexia liquidity facility, the Authority is planning to restructure these bonds in a separate transaction.

[3] Interest on 2008 B-1 and 2008 B-2 Variable Rate Bonds calculated at the associated swap rate of 4.04%.

[4] Does not include loans with PENNVEST.

Letter of Credit and Liquidity Agreements

The Authority has entered into various letter of credit and standby agreements relating to the outstanding bonds of the Authority. Upon completion of the restructuring of the 2008B Bonds, the Authority will have the following letter of credit and standby agreements relating to the outstanding bonds of the Authority as provided in the following table:

Variable Rate Bond Series	Provider	Agreement	Term
2007 Bonds	JPMorgan Chase Bank	Standby Bond Purchase Agreement	June 10, 2010
2008 Bonds Series B-1	Bank of America, N.A.	Direct Pay Letter of Credit	October 22, 2011
2008 Bonds Series B-2	PNC Bank, National Association	Direct Pay Letter of Credit	October 22, 2011
2008 Series C-1	Dexia Credit Local	Standby Bond Purchase Agreement	October 10, 2009*
2008 Series C-2	JPMorgan Chase Bank	Standby Bond Purchase Agreement	June 10, 2010
2008 Series D-2	JPMorgan Chase Bank	Standby Bond Purchase Agreement	June 10, 2010

* The Authority intends to restructure the $51,910,000 outstanding principal amount of the Series 2008-C-1 subseries (the "2008 Series C-1 Bonds") of the Series 2008C Bonds due to the expiration of the liquidity facility. The Authority intends to divide the Series 2008C-1 Bonds into four separate subseries: Series C-1A of 2008, Series C-1B of 2008, Series C-1C of 2008 and Series C-1D of 2008 and to convert those bonds from the Weekly Mode to a Term Mode. It is expected that the Series C-1A of 2008, Series C-1B of 2008 and Series C-1C of 2008 bonds in the estimated aggregate principal amount of $25,000,000 will be supported by individual irrevocable direct-pay letters of credit (collectively, the "LOC Banks Letters of Credit") by Northwest Bancorp, Inc., ESB Bank and Washington Federal Savings Bank and that the Federal Home Loan Bank of Pittsburgh will issue confirming letters of credit relating to the LOC Banks Letters of Credit. The Authority expects that the Series C-1D bonds will not be supported by a direct-pay letter of credit or liquidity facility. The Authority anticipates completing the restructuring of the 2008 C-1 Bonds in November, 2009.

Interest Rate Swap Agreements

The Authority has entered into other Qualified Interest rate Swap Agreements relating to other outstanding bonds of the Authority. The following table sets forth the terms of all of the Swap Agreements as of September 1, 2009:

Pittsburgh Water and Sewer Authority
Interest Rate Swap Agreement Summary
As of September 1, 2009

Variable to Fixed Rate Swaps	Counterparty	Outstanding Notional Amount	Effective Date	Termination Date	Fixed Rate	Floating Index
2007 B1 and B2	JPMorgan Chase Bank & Merrill Lynch Capital Services, Inc.	$ 82,645,000	3/9/2007	9/1/2033	3.932%	SIFMA
2008 B	JPMorgan Chase Bank & Merrill Lynch Capital Services, Inc.	$145,495,000	6/12/2008	9/1/2039	4.038%	SIFMA
2008 C	JPMorgan Chase Bank & Merrill Lynch Capital Services, Inc.	$103,795,000	6/12/2008	9/4/2035	3.998%	SIFMA
2008 D	JPMorgan Chase Bank	$ 71,225,000	6/12/2008	9/4/2040	4.103%	SIFMA
Total		$403,160,000				

Projected Capital Borrowings

The Authority has established a five (5) year capital improvement program encompassing years 2008 to 2012 (the "Capital Improvement Program"). The primary objectives of the Authority's Capital Improvement Program are to assure uninterrupted service to the Authority's customers and to enhance the Water and Sewer System's capabilities. The Capital

Improvement Program was designed to maintain a satisfactory level of service to Water and Sewer System users, to improve operating efficiency, to address future requirements and to assure a safe supply of water to its users. The current program was initially implemented in 1984 and has resulted in major improvements, additions and rehabilitation to all components of the Water and Sewer Systems.

As more fully discussed under "CERTAIN BONDHOLDERS' RISKS — Certain Environmental Matters", the Authority is subject to a U.S. Environmental Protection Agency Combined Sewer Overflow Policy ("CSO Policy") regarding overflows from combined sewers during events that result in the discharge to receiving water of untreated sanitary sewage. Pursuant to the January 2004 Consent Order and Agreement (the "Order"), the Authority is currently developing a feasibility study in conjunction with the Allegheny County Sanitary Authority ("ALCOSAN') which entered into a Consent Decree with the United States Environmental Protection Agency ("USEPA"), the Pennsylvania Department of Environmental Protection ("DEP") and the Allegheny County Health Department ("ACHD"), to address combined sewer overflows and achieve compliance with water quality standards and the Clean Water Act. The Authority expects to submit its feasibility study to DEP and ALCOSAN by January 2010. The cost of the studies and construction activities that will be required to reach target goals that are to be established through the CSO Policy is currently preliminarily estimated by the Authority at $300,000,000, but will be more accurately determined when the feasibility study necessary for the implementation ALCOSAN Regional Long Term Control Plan is finally approved. The amount is dependent, in part, on coordination with other regional providers and ALCOSAN. Funding of a portion of the amount needed to address the combined sewer overflow issue and achieve compliance with the Clean Water Act was provided with proceeds of the Authority's Water and Sewer System First Lien Revenue Bonds, Series of 2002 and the Authority's Water and Sewer System First Lien Revenue Bonds, Series of 2005 (both refinanced with Series of 2007 Bonds previously issued by the Authority).

The final years of the current Capital Improvement Program contemplate additional expenditures for sewer compliance issues and infrastructure improvements. It is anticipated that funding for these expenditures, as well as implementation of the feasibility study necessary for the completion of the ALCOSAN Regional Long Term Control Plan was provided, in all or in part, through the original issuance of the Reoffered Bonds, the Pennvest Loans and additional debt. In total, the new money bonds issued as a component of the Authority's First Lien Bonds and Subordinate Lien Bonds issued in 2008 will fund approximately $100 million out of the Authority's $125 million Capital Improvement Program. The Authority also has applied for additional Pennvest Loans, which loans are subordinate to payments due on the Authority's Bonds, in the amount of $5.8 million in 2008 and approximately $40.2 million in 2009.

Expenses of Operation

Salaries and related expenses account for approximately seventeen percent (17%) of total operating expenses in the 2009 budget. In 2009 the Authority's budget provides for two-hundred-seventy-three (273) positions as follows: thirty-nine (39) in billing and collections; twenty-four (24) in administrative and accounting positions; one-hundred-ninety-three (193) in water and sewer operations and seventeen (17) in engineering. Payments to the City of Pittsburgh for services to be provided to the Authority under the Cooperating Agreement are approximately nine percent (9%) of the 2009 total operating expenses. In addition, utility fees and the cost of chemicals account for approximately ten (10%) of the 2009 total operating expenses.

Financial Operations

The Authority's income statement and annual debt service requirements are set forth in the following Financial History table. The table was prepared by the Authority using information contained in the audited financial statements for the years ended December 31, 2005 through December 31, 2008. The audited financial statements and management discussion and analysis for the years ended December 31, 2008 and 2007 are included as APPENDIX C.

Total operating revenues in 2008 were unchanged at $129 million compared to total operating revenues in 2007. However, a net $2.1 million increase in wastewater treatment revenues due to a 9% rate increase by ALCOSAN and an increase of $1.1 million in other revenues was offset by a $3.1 million or 3.5% decline in Water Sales revenues in 2008. The decline in water utility revenues was a result of an overall drop in consumption in 2008 as compared to 2007. Total operating expenses increased by $5.6 million or 5.6% in 2008 to $105.6 million from $100 million in 2007. This was due to several factors including (i) salary and employee benefit expense were up $0.867 million or 6.0% (attributed to an average salary increase of 2.5% and staff increases in operational and Customer Service areas), (ii) electricity expenses were up 7% or $0.3 million to $4.7 million, from $4.4 million in 2008, and (iii) collections decreased by $1.9 million or 1.5% while accounts receivable aggregate reserve adjustment for bad debt expense decreased by 8% or, $0.2 million.

Statement of Revenues, Expenses and Changes in Net Assets*
(Dollars expressed in thousands)
(Years Ended December 31, 2008, 2007, 2006 and 2005)

	2008	2007	2006	2005
Operating revenues:				
Residential, commercial and industrial water sales	$ 86,627	$ 89,766	$ 83,954	$ 82,726
Wastewater treatment	39,439	37,381	33,968	32,315
Other	3,872	2,760	2,371	2,305
Total operating revenues	$ 129,938	$ 129,907	$ 120,293	$ 117,346
Operating Expenses:				
Direct operating expenses	$ 38,346	$ 35,328	$ 33,935	$ 30,501
Cooperation agreement operating expenses:				
Wastewater direct expenses	40,096	38,094	34,661	32,974
Indirect cost allocation - wastewater	4,415	4,415	3,000	3,000
Indirect cost allocation - water	5,235	5,235	4,150	4,150
Transfer costs, net				
Expense of water provided by other entities:				
Subsidy of customers located in the City	$ 1,070	$ 684	$ 819	$ 1,093
Depreciation	13,914	13,692	13,332	13,795
Amortization of capitalized lease assets	2,557	2,557	2,557	2,557
Total operating expenses	105,633	100,005	92,454	88,070
Operating income	$ 24,305	$ 29,902	$ 27,839	$ 29,276
Other revenues (expenses):				
Federal Grants	986	--		
Interest revenue	5,032	2,598	2,216	1,348
Interest expense	(29,362)	(28,394)	(27,946)	(27,500)
Unrealized gain/(loss) on trust investments	(153)	(155)	(145)	(160)
Amortization of bond issue costs	(1,202)	(622)	(627)	(643)
Total other revenue (expense)	(24,699)	(26,573)	(26,502)	(26,955)
Increase/(Decrease) in Net Assets	$ (394)	$ 3,329	$ 1,337	$ 2,321
Net Asset Surplus/(Deficit):				
Beginning of year	(34,603)	(37,932)	(39,269)	(41,590)
End of year	$ (34,997)	$ (34,603)	$ (37,932)	$ (39,269)
Annual debt service requirement				
Principal	$ 15,531	$ 17,299	$ 17,834	$ 17,159
Interest	24,223	22,345	26,021	23,180
Total annual debt service	$ 39,754	$ 39,644	$ 43,855	$ 40,339

- Financial history restated to conform with new requirements of Governmental Accounting Standards Board 34*, Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* adopted by the Authority as of January 1, 2001.

The Financial History table reflects the results of past operations and is not necessarily indicative of results of future operations. Future operations will be affected by various factors, including, but not limited to, regulatory mandates, rate changes, weather, labor contracts, population changes, business environment and other matters, the nature and effect of which cannot now be determined. See "CERTAIN BONDHOLDERS' RISKS".

Based on the Authority's unaudited results for the seven months ended July 31, 2009, total operating revenues were approximately $81.6 million, or 7.7%, above total operating revenues for the same seven-month period ended July 31, 2008. The variances were primarily due to ALCOSAN's 16% rate increase for sewage treatment services and a $2M increase in federal grant funding in capital construction projects. Such results also show operating expenses for the seven months ended July 31, 2009, are approximately $48.9 million, or 2.5%, above operating expenses for the same seven-month period ended July 31, 2008, with the variance due primarily to growth in salaries and benefits (5.9%), operating contracts (5.2%) and utilities (34.3%). The growth in expenses was offset with a reduction in bad debt reserves and chemicals expense. Actual operating expenses overall were approximately $1.1 million higher than the same seven months period ended July 31, 2008.Other non-operating expenses for the seven months ended July 31, 2009 are approximately $39.2M, or 26.9% above non-operating expenses for the same seven-month period ended July 31, 2008. While the City Co-op expenses declined by $.583M, overall interest expenses increased by 57.3% due to the June 2008 Bond issue which included $96.M in new monies and restructuring of the 1998 and 2007 Bond Series.

Debt Service Coverage

The Authority is required to satisfy one of the two debt service coverage tests under Indenture. Under Test 1 receipts, revenues and unrestricted revenue fund cash must be sufficient to provide for payment of (a) current expenses of PWSA and (b) 120% of debt service on the first and subordinate lien bonds. Under Test 2, receipts and revenues, including construction fund earnings with certain limitation, together with debt service reserve fund earnings must be sufficient to provide for payment of (a) current expenses of PWSA and (b) 100% of debt service on the first and subordinate lien bonds. Below is the historical debt service coverage from 2005 to 2008.

Debt Service Coverage Calculations	2005	2006	2007	2008	2009
Receipts and Revenues	$ 117,346	$ 120,293	$ 129,907	$ 129,938	$ 132,765
Unrestricted Cash	26,344	31,907	35,024	41,914	39,857
Total	$ 143,690	$ 152,200	$ 164,931	$ 171,852	$ 172,622
Operating Expenses	$ 64,568	$ 69,415	$ 74,106	$ 79,512	$ 80,246
120% Debt Service	48,407	52,626	47,573	47,576	53,468
Total	$112,975	$ 122,041	$121,679	$ 127,088	$ 133,714
Funds in Excess of Test	$ 30,715	$ 30,159	$ 43,252	$ 44,764	$ 38,908
Test 1 Debt Service Coverage	163%	157%	191%	194%	173%

TEST 2 Debt Service Coverage Calculations	2005	2006	2007	2008	2009
Receipts and Revenues	$ 118,005	$ 120,986	$ 129,907	$ 129,938	$ 132,765
Operating Expenses	64,568	69,415	74,106	79,512	80,246
100% Debt Service	40,339	43,855	39,644	39,647	44,557
Total	$ 104,907	$ 113,270	$ 113,750	$ 119,159	$ 124,803
Funds in Excess of Test	$ 13,098	$ 7,716	$ 16,157	$ 10,779	$ 7,962
Test 2 Debt Service Coverage	132%	118%	141%	127%	118%

For purposes of its debt service coverage calculations, the Authority does not include its Cooperative Payments to the City, which are subordinate to the payment of debt service on the First Lien and Subordinate Bonds, under operating expenses.

Billings, Collections and Enforcement

All bills are due 20 days after the billing date and interest is applied on the next invoicing date. Dunning notices are generated and mailed to customers with any past due balances, and all unpaid balances plus interest are reflected on the next regularly scheduled monthly statement. In addition, accounts with past due balances in excess of 90 days are also issued to a collection agency as part of the overall collection process. Any accounts eligible to be terminated are posted for non-payment, and water services are terminated when necessary.

In March 2003, as Phase 1 of an information technology ("IT") implementation plan, the Authority upgraded to an SAP billing and customer information system which has the ability to combine water and delinquent wastewater charges on a single customer account and has dunning abilities never before used by the Authority. This new system has enabled the Authority to better manage metering, billing and collection of customer accounts, as well as improving management of revenue forecasting and service work processing.

Also as part of the Phase 1 IT implementation, the Authority upgraded to an SAP finance and materials management system. The second phase of the IT implementation plan, which was completed in mid-2004, included additional enhancements to billing and collection capabilities and implementation of a comprehensive IT asset management system.

Effective May 2004, the Authority began direct-billing City residents for current wastewater treatment charges. The intent of this operational change (from purchasing delinquent wastewater receivables and billing) is to reduce delinquencies by providing for more timely billing and collection activities.

In order to effect this billing change, the Authority entered into a tentative agreement with ALCOSAN relating to direct billing by the Authority of the ALCOSAN wastewater treatment charges. Under that agreement, the Authority is obligated to create and fund an escrow account covering a two-month billing period.

In October 2008, the Authority partnered with Paymentus Corporation to bring a one-time telephone and internet payment solution to its customers. A full Electronic Billing Payment and Presentment (EBPP) solution is scheduled to be available in the fall of 2009 via the Authority's billing vendor, Pittsburgh Mailing Services, Inc.

Employee Relations and Retirement System

The majority of employees of the Authority are represented by a labor organization under Act 195 of 1970 of the Commonwealth of Pennsylvania. The Pittsburgh Joint Collective Bargaining Committee represents blue-collar employees, and the American Federation of State, County and Municipal Employees (AFSCME), Local 2719 represents white-collar employees while, Local 2037 represents the foremen. Act 195 requires that bargaining start at least six months prior to the date on which the Authority's budget is adopted and that mediation be used if an impasse is reached. Since the time they were certified, the Authority has concluded numerous negotiations with these bargaining units without any labor stoppages. A five year agreement was recently reached with the AFSCME which provides for a salary increase effective January 1, 2009, 2010, 2011, 2012, and 2013. The Pittsburgh Joint Collective Bargaining Committee reached a five year agreement which provides for a salary increase effective January 1, 2008, 2009, 2010, 2011, and 2012.

Government Regulation

The Authority is subject to Federal, State and County regulations in connection with water treatment, water distribution, wastewater collection, construction activities, and storage tank use and air emissions. At the Federal level, regulatory oversight is provided by the United States Environmental Protection Agency ("USEPA"); at the State level, oversight is provided by the PADEP; and at the local level, oversight is provided by the Allegheny County Health Department ("ACHD"). The system meets or is in the process of planning and implementing improvements to meet all applicable regulations, permits and licenses. The major regulatory programs governing the Authority's operations are discussed below, grouped by subject matter.

Drinking Water

Large municipal water suppliers, such as the Authority, provide drinking water in accordance with the Federal Safe Drinking Water Act, which was passed in 1974 and was amended in 1986 and 1996, regulating all systems which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. The Federal Act gave USEPA the authority to establish drinking water standards to control the level of contaminants in drinking water, rules prescribing minimum methods of drinking water treatment, and requirements for monitoring and reporting of drinking water quality. Pennsylvania has adopted a corresponding Pennsylvania Safe Drinking Water Act in 1984, and the state regulatory program has received USEPA primary approval, meaning that PADEP primarily administers the permitting and regulatory program in Pennsylvania.

The Authority holds permits issued by PADEP for the operation of a public water supply system, and is required to comply with federal and state requirements for treatment, monitoring of water quality, reporting of monitoring results and notification of exceeding events, and issuance of consumer confident reports to our customers.

Water Quality

Federal regulations adopted under the Federal Clean Water Act, and State rules enacted under the Pennsylvania Clean Streams Law, govern discharges of wastewater and storm water. Any facility which discharges sewage, process wastewater, non-contact cooling water, storm water from municipal separate storm sewer systems or storm water associated with an industrial activity must obtain a National Pollutant Discharge Elimination System ("NPDES") Permit. Under program approval from USEPA, PADEP administers the NPDES Permit program in Pennsylvania.

The Authority and the City of Pittsburgh have been issued an NPDES Permit for discharge from the municipal separate storm sewer systems within the City.

The PWSA Water Treatment Plant recently applied for an NPDES Permit to allow treated process water discharges to the Allegheny River. The PWSA has been asked by the PADEP to provide additional information for their review of the permit application. Discharges have occurred prior and subsequent to submission of the application. The PWSA will determine what action, if any, is required once the permit has been issued.

An NPDES permit is also required for discharges from sewage treatment facilities and combined sewer overflows ("CSO"). Such a permit establishes discharge limitations, monitoring, and reporting requirements and compliance schedules. The PWSA has been issued its NPDES CSO Permit for its combined sewer overflows.

On January 29, 2004, the Authority entered into a Consent Order and Agreement which contains detailed requirements for addressing wet weather sewer overflows (see "CERTAIN BONDHOLDERS' RISKS, *Certain Environmental Matters*").

The City of Pittsburgh, ACHD and the Authority have rules and regulations prohibiting the introduction of hazardous chemicals or materials, including industrial byproducts, into the sewer collection and conveyance system. Enforcement is through the Allegheny County Health Department, the City of Pittsburgh, Department of Public Safety, and the PADEP. Under USEPA requirements governing pre-treatment of industrial wastewaters discharged to publicly owned treatment works, pretreatment regulations and monitoring of those regulations are the responsibility of ALCOSAN and the ACHD.

Section 303(d) of the federal Clean Water Act requires Pennsylvania to identify all impaired waters within the Commonwealth where technology-based treatment requirements for point and non point sources of pollution are not stringent enough to attain and or maintain applicable water quality standards. This is an ongoing evaluation program being conducted by the PADEP. At this time, the PWSA has not been notified of any identified problems.

Storage Tanks

The Pennsylvania Storage Tank and Spill Prevention Act established a comprehensive regulatory program for both aboveground and underground storage tanks and facilities. The Act allows the PADEP to develop environmental protection programs to prevent and clean up storage tank product releases and spills. The Act includes both enforcement provisions and a strong reliance on the private sector to implement the major program elements. PADEP has received approval to administer the state storage tank program in lieu of most corresponding provisions of the Federal Resource Conservation and Recovery Act underground storage tank program.

The Authority currently has 12 tanks requiring frequent inspections under the regulatory provisions.

All Authority storage tanks have been upgraded to meet current regulatory requirements for protection, monitoring and containment.

Water Treatment Plant

The Authority has completed a $3 million upgrade to the chemical treatment facility at the water treatment plant. This upgrade addresses storage, handling and distribution, containment and monitoring. These improvements will ensure compliance with current and proposed water quality and environmental regulations. A major aspect of the upgrade has been the conversion of the chlorination system from one utilizing gaseous chlorine to one utilizing liquid chlorine. Chlorine in a liquid form is safer to handle and store.

Air Quality

ACHD administers the air quality permitting program under the provisions of the Federal Clean Air Act and the Pennsylvania Air Pollution Control Act. Under Article XXI of the ACHD Air Pollution Control Regulations, pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Stack emission standards are set for specific air quality parameters and enforced by permit. On January 29, 1996 the Allegheny Health Department, Air Quality Program, issued the Authority an Annual Air Quality Operating Permit, # 96-0117. This permit covers emissions generated at the Water Treatment Plant and is reviewed and renewed annually. PWSA is required to periodically sample and meet stack air emission standards at the treatment plant from its boilers.

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX B

SUMMARY OF INDENTURES

[THIS PAGE INTENTIONALLY LEFT BLANK]

The Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 and Series B-2 of 2008 (the "2008B First Lien Bonds") were issued and secured under the Trust Indenture dated as of October 15, 1993 (the "Original Indenture"), as amended and supplemented by the First Supplemental Indenture, dated as of July 15, 1995, the Second Supplemental Indenture, dated as of March 1, 1998, the Third Supplemental Indenture, dated as of March 1, 2002, the Fourth Supplemental Indenture, dated as of September 15, 2003, the Fifth Supplemental Indenture dated as of June 1, 2005, the Sixth Supplemental Indenture dated as of March 1, 2007 and the Seventh Supplemental Indenture dated as of June 1, 2008 (the "Seventh Supplemental Indenture"), as amended by the Amending Supplement dated as of October 15, 2009 (collectively, the "First Lien Indenture"). The 2008B First Lien Bonds are being reoffered in connection with a mandatory tender of 2008B First Lien Bonds necessitated by substitution of the liquidity facility with the Alternate Liquidity Facility, as that term is defined in the Seventh Supplemental Indenture.

SUMMARY OF FIRST LIEN INDENTURE

This summary of the First Lien Indenture is qualified in all respects by specific reference to the First Lien Indenture. A copy of the First Lien Indenture may be reviewed at the offices of the Authority or the Trustee. Capitalized terms and phrases, not otherwise defined herein, shall have the meanings ascribed to them in the First Lien Indenture.

Defined Terms

Authority Bonds. Means Bonds owned by the Authority.

Authorized Investments. The funds of the First Lien Indenture may be invested in the following:

(a) Direct obligations of the United States of America and securities fully and unconditionally guaranteed as to the timely payment of principal and interest by the United States of America, provided, that the full faith and credit of the United States of America must be pledged to any such direct obligation or guarantee ("Direct Obligations").

(b) Direct obligations and fully guaranteed certificates of beneficial interest of the Export-Import Bank of the United States; consolidated debt obligations and letter of credit-backed issues of the Federal Home Loan Banks; participation certificates and senior debt obligations of the Federal Home Loan Mortgage Corporation ("FHLMCs"); debentures of the Federal Housing Administration; mortgage-backed securities (except stripped mortgage securities which are valued greater than par on the portion of unpaid principal) and senior debt obligations of the Federal National Mortgage Association ("FNMAs"); participation certificates of the General Services Administration; guaranteed mortgage-backed securities and guaranteed participation certificates of the Government National Mortgage Association ("GNMAs"); guaranteed participation certificates and guaranteed pool certificates of the Small Business Administration; debt obligations and letter of credit-backed issues of the Student Loan Marketing Association; local authority bonds of the U.S. Department of Housing and Urban Development; guaranteed Title XI financings of the U.S. Maritime Administration; guaranteed transit bonds of the Washington Metropolitan Area Transit Authority; Resolution Funding Corporation securities.

(c) Direct obligations of any state of the United States of America or any subdivision or agency thereof whose unsecured, uninsured and unguaranteed general obligation debt is rated, at the time of purchase, "A" or better by Moody's and "A" or better by S&P, or any obligation fully and unconditionally guaranteed by any state, subdivision or agency whose unsecured, uninsured and unguaranteed general obligation debt is rated, at the time of purchase, "A" or better by Moody's and "A" or better by S&P.

(d) Commercial paper (having original maturities of not more than 270 days) rated, at the time of purchase, "P-1" by Moody's and "A-1" or better by S&P.

(e) Federal funds, unsecured certificates of deposit, time deposits or bankers acceptances (in each case having maturities of not more than 365 days) of any domestic bank including a branch office of a foreign bank which branch office is located in the United States, provided legal opinions are received to the effect that full and

timely payment of such deposit or similar obligation is enforceable against the principal office or any branch of such bank, which, at the time of purchase, has a short-term "Bank Deposit" rating of "P-1" by Moody's and a "Short-Term CD" rating of "A-1" or better by S&P.

(f) Deposits of any bank or savings and loan association which has combined capital, surplus and undivided profits of not less than $3 million, provided such deposits are continuously and fully insured by the Bank Insurance Fund or the Saving Association Insurance Fund of the Federal Deposit Insurance Corporation ("FDIC").

(g) Investments in money-market funds rated "AAAm" or "AAAm-G" by S&P.

(h) Repurchase agreements collateralized by Direct Obligations, GNMAs, FNMAs or FFILMCs with any registered broker/dealer subject to the Securities Investors' Protection Corporation jurisdiction or any commercial bank insured by the FDIC, if such broker/dealer or bank has an uninsured, unsecured and unguaranteed obligation rated "P-1" or "A3" or better by Moody's and "A-1" or "A-" or better by S&P, provided:

(i) a master repurchase agreement or specific written repurchase agreement governs the transactions; and

(i) the securities are held free and clear of any lien by the Trustee or an independent third party acting solely as agent ("Agent") for the Trustee, and such third party is (i) a Federal Reserve Bank, (ii) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus and undivided profits of not less that $50 million, or (iii) a bank approved in writing for such purpose by the Bond insurers, and the Trustee shall have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee; and

(j) a perfected first security interest under the Uniform Commercial Code, or book entry procedures prescribed at 31 C.F.R. 306.1 et seq. or 31 C.F.R. 350.0 et seq. in such securities is created for the benefit of the Trustee; and

(k) the repurchase agreement has a term of 180 days or less, and the Trustee or the agent will value the collateral securities no less frequently than weekly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within two Business Days of such valuation; and

(l) the fair market value of the securities in relation to the amount of the repurchase obligation, including principal and interest, is equal to at least 103%.

(m) Investment agreements approved by the Bond Insurers.

Current Expenses. The term "Current Expenses" shall mean the reasonable, proper and necessary costs of operation, maintenance and repair of the Water and Sewer System and Capital Additions and shall include, but without limiting the generality of the foregoing, administrative, engineering, legal, auditing and insurance expenses, liquidity facility fees and expenses, fees and expenses of the Trustee, any paying agent, and authorized depositaries, an allowance for depreciation, any payments to pension or retirement funds and taxes, and payments payable by the Authority to the City under the Cooperation Agreement.

Debt Service Requirements. The term "Debt Service Requirements" shall mean, in respect of any Fiscal Year, the sum of the amount required to be paid in such Fiscal Year by the Authority in respect of the interest on and the principal of the Bonds outstanding or to be outstanding, as the case may be, and the amounts required to be paid to any sinking, purchase or analogous fund established for such Bonds and any Periodic Payments to be paid in connection with any Qualified Interest Rate Swap Agreement to the extent not taken into account in calculating the Debt Service Requirements on Bonds bearing interest at a variable rate pursuant to the immediately following sentence; provided, however, that the Debt Service Requirements in respect of any Fiscal Year for a series of Bonds for which there shall have been established a sinking, purchase or analogous fund shall be determined after projecting the operation of such fund to the retirement of Bonds by redemption and giving effect to the reduction in the payments to be made in such Fiscal Year in respect of the principal of and interest on such Bonds by reason of

such redemption. To the extent any Bonds under consideration bear interest at a variable rate, and a Qualified Interest Rate Swap Agreement is in place with respect to such Bonds, the Debt Service Requirements on those Bonds shall be calculated by substituting the fixed rate used to determine amounts payable by the Authority under the Qualified Interest Rate Swap Agreement in lieu of the variable rate on the Bonds (except as such calculation relates to amounts to be deposited into the Debt Service Reserve Fund); provided, the Counterparty to such Qualified Interest Rate Swap Agreement maintains a rating by Standard & Poor's of at least "AA-" and by Moody's of at least "Aa3", otherwise the Debt Service Requirements for such Bonds shall be assumed to bear interest at the highest of: (i) the actual rate on the date of calculation, or if the indebtedness is not yet outstanding, the initial rate (if established and binding); (ii) if the indebtedness has been outstanding for at least twelve (12) months, the average rate over the twelve (12) months immediately preceding the date of calculation; and (iii) (1) if the interest on the indebtedness is excludable from gross income under the applicable provisions of the Internal Revenue Code of 1986, as amended, the most recently published Bond Buyer 25 Bond Revenue Index (or comparable index if no longer published) plus fifty (50) basis points, or (2) if interest is not so excludable, the interest rate on direct U.S. Treasury Obligations with comparable maturities plus fifty (50) basis points.

Letter of Credit. The term "Letter of Credit" shall mean an irrevocable transferable direct-pay letter of credit issued for a series or subseries of Bonds by a Letter of Credit Bank for the account of the Authority in favor of the Trustee supporting a series or subseries of Bonds as set forth in a Reimbursement Agreement between the Letter of Credit Bank and the Authority.

Letter of Credit Bank. The term "Letter of Credit Bank" shall mean the issuer of a irrevocable transferable direct-pay Letter of Credit pursuant to a Reimbursement Agreement.

Periodic Payment Date. The term "Periodic Payment Date" shall mean the date on which a Fixed Swap Payment is required under any Qualified Swap Agreement until the termination or maturity of the Qualified Interest Rate Swap Agreement.

Periodic Payments. The term "Periodic Payments" shall mean any regularly scheduled payment payable by the Authority to the Counterparty pursuant to the terms of any Qualified Interest Rate Swap Agreement(s); however, Periodic Payments shall not include any termination payments, costs and fees or any other sums payable under the Qualified Swap Agreement that are not regularly scheduled payments payable by the Authority.

Pledged Bonds. The term "Pledged Bonds" shall mean Bonds purchased with proceeds of a draw on a Letter of Credit and not remarketed and held in pledge by the Letter of Credit Bank or its designee.

Qualified Interest Rate Swap Agreement. The term "Qualified Interest Rate Swap Agreement" or "Qualified Swap Agreement" shall mean any agreement relating to any Bonds issued or to be issued under the Indenture with a Counterparty whereby the Authority will pay to the Counterparty periodic fixed amounts based upon a fixed percentage of a notional amount specified in such agreement and such Counterparty will pay to the Authority certain periodic floating amounts based upon a variable percent of the same notional amount; provided, that (i) the underwriter or the Authority's financial advisor shall certify to the Authority and the Trustee that (based upon then current market conditions) such Qualified Swap Agreement creates an overall lower Debt Service Requirement than would be attained through the issuance of Additional Bonds in an amount equal to such notional amounts at a Fixed Rate without such Qualified Interest Rate Swap Agreement and (ii) there is in place a municipal bond insurance policy, letter of credit or other credit enhancement instrument with respect to the Bonds to which the agreement relates guaranteeing payments of amounts owed on the Bonds and a swap insurance policy guaranteeing the payment of Periodic Payments due pursuant to such agreement respectively. Periodic Payments under a Qualified Interest Rate Swap Agreement may be on parity with the Bonds to which the Qualified Interest Rate Swap Agreement relates.

Receipts and Revenues. The term "Receipts and Revenues" shall mean any and all rates, fees, payments received by the Authority from a counterparty pursuant to the terms of a Qualified Interest Rate Swap Agreement, rents and charges established or to be established, levied and collected in connection with, and all other payments, receipts and revenues of whatever kind or character arising from, the operation or ownership of any property of the Authority or any part thereof (except tap or connection fees and charges to the extent such fees or charges are pledged in accordance with the Act as a refund to such person who has paid for the construction of any extension of

the Water and Sewer System or assessment revenues which are subject to the lien of assessment bonds then outstanding), any income earned on the moneys or investments on deposit in the Debt Service Fund, Debt Service Reserve Fund, Construction Fund, Revenue Fund, Operation and Maintenance Fund and any sinking, purchase or analogous fund created under the First Lien Indenture.

Reimbursement Agreement. The term "Reimbursement Agreement" shall mean a Reimbursement Agreement between the Authority and the respective Letter of Credit Bank, which may be amended from time to time in accordance with the terms thereof.

Reimbursement Obligations. The term "Reimbursement Obligations" shall mean the obligations of the Authority to reimburse the Letter of Credit Bank for draws on such Letter of Credit Bank's Letter of Credit and to pay all other amounts due or to become due under the Reimbursement Agreement.

Pledge and Security

Pursuant to the First Lien Indenture, the Receipts and Revenues after payment of the Authority's Current Expenses, together with all cash and investments from time to time held in any fund (other than the Rebate Fund) by the Trustee, is pledged by the Authority to the Trustee, its successors and assigns, to secure the payment of principal of and interest on all Bonds issued under the First Lien Indenture, the observance and performance of all the terms, provisions and conditions of the First Lien Indenture, and for the equal and ratable benefit and security of all and singular the present and future holders of the Bonds, Letter of Credit Banks and Qualified Interest Rate Swap Agreement without preference, priority or distinction as to lien or otherwise, except as otherwise provided in the First Lien Indenture, of any one Bond, Reimbursement Agreement or Qualified Interest Rate Swap Agreement over any other Bond Reimbursement Agreement or Qualified Interest Rate Swap Agreement by reason of priority in the issue, sale or authentication thereof or otherwise. The municipal bond insurance policy issued with respect to a particular series of the Bonds is for the sole benefit and security of the holders of the particular series of Bonds to which such policy relates. Holders of Bonds of another series shall have no rights or protection under a bond insurance policy issued with respect to another series of the Bonds.

Additional Bonds

The Authority may issue Additional Bonds, on a parity with the 2008 Bonds, 2007 Bonds, the 2003 Bonds, the 1998 Bonds and the 1993 Bonds, for the purpose of financing the cost of acquiring or constructing capital additions or improvements, or for the purpose of refunding outstanding Bonds upon the conditions and terms set forth in the First Lien Indenture. In addition to the foregoing, the Authority may incur or assume additional debt provided that the security for such debt is subordinate to the lien of and security interests granted by the First Lien Indenture.

Funds Established Under the Indenture

Revenue Fund. All Receipts and Revenues and all other amounts received by the Authority from any source (except as otherwise provided in the First Lien Indenture) shall be deposited in the Revenue Fund established by the Authority with one or more Authorized Depositaries.

Operation and Maintenance Fund. On or before the first day of each month, the Authority shall transfer from the Revenue Fund to the Operation and Maintenance Fund an amount equal to the amount budgeted by the Authority for that month for payment of the Current Expenses as the same become due. The Authority shall pay out of the Operation and Maintenance Fund its Current Expenses as the same shall become due. There is a special account within the Operation and Maintenance Fund called the "Operating Reserve Account." There shall be maintained in the Operating Reserve Account one-sixth of the amount equal to the Authority's budgeted Current Expenses for the current Fiscal Year. Amounts in the Operating Reserve Account shall be applied to pay the Current Expenses of the Authority to the extent that the amounts on deposit in the Operation and Maintenance Fund are insufficient.

Debt Service Fund. On or before each interest payment date, the Authority will transfer from the Revenue Fund for deposit in the Debt Service Fund an amount equal to the amount of interest accrued and payable to date and an amount equal to the Reimbursement Obligations and pursuant to Reimbursement Agreement and an amount equal to the Periodic Payments for that Periodic Payment Date, and on or before the first day of each month, the Authority shall transfer from the Revenue Fund to the Trustee for deposit in the Debt Service Fund an amount equal to 1/12th of the principal due on the Bonds or 1/12th of the amount representing draws to be paid by the applicable Letter of Credit Bank for payment of principal on the next following principal payment date.

Debt Service Reserve Fund. There shall be maintained in the Debt Service Reserve Fund an amount equal to the maximum annual debt service requirements on the Bonds, subject to restrictions of federal tax laws. The amount required to be maintained in the Debt Service Reserve Fund may be in the form of cash, a letter of credit or other credit instrument, a surety bond, or a combination thereof.

Redemption Fund. The Authority may transfer to the Trustee for deposit to the credit of the Redemption Fund such amounts as it may elect for the purchase or redemption of Bonds at the option of the Authority and the Trustee shall apply such moneys to the purchase or redemption of Bonds in the amounts directed by the Authority. Upon any such purchase or redemption, the Trustee shall transfer from the Debt Service Fund to the Redemption Fund any amount deposited to the Debt Service Fund with respect to interest on the Bonds being redeemed and shall pay the interest due on the redemption date out of such moneys.

Renewal and Replacement Fund. On the dates and in the amounts set forth in the consulting engineer's report, money is transferred to the Renewal and Replacement Fund. The moneys at any time on deposit to the credit of the Renewal and Replacement Fund may be used by the Authority for extraordinary maintenance and repair of the Water and Sewer System or to pay the cost of capital additions or construction, or, to the extent of any insufficiency therein, to the Debt Service Fund or to any sinking, purchase or analogous fund.

Rebate Fund. Separate and apart from the pledge of the First Lien Indenture is a Rebate Fund. Within the Rebate Fund there is a separate account for each series of Outstanding Bonds. Deposits, transfers and payments from the particular rebate accounts shall be made in accordance with tax regulatory agreements entered into with respect to the respective series of Bonds.

Rate Covenant

The Authority covenants that it will comply with (1) or (2) below in any fiscal year:

1) The Authority will maintain, charge and collect, so long as any Bonds are outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due and reasonable allowances for contingencies and a margin of error in the estimates) together with other Receipts and Revenues, including any unrestricted cash and investments accumulated in the Revenue Fund at the beginning of each Fiscal Year, shall be at all times at least sufficient to provide annually:

(a) Amounts sufficient to pay all of the Current Expenses of the Authority; and

(b) An amount equal to 120% of the debt service requirements with respect to the Authority Bonds (i.e., the Bonds and any bonds issued under the Subordinate Indenture) and other Authority Long Term Indebtedness during the then current fiscal year of the Authority.

2) The Authority will maintain, charge and collect, so long as any Bonds are outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due and reasonable allowances for contingencies and a margin of error in the estimates), together with other Receipts and Revenues, for the then current fiscal year (exclusive of interest income earned by the Authority on funds other than the Debt Service Reserve Fund; provided, however, that earnings on the construction/acquisition funds may also be included during any construction period, but only to the extent such earnings are expressly required to be either retained in the construction/acquisition funds and may be used to pay debt service on the Authority Bonds or other

Authority Long Term Indebtedness or are applied directly to payment of debt service on the Authority Bonds or other Authority Long Term Indebtedness), shall be at all times at least sufficient to provide annually:

(a) Funds to pay all of the Current Expenses of the Authority; and

(b) An amount equal to 100% of the debt service requirements with respect to the Authority Bonds and other Authority Long Term Indebtedness during the then current fiscal year of the Authority.

Calculation of compliance with the covenant shall be made on the following basis: (a) operating revenue, construction/acquisition fund income, earnings on the Debt Service Reserve Fund, expenses, required deposits to replenish any withdrawals from the Debt Service Reserve Fund and the Renewal and Replacement Fund which have not been capitalized shall be accounted for on the accrual basis; (b) costs of issuance of the Authority Bonds and other Authority Long Term Indebtedness may be treated as if such amounts are amortized over the life of the Authority Bonds and other Authority Long Term Indebtedness irrespective of any shorter period over which such costs are actually amortized; and (c) depreciation is specifically excluded from the calculation. In the event that any Policy Costs are due and owing at the time of the calculation of the rate covenant, Gross Revenues of the Authority shall be reduced by the amount of any Policy Costs then due and owing.

The Authority also covenants with the holders of the Bonds that if at any time the revenues collected shall not be sufficient to enable the Authority to comply with the provisions set forth above, it will promptly revise its water or sewer rates, rents and other charges so that the Authority will be in compliance and so that any deficiencies in transfers of funds required to be made pursuant to the First Lien Indenture will be remedied before the end of the next ensuing fiscal year. In addition, with respect to the 2003 Bonds, (a) failure by the Authority to meet at least one of the requirements set forth in (1) and (2) above will constitute a breach requiring the Authority to engage a consultant within 60 days of the determination that such breach has occurred, and failure to engage and follow the recommendations of the consultant in a prompt manner will constitute an Event of Default as to the 2003 Bonds, and (b) failure to meet the test contained in (1) above when substituting "100%" for "120%" in (1)(b) will constitute an Event of Default as to the 2003 Bonds.

Insurance of Water and Sewer System. The Authority will at all times cause all the property of the Water and Sewer System which is of a character usually insured by persons operating properties of a similar nature to be properly insured and kept insured by a reputable insurance company or companies against loss or damage by fire or other hazards to the extent that such properties are usually insured by persons operating properties of a similar nature in the same or similar localities. Such policies of insurance shall be for the benefit of the Trustee and the Authority, as their respective interests may appear. All claims in excess of $500,000 shall be made payable to the Trustee and shall be held by the Trustee as additional security until paid out by it as provided therein. All claims of $500,000 or less shall be paid to the Authority.

Employment of Independent Accountant; Annual Financial Report. The Authority covenants to employ an independent auditor to perform such duties as are imposed on the independent auditor by the First Lien Indenture, including preparation of an audit report for the preceding fiscal year.

Events of Default. Each of the following events is hereby declared an "Event of Default" for any Bond issued under the First Lien Indenture:

(a) failure by the Authority to pay the principal of, or the premium (if any) payable upon the redemption of, any Bond when due and payable either at maturity, declaration, or by proceedings for redemption, or otherwise (no effect being given to payments made under the Bond insurance policies); or

(b) failure by the Authority to pay any installment of interest on any Bond when due and payable (no effect being given to payments made under the Bond insurance policies); or

(c) the entry of an order or decree appointing a receiver or receivers of the Water and Sewer System or of the Receipts and Revenues with the consent or acquiescence of the Authority, or, if such order or decree shall have

been entered without the acquiescence or consent of the Authority, the failure of the Authority to cause such order or decree to be vacated or discharged or stayed on appeal within 90 days after entry; or

(d) the institution of any proceeding with the consent or acquiescence of the Authority for the purpose of effecting a composition between the Authority and its creditors, or for the purpose of adjusting the claims of such creditors pursuant to any Federal or State statute now or hereafter enacted, if the claims of such creditors are under any circumstances payable out of the Receipts and Revenues, or if such proceeding shall have been instituted without the consent or acquiescence of the Authority, the failure of the Authority to have such proceeding withdrawn, or any order entered therein vacated or discharged, within 90 days after the institution of such proceeding or the entry of such order; or

(e) the entry of a final judgment against the Authority, which judgment constitutes or could result in a lien or charge upon the Water and Sewer System or the Receipts and Revenues, or which materially and adversely affects the ownership, control or operation of the Water and Sewer System, if such judgment shall not be discharged within 90 days from the entry thereof, or if an appeal shall not be taken therefrom, or from the order, decree or process upon which or pursuant to which such judgment was granted or entered, in such manner as to conclusively set aside the execution or levy under such judgment, order, decree or process, or the enforcement thereof; or

(f) the failure of the Authority to repair or replace, with reasonable dispatch, any part of the Water and Sewer System necessary for its efficient operation which shall have been destroyed or damaged (whether such failure promptly to repair or replace the same be due to the impracticability of such repair or replacement or the lack of funds therefor or for any other reason); or

(g) the failure or refusal of the Authority to comply with any provisions of the Municipality Authorities Act, as amended and supplemented, or the rendering of the Authority, for any reason, incapable of fulfilling its obligations thereunder or under the First Lien Indenture; or

(h) the failure of the Authority to observe any other covenant, condition or agreement of the Authority contained in the Bonds or in the First Lien Indenture and the continuation of such failure for a period of 60 days after written notice of such failure from the Trustee, which may give such notice in its discretion and shall give such notice at the written request of the holders of not less than 25% in aggregate principal amount of the Bonds then outstanding, provided that (except as summarized under "Rate Covenant") the failure of the Authority to meet the rate covenant set forth in the First Lien Indenture shall not constitute an event of default thereunder, and provided further that if such failure is not capable of being remedied within 60 days after such notice, no Event of Default shall exist if the Authority commences the actions necessary for the cure of such failure within such 60 day period and diligently pursues such actions thereafter; or

(i) failure by the Authority to pay principal of, or premium (if any) payable upon the redemption of any Subordinate Bond when due and payable either at maturity or otherwise or to pay any installment of interest on any such Subordinate Bond when due and payable (no effect being given to payments made under a bond insurance policy) or any default under the Subordinate Indenture; or

(j) the Trustee shall have received written notice from a Letter of Credit Bank that an Event of Default shall have occurred under the Reimbursement Agreement, with a direction from the Letter of Credit Bank to the Trustee to accelerate the principal and interest on the respective series or subseries of Bonds secured by such Letter of Credit Bank's Letter of Credit; or

(k) any acceleration of the payment of principal of any series or subseries of Bonds or the payment of Reimbursement Obligations shall have occurred; or

(l) failure by the Authority to pay the principal of any Reimbursement Obligation when due or within any applicable grace period, if any, set forth in the applicable Reimbursement Agreement; or

(m) failure by the Authority to pay any installment of interest on any Reimbursement Obligation when due or under any applicable grace period, if any, set forth in the applicable Reimbursement Agreement.

Acceleration of Principal. Upon the occurrence and continuance of any Event of Default, the Trustee may, and at the written request of Bondholders of not less than 25% in principal amount of the Bonds then outstanding shall, by written notice to the Authority, declare the Bonds to be immediately due and payable, whereupon they shall, without further action, become and be immediately due and payable. Upon the occurrence and continuance of an Event of Default as described in Section 8.01(j) or Section 8.01(k), at the written direction of the applicable Letter of Credit Bank, the Trustee shall, by written notice to the Authority, declare the series or subseries of Bonds secured by such Letter of Credit Bank's Letter of Credit to be due and payable five (5) Business Days after delivery of such written notice by the Trustee to the Authority, whereupon such series or subseries of Bonds shall, without further action, become and be due and payable five (5) Business Days after the provision of such notice by the Trustee to the Authority. The Trustee shall give written notice thereof to the Authority and shall give notice thereof by first class mail to all holders of such series or subseries of Outstanding Bonds and to all other holders of Outstanding Bonds and to any Letter of Credit Bank, Insurer or other provider of credit or credit enhancement to any series or subseries of Bonds (each a "Provider"). No later than one (1) Business Day of receiving written direction of acceleration from the applicable Letter of Credit Bank, the Trustee shall give written notice to each Provider of the Trustee's receipt of such written direction of acceleration. Such written notice may be electronic. In the case of electronic notice provided pursuant hereto to Bank of America, N.A., such electronic notice shall be sent to any address or addresses as directed by Bank of America, N.A., in the case of electronic notice provided pursuant hereto to PNC Bank, National Association, such electronic notice shall be sent to such other address or addresses as directed by PNC Bank, National Association, and in the case of electronic notice provided pursuant hereto to the Insurer, such electronic notice shall be sent to such address or addresses as directed by the Insurer. Upon the occurrence and continuance of an Event of Default as described in Section 8.01(l) or Section 8.01(m), at the written direction of the applicable Letter of Credit Bank, the Trustee shall, by written notice of the Authority, declare the principal and accrued interest and all other Reimbursement Obligations owed to the applicable Letter of Credit Bank to be immediately due and payable whereupon such Reimbursement Obligations shall, without further action, be immediately due and payable. The Trustee shall give notice thereof by first class mail to all holders of Outstanding Bonds and to each Provider, no later than one (1) Business Day of receiving written direction of acceleration from the applicable Letter of Credit Bank, in the same manner as provided in the previous paragraph. The above provision, however, is subject to the condition that if, after the principal of said Bonds shall have been so declared to be due and payable, all arrears of interest, if any, upon the Bonds and interest on overdue installments of interest at the rate of interest specified therein, and the principal of all Bonds which have matured other than by reason of such declaration, shall have been paid by the Authority, and the Authority shall also have performed all other things in respect to which it may have been in default hereunder, and shall have paid the reasonable charges of the Trustee and its counsel and of the holders of said Bonds, including reasonable attorneys' fees paid or incurred, then, and in every such case, the holders of not less than a majority in aggregate principal amount of the Bonds then outstanding, by written notice to the Authority and to the Trustee, may waive such default and its consequences and such waiver shall be binding upon the Trustee and upon all holders of Bonds; but no such waiver shall extend to or affect any subsequent default or impair any rights or remedy consequent thereon. In no event, so long as a Bond insurance policy is in effect and the Bond insurer is not in default thereunder, shall the Trustee waive a default without the prior written consent of the bond insurer with respect to the series of Bonds it insures. In no event, so long as a Letter of Credit is in effect and the applicable Letter of Credit Bank is not in default of its obligations pursuant to the applicable Letter of Credit, shall the Trustee waive a default or an Event of Default without prior written consent of the applicable Letter of Credit Bank. Prior to waiving a default or an Event of Default pertaining to an applicable series or subseries of Bonds, the Trustee must receive from the applicable Letter of Credit Bank written notice that the applicable Letter of Credit is still in effect if not drawn upon pursuant a default or an Event of Default hereunder, or if drawn upon pursuant to a default or an Event of Default hereunder, that the applicable Letter of Credit has been fully reinstated. In the event that the principal and interest on any series or subseries of Bonds is declared due and payable, when such Bonds are then supported by a Letter of Credit, the interest on those Bonds shall cease to accrue on the date to which the principal and interest on such Bonds has been accelerated.

Remedies of Trustee and Bondholders; Right of Entry. Subject to the acceleration of principal provision above, upon the happening and during the continuance of any event of default, the Trustee may and, upon written request of the holders of not less than 25% in aggregate principal amount of the Bonds then outstanding, shall enter into and upon and take possession of the Water and Sewer System and each and every part thereof as for a condition broken and may exclude the Authority, its agents and employees and all persons claiming under them wholly therefrom and have, hold, use, operate, manage and control the same and each and every part thereof, and in

the name of the Authority or otherwise as the Trustee shall deem best, conduct the business thereof and exercise all the rights and powers of the Authority with respect to the Water and Sewer System and use all its then existing property, assets and franchises for that purpose and out of the Receipts and Revenues, maintain, restore, insure and keep insured, the Water and Sewer System against such hazards as are ordinarily insured against by a person operating a water and sewer system similar to the Water and Sewer System and from time to time may make all such necessary or proper repairs as to it may seem expedient, and establish, levy, maintain and collect such rates, rents and charges in connection with the Water and Sewer System as it may deem necessary, proper, desirable and reasonable, and collect and receive Receipts and Revenues, and after deducting therefrom the expenses of operation, maintenance and repair and all expenses incurred thereunder and all other proper outlays herein authorized and all such payments which may be made for insurance and other proper charges, including just and reasonable compensation for its own services, and for the services of such attorneys, agents and employees as it may, in the exercise of its discretion, employ for any of the purposes aforesaid, the Trustee shall apply the rest and residue of the moneys received by it, as well as all cash and investments held by the Trustee in any fund under the First Lien Indenture subject to the provisions thereof with respect to claims for principal and interest, to the payment of the principal of and interest on the Bonds. Whenever all that is due upon such Bonds and installments of interest and under any of the terms of the First Lien Indenture have been paid or deposited with the Trustee and all defaults made good, the Trustee in possession shall surrender possession to the Authority, its successors or assigns. However, the same right of entry shall exist upon any subsequent default or defaults. For purposes of this section, the bond insurer shall, so long as no default has occurred under its respective insurance policy, be deemed to be the owner of the series of Bonds which it insures.

Judicial Action. So long as any series or subseries of Bonds are supported by a Letter of Credit, and the Letter of Credit Bank issuing such Letter of Credit is not in default of its obligations pursuant to the applicable Letter of Credit, the applicable Letter of Credit Bank shall be deemed to be the Bondholder of the series or subseries of Bonds secured by such Letter of Credit with respect to the taking of each remedy provided in this Section and the Trustee shall not take any action directed by the registered owners of the Bonds of the series or subseries of Bonds supported by such Letter of Credit Bank's Letter of Credit. If a Letter of Credit has been drawn to pay principal and interest or purchase price and there are unpaid Reimbursement Obligations, the respective Letter of Credit Bank shall be deemed to be a Bondholder in the amount of the unpaid Reimbursement Obligations, provided that nothing herein shall be interpreted as providing for the double-counting of principal.

So long as the Bond insurance policy is in effect and the Bond Insurer is not in default thereunder, the Bond insurer may direct the Trustee with respect to the taking of each remedy and the Trustee may not take any action directed by the respective series of the Bondholders without the prior written consent of the Bond insurer. So long as any series or subseries of Bonds are supported by a Letter of Credit, and the Letter of Credit Bank issuing such Letter of Credit is not in default of its obligations pursuant to the applicable Letter of Credit, the applicable Letter of Credit Bank shall be deemed to be the Bondholder of the series or subseries of Bonds secured by such Letter of Credit with respect to the taking of each remedy provided in this Section and the Trustee shall not take any action directed by the Bondholders of the series or subseries of Bonds supported by such Letter of Credit Bank's Letter of Credit without the prior written consent of the applicable Letter of Credit Bank. If a Letter of Credit has been drawn to pay principal and interest or purchase price and there are unpaid Reimbursement Obligations, the respective Bank shall be deemed to be a Bondholder in the amount of the unpaid Reimbursement Obligations.

Limitations on Bondholders. No holder of any Bonds shall have any right to institute any suit, action, or proceeding in equity or at law for the enforcement of the First Lien Indenture or for the execution of any trust thereof or for the appointment of a receiver or to exercise any other remedy thereunder, unless such holder shall have previously given to the Trustee written notice of an event of default and of the continuance thereof nor unless also the holders of at least 25% in aggregate principal amount of the Bonds shall have made written request of the Trustee and shall have offered it reasonable opportunity either to proceed to exercise the powers hereinbefore granted or to institute such action, suit or proceeding in its own name nor unless also they shall have offered to the Trustee adequate security and indemnity against the costs, expenses and liability to be incurred therein or thereby; and such notification, request and offer of indemnity are, at the option of the Trustee, conditions precedent to the execution of the powers and trusts of the First Lien Indenture or for the appointment of a receiver or for any other remedy thereunder; no one or more holders or registered owners of Bonds, however, have any right to affect, disturb or prejudice the lien of the First Lien Indenture by their action or to enforce any right thereunder except in the manner therein provided. Subject to the following paragraph, nothing shall affect or impair the right of any

Bondholder, which is absolute and unconditional, to enforce the payment of the principal of and interest on its Bonds, or the obligation of the Authority, which is also absolute and unconditional, to pay the principal of and interest on the Bonds to the respective holders or registered owners thereof at the time and place in said Bonds expressed.

So long as any series or subseries of the Bonds are supported by a Letter of Credit, and the Letter of Credit Bank issuing such Letter of Credit is not in default of its obligations pursuant to the applicable Letter of Credit, the applicable Letter of Credit Bank shall be deemed to be the holder of the series or subseries of Bonds supported by such Letter of Credit Bank's Letter of Credit with respect to any direction to the Trustee with respect to the taking of each remedy provided in this Section with respect to such series or subseries of the Bonds and the Trustee shall not take any direction by the registered owners of the Bonds of the series or subseries of Bonds supported by such Letter of Credit Bank's Letter of Credit.

Waivers and Supplemental Indentures Not Requiring Consent of Bondholders. In addition to any supplemental indenture otherwise authorized by the First Lien Indenture, the Authority (with the prior written consent of the Bond insurer), and the Trustee may, from time to time and at any time, enter into such indentures or agreements supplemental to the First Lien Indenture as shall not be inconsistent with the terms and provisions thereof and which shall not adversely affect the rights of the holders of the Bonds (which supplemental indentures or agreements shall thereafter form a part thereof) for the following purposes:

(a) to cure any ambiguity, formal defect or omission in the First Lien Indenture or any supplemental indenture;

(b) to grant or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, authority or security that may lawfully be granted to or conferred upon the Bondholders or the Trustee;

(c) to add to the covenants and agreements of the Authority in the First Lien Indenture other covenants and agreements thereafter to be observed, or to surrender any right or power therein reserved to or conferred upon the Authority;

(d) to modify any of the provisions of the First Lien Indenture or to relieve the Authority of any of the obligations, conditions or restrictions contained in the First Lien Indenture, provided that such modification or relief shall not, by the express terms of the particular supplemental indenture, become effective until all Bonds outstanding on the date of the execution and delivery of such supplemental indenture shall no longer be outstanding;

(e) to make such provision in regard to matters or questions arising under the First Lien Indenture as may be necessary or desirable and not inconsistent with the First Lien Indenture; or

(f) to close the First Lien Indenture against, or to restrict, in addition to the limitations and restrictions therein contained, the issue of additional bonds thereunder, by imposing additional conditions and restrictions to be thereafter observed, whether applicable in respect of all Bonds issued and to be issued thereunder or in respect of one or more series of Bonds, or otherwise.

Supplemental Indentures Requiring Consent of Bondholders. With the consent of the holders of not less than 66-2/3% in aggregate principal amount of the Bonds then outstanding or, in the case one or more but less than all of the series of the Bonds then outstanding are affected, then, in addition, with the consent of the holders of not less than 66-2/3% of the principal amount of the Bonds of each series so affected then outstanding, and with the consent of any guarantor of principal of and interest on any series of Bonds, the Authority and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental to the First Lien Indenture for the purpose of eliminating any of the provisions of the First Lien Indenture or of any supplemental indenture or of modifying in any manner the rights of the holders of the Bonds so affected; provided, however, that no such supplemental indenture shall (i) extend the fixed maturity date of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce any premium payable upon the redemption thereof, without the consent of the holder of each Bond so affected, or (ii) permit the creation by the Authority of any lien prior to the lien of the First Lien Indenture upon any part of the Receipts and Revenues, or

reduce the aforesaid percentage of Bonds, the holders of which are required to consent to any such supplemental indenture, without the consent of the holders of all Bonds then outstanding; provided, however, that in no event shall the provisions on Authorized Investments be amended. No supplemental indenture shall be effective unless it has been consented to in writing by the Bond insurers.

Discharge of First Lien Indenture. If the Authority, its successors or assigns, shall pay or cause to be paid unto the holders of all Bonds outstanding the principal and interest to become due thereon and the premium thereon, if any, then the First Lien Indenture and the estate and rights therein granted shall cease, determine and be void, and the Trustee shall, upon the request of the Authority, deliver to the Authority such instruments as shall be requisite to satisfy the lien thereof, and reconvey to the Authority the estate and title thereby conveyed, and assign and deliver to the Authority any property at the time subject to the lien of the First Lien Indenture which may then be in the possession of the Trustee.

Bonds for the payment or redemption of which there shall have been deposited with the Trustee cash or direct non-callable obligations of the United States of America and securities fully and unconditionally guaranteed as to the timely payment of principal and interest by the United States of America, to which direct obligation or guarantee the full faith and credit of the United States of America has been pledged, Refcorp interest strips, CATS, TIGRS, STRPS, or defeased municipal bonds rated "AAA" by S&P or "Aaa" by Moody's, any combination thereof or any other security approved by the Bond insurer), the principal of and interest on which when due will, without reinvestment of principal or interest, provide sufficient moneys to pay the Bonds in full at maturity or the date fixed for redemption, shall be deemed to be paid. In the event of an advance refunding, the Authority shall cause to be delivered a verification report of an independent nationally recognized certified public accountant.

Removal of Trustee. The Trustee may be removed at any time by an instrument in writing signed by not less than a majority in aggregate principal amount of Bonds outstanding and filed with the Authority. No such removal shall become effective until a successor trustee is appointed and has accepted the duties of Trustee.

SUMMARY OF SUBORDINATE INDENTURE

A summary of the Subordinate Indenture follows. Such summary is qualified in all respects by specific reference to the Subordinate Indenture. A copy of the Subordinate Indenture may be reviewed at the offices of the Authority or the Trustee. Capitalized terms and phrases, not otherwise defined herein, shall have the meaning ascribed to them in the Subordinate Indenture.

Defined Terms

Fledge and Security. The Subordinate Indenture creates a lien on Receipts and Revenues after the payment of (1) the Authority's Current Expenses; (2) the debt service on bonds issued from time to time under the First Lien Indenture; (3) the funding of the Debt Service Reserve Fund, the Operating Reserve Fund and the Renewal and Replacement Fund held pursuant to and as required by the First Lien Indenture; and (4) policy costs under the First Lien Indenture, together with all cash and investments held in any fund other than the Rebate Fund by the Trustee.

Additional Bonds. The Authority may issue additional Bonds from time to time under the Subordinate Indenture for any lawful purpose including refunding. Any such additional Bonds will not be secured by or afforded the benefits of the Bond insurance policy issued in connection with the Subordinate Bonds. In addition to the foregoing, the Authority may incur or assume additional debt provided that the security for such debt is subordinate to the lien of and security interests granted by the Subordinate Indenture.

Acquisition Fund. Proceeds deposited in the Acquisition Fund shall be disbursed by the Trustee to pay the costs of the acquisition by the Authority of the capital assets of the Water and Sewer System from the City of Pittsburgh pursuant to a Capital Lease Agreement (the "Acquisition"). Funds may be withdrawn from the Acquisition Fund to pay the costs of Acquisition as provided in the Capital Lease Agreement. Investment earnings on the amounts on deposit in the Acquisition Fund shall be retained in the Acquisition Fund unless the Authority

directs the Trustee otherwise. Any monies remaining in the Acquisition Fund after all amounts due in respect of the Acquisition are paid shall be transferred by the Trustee to the Debt Service Fund.

Debt Service Requirements. The term "Debt Service Requirements" shall mean, in respect of any Fiscal Year, the sum of the amount required to be paid in such Fiscal Year by the Authority in respect of the interest on and the principal of the Bonds outstanding or to be outstanding, as the case may be, and the amounts required to be paid to any sinking, purchase or analogous fund established for such Bonds and any Periodic Payments to be paid in connection with any Qualified Interest Rate Swap Agreement to the extent not taken into account in calculating the Debt Service Requirements on Bonds bearing interest at a variable rate pursuant to the immediately following sentence; provided, however, that the Debt Service Requirements in respect of any Fiscal Year for a series of Bonds for which there shall have been established a sinking, purchase or analogous fund shall be determined after projecting the operation of such fund to the retirement of Bonds by redemption and giving effect to the reduction in the payments to be made in such Fiscal Year in respect of the principal of and interest on such Bonds by reason of such redemption. To the extent any Bonds under consideration bear interest at a variable rate, and a Qualified Interest Rate Swap Agreement is in place with respect to such Bonds, the Debt Service Requirements on those Bonds shall be calculated by substituting the fixed rate used to determine amounts payable by the Authority under the Qualified Interest Rate Swap Agreement in lieu of the variable rate on the Bonds (except as such calculation relates to amounts to be deposited into the Debt Service Reserve Fund); provided, the Counterparty to such Qualified Interest Rate Swap Agreement maintains a rating by Standard & Poor's of at least "AA-" and by Moody's of at least "Aa3", otherwise the Debt Service Requirements for such Bonds shall be assumed to bear interest at the highest of: (i) the actual rate on the date of calculation, or if the indebtedness is not yet outstanding, the initial rate (if established and binding); (ii) if the indebtedness has been outstanding for at least twelve (12) months, the average rate over the twelve (12) months immediately preceding the date of calculation; and (iii) (1) if the interest on the indebtedness is excludable from gross income under the applicable provisions of the Internal Revenue Code of 1986, as amended, the most recently published Bond Buyer 25 Bond Revenue Index (or comparable index if no longer published) plus fifty (50) basis points, or (2) if interest is not so excludable, the interest rate on direct U.S. Treasury Obligations with comparable maturities plus fifty (50) basis points.

Debt Service Fund. The Trustee of the First Lien Indenture will transfer to the Trustee, under the Subordinate Indenture, moneys sufficient to pay the debt service on the Subordinate Bonds.

Debt Service Reserve Fund. There shall be maintained in the Debt Service Reserve Fund an amount which when added to the amounts on hand in the Debt Service Reserve Fund of the First Lien Indenture is equal to the maximum annual debt service on all Authority Bonds. The amount required to be maintained in the Debt Service Reserve Fund may be in the form of cash, a letter of credit or other credit instrument, a surety bond, or a combination thereof.

Qualified Interest Rate Swap Agreement. The term "Qualified Interest Rate Swap Agreement" or "Qualified Swap Agreement" means any agreement relating to any Bonds issued or to be issued under the Indenture with a Counterparty whereby the Authority will pay to the Counterparty periodic fixed amounts based upon a fixed percentage on a notional amount specified in such agreement and such Counterparty will pay to the Authority certain periodic floating payments; provided, that (i) the underwriter or the Authority's financial advisor shall certify to the Authority and the Trustee that (based on current market conditions) such Qualified Swap Agreement creates an overall lower Debt Service Requirement than attained through the sole issuance of Additional Bonds bearing interest at fixed rates through maturity in lieu of that Qualified Swap Agreement and (ii) there is in place a municipal bond insurance policy with respect to the Bonds to which the agreement relates guaranteeing payment of amounts owed on the Bonds and a swap insurance policy guaranteeing the payment of Periodic Payments due with respect to such agreement respectively. Periodic Payments under a Qualified Interest Rate Swap Agreement may be on parity with the Bonds to which the agreement relates.

Redemption Fund. The Authority may transfer to the Trustee for deposit to the credit of the Redemption Fund such amounts as it may elect for the purchase or redemption of Subordinate Bonds at the option of the Authority and the Trustee shall apply such monies placed in the Redemption Fund to the purchase or redemption of the Subordinate Bonds in the amounts directed by the Authority. Upon any such purchase or redemption, the Trustee shall transfer from the Debt Service Fund to the Redemption Fund any amount

deposited in the Debt Service Fund with respect to interest on the Subordinate Bonds being redeemed and shall pay the interest due on the redemption date out of such moneys.

Rebate Fund. Separate and apart from the pledge of the Subordinate Indenture is a Rebate Fund. Deposits, transfers and payments from the Rebate Fund shall be made in accordance with a tax regulatory agreement entered into in connection with the Subordinate Bonds.

Periodic Payment Date. The term "Periodic Payment Date" means the date on which a Fixed Swap Payment is required under any Qualified Swap Agreement until the termination or maturity of the Qualified Interest Rate Swap Agreement.

Periodic Payments. The term "Periodic Payments" means any regularly scheduled payment payable by the Authority to the Counterparty pursuant to the terms of any Qualified Interest Rate Swap Agreement(s); however, Periodic Payments shall not include any termination payments, costs and fees or any other sums payable under the Qualified Swap Agreement that are not regularly scheduled payments payable by the Authority.

Investment of Funds

The funds of the Subordinate Indenture may be invested in the following:

(g) Direct obligations (other than an obligation subject to variation in principal repayment) of the United States of America ("United States Treasury Obligations"), (2) obligations fully and unconditionally guaranteed as to timely payment of principal and interest by the United States of America, (3) obligations fully and unconditionally guaranteed as to timely payment of principal and interest by any agency or instrumentality of the United States of America when such obligations are backed by the full faith and credit of the United States of America, or (4) evidences of ownership of proportionate interests in future interest and principal payments on obligations described above held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor and the underlying government obligations are not available to any person claiming through the custodian or to whom the custodian may be obligated.

(h) Federal Housing Administration debentures.

(i) The listed obligations of government-sponsored agencies which are not backed by the full faith and credit of the United States of America: (1) Federal Home Loan Mortgage Corporation (FHLMC) participation certificates (excluded are stripped mortgage securities which are purchased at prices exceeding their principal amounts) and senior debt obligations; (2) Farm Credit Banks (formerly: Federal Land Banks, Federal Intermediate Credit Banks and Banks for Cooperatives) consolidated system-wide bonds and notes; (3) Federal Home Loan Banks (FHL Banks) consolidated debt obligations; (4) Federal National Mortgage Association (FNMA) senior debt obligations and mortgage-backed securities (excluded are stripped mortgage securities which are purchased at prices exceeding their principal amounts); (5) Student Loan Marketing Association (SLMA) senior debt obligations (excluded are securities that do not have a fixed par value and/or whose terms do not promise a fixed dollar amount at maturity or call date); (6) Financing Corporation (FICO) debt obligations; and (7) Resolution Funding Corporation (REFCORP) debt obligations.

(j) Unsecured certificates of deposit, time deposits, and bankers' acceptance (having maturity of not more than 30 days) of any bank the short-term obligations of which are rated "A-1" or better by S&P.

(k) Deposits the aggregate amount of which are fully insured by the Federal Deposit Insurance Corporation (FDIC), in banks which have capital and surplus of at least $5 million.

(l) Commercial paper (having original maturities of not more than 270 days) rated "A-1+" by S&P and "Prime-1" by Moody's.

(m) Money market funds rated "AAm" or "AAm-G" by S&P, or better.

(n) "State Obligations", which mean: (1) Direct general obligations of any state of the United States of America or any subdivision or agency thereof to which is pledged the full faith and credit of a state the unsecured general obligation debt of which is rated "A3" by Moody's and by S&P, or better, or any obligation fully and unconditionally guaranteed by any state, subdivision or agency whose unsecured general obligation debt is so rated; (2) Direct general short-term obligations of any state agency or subdivision or agency thereof described in (1) above and rated "A-1+" by S&P and "Prime-1" by Moody's; and (3) Special Revenue Bonds (as defined in the United States Bankruptcy Code) of any state, state agency or subdivision described in (1) above and rated "AA" or better by S&P and "Aa" or better by Moody's.

(o) Pre-refunded municipal obligations rated "AAA" by Standard & Poor's Ratings Group and "Aaa" by Moody's Investors Service meeting the following requirements: (1) the municipal obligations are (i) not subject to redemption prior to maturity or (ii) the trustee for the municipal obligations has been given irrevocable instructions concerning their call and redemption and the issuer of the municipal obligations has covenanted not to redeem such municipal obligations other than as set forth in such instructions; (2) the municipal obligations are secured by cash or United States Treasury Obligations which may be applied only to payment of the principal of, interest and premium on such municipal obligations; (3) the principal of and interest on the United States Treasury Obligations (plus any cash in the escrow) has been verified by the report of independent certified public accountants to be sufficient to pay in full all principal of, interest, and premium, if any, due and to become due on the municipal obligations; (4) the cash or United States Treasury Obligations serving as security for the municipal obligations are held by an escrow agent or trustee in trust for owners of the municipal obligations; (5) no substitution of a United States Treasury Obligation shall be permitted except with another United States Treasury Obligation and upon delivery of a new Verification; and (6) the cash or United States Treasury Obligations are not available to satisfy any other claims, including those by or against the trustee or escrow agent.

(p) Repurchase agreements: with (1) any domestic bank the long term debt of which is rated at least "AA" by S&P and "Aa" by Moody's; (2) any foreign bank the long term debt of which is rated at least "AA" by S&P and "Aa" by Moody's; (3) any broker-dealer with "retail customers" which has, or the parent company (which guarantees the broker dealer) of which has, long-term debt rated at least "AA" by S&P and "Aa" by Moody's, which broker-dealer falls under the jurisdiction of the Securities Investors Protection Corporation (SIPC); or (4) any other entity described above rated "A" or better and acceptable to the Bond Insurer, provided that: (A) The market value of the collateral is maintained at levels and upon such conditions as would be acceptable to S&P and Moody's in an "A" rated structured financing (with a market value approach); (B) Failure to maintain the requisite collateral percentage will require the Authority or the Trustee to liquidate the collateral (C) The Trustee or a third party acting solely as agent therefor (the "Holder of the Collateral") has possession of the collateral or the collateral has been transferred to the Holder of the Collateral in accordance with applicable state and federal laws (other than by means of entries on the transferor's books); (D) The repurchase agreement shall state and an opinion of counsel shall be rendered that the Holder of the Collateral has a perfected first priority security interest in the collateral, any substituted collateral and all proceeds thereof (in the case of bearer securities, this means the Holder of the Collateral is in possession); (E) The transferor represents that the collateral is free and clear of any third-party Liens or claims; (F) The repurchase agreement is a "repurchase agreement" as defined in the United States Bankruptcy Code and, if the provider is a domestic bank, a "qualified financial contract" as defined in the Financial Institutions Reform Recovery and Enforcement Act of 1989 ("FIRREA") and such bank is subject to FIRREA; (G) There is or will be a written agreement governing every repurchase transaction; (H) The Authority and the Trustee each represents that it has no knowledge of any fraud involved in the repurchase transaction; (I) The Authority and the Trustee receive the opinion of counsel (which opinion shall be addressed to the Authority and the Bond Insurer) that such repurchase agreement is legal, valid, binding and enforceable upon the provider in accordance with its terms; (J) The repurchase agreement shall provide that if during its term (i) the provider's rating by either S&P or Moody's falls below "AA-" or "Aa3", respectively, the provider must, at the direction of the Authority or the Trustee (who shall give such direction if so directed by the Bond Insurer), within 10 days of receipt of such direction, either (a) maintain collateral at levels and of the type as shall be reasonably acceptable to the Bond Insurer; or (b) repurchase all collateral and terminate the agreement, and (ii) the provider's rating by either Moody's or S&P is withdrawn or suspended or falls below "A" by S&P or "A2" Moody's, as appropriate, the provider must, at the direction of the Authority or the Trustee (who shall give such direction if so directed by the Bond Insurer), within 10 days of receipt of such direction, repurchase all collateral and terminate the agreement, in either case with no penalty or premium to the Authority or Trustee. Notwithstanding the above, if a repurchase agreement has a term of 270 days of less (with no evergreen provision), collateral levels need not be as specified in (a) above, so long as such collateral levels are 103% or better and the provider is rated at least "AA" and "Aa" by S&P and Moody's, respectively.

(q) Investment agreements with a domestic or foreign bank the long-term debt of which is rated at least "AA" by S&P and "Aa" by Moody's; provided that, by the terms of the investment agreement: (1) interest payments are to be made to the Trustee at times and in amounts as necessary to pay debt service (or, if the investment agreement is for the construction fund, construction draws) on the Bonds; (2) the invested funds are available for withdrawal without penalty or premium, at any time upon not more than seven days' prior notice (which notice may be amended or withdrawn at any time prior to the specified withdrawal date); provided that the Subordinated Indenture specifically requires the Authority or the Trustee to give notice in accordance with the terms of the investment agreement so as to receive funds thereunder with no penalty or premium paid; (3) the investment agreement shall state that is the unconditional general obligation of, and is not subordinated to any other obligation of, the provider thereof; (4) a fixed guarantee rate of interest is to be paid on invested funds and all future deposits, if any required to be made to restore the amount of such funds to the level specified under the Subordinate Indenture: (5) the Authority or the Trustee receives the opinion of domestic counsel (which opinion shall be addressed to the Authority and the Bond Insurer) that such investment agreement is legal, valid, binding and enforceable upon the provider in accordance with its terms and of foreign counsel (if applicable) in form and substance acceptable, and addressed to, the Bond Insurer; (6) the investment agreement shall provide that if during its term (a) the provider's rating by either S&P or Moody's falls below "AA" of "Aa", respectively, the provider must, at the direction of the Authority or the Trustee (who shall give such direction if so directed by the Bond Insurer), within 10 days of receipt of such direction, either (i) collateralize the investment agreement by delivering or transferring in accordance with applicable state and federal laws (other than by means of entries on the provider's books) to the Authority, the Trustee or a third party acting solely as agent therefor (the "Holder of the Collateral") collateral free and dear of any third-party liens or claims the market value of which collateral is maintained at levels and upon such conditions as would be acceptable to S&P and Moody's in an "A" rated structured financing (with a market value approach); or (ii) repay the principal of and accrued but unpaid interest on the investment, (b) the provider's rating by either S&P or Moody's is withdrawn or suspended or falls below "A" or "A2", respectively, the provider must, at the direction of the Authority or the Trustee (who shall give such direction if so directed by the Bond Insurer), within 10 days of receipt of such direction, repay the principal of an accrued but unpaid interest on the investment, in either case with no penalty or premium to the Authority or Trustee; (7) The investment agreement shall state and an opinion of counsel shall be rendered that the Holder of the Collateral has a perfected first priority security interest in the collateral, any substituted collateral and all proceeds thereof (in the case of bearer securities, this means the Holder of the Collateral is in possession); and (8) the investment agreement must provide that if during its term (a) the provider shall default in its payment obligations, the provider's obligations under the investment agreement shall, at the direction of the Authority or the Trustee (who shall give such direction if so directed by the Bond Insurer), be accelerated and amounts invested and accrued but unpaid interest thereon shall be repaid to the Authority or Trustee, as appropriate, and (b) the provider shall become insolvent, not pay its debts as they become due, be declared or petition to be declared bankrupt, etc. ("event of insolvency"), the provider's obligations shall automatically be accelerated and amounts invested and accrued but unpaid interest thereon shall be repaid to the Authority or Trustee, as appropriate.

Rate Covenant

The Authority covenants that it will comply with one of the following in any fiscal year:

3) The Authority will maintain, charge and collect, so long as any of the Bonds shall remain outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due and reasonable allowances for contingencies and a margin of error in the estimates) together with other Receipts and Revenues, including any unrestricted cash and investments accumulated in the Revenue Fund at the beginning of each Fiscal Year, shall be at all times at least sufficient to provide annually:

(a) Funds to pay all of the Current Expenses of the Authority; and

(b) An amount equal to 120% of the debt service requirements with respect to the Authority Bonds during the then current fiscal year of the Authority.

(c) The Authority will maintain, charge and collect, so long as any of the Subordinate Bonds shall remain outstanding, reasonable rates, rentals and other charges for the use of the facilities of the Water and Sewer System which (after making due and reasonable allowances for contingencies and a margin of error in the estimates), together with other Receipts and Revenues, for the then current fiscal year (exclusive of interest income earned by the Authority on funds other than the Debt Service Reserve Fund; provided, however, that earnings on the construction

funds may also be included during any construction period, but only to the extent such earnings are expressly required to be either retained in the construction funds and may be used to pay debt service on Authority Bonds or are applied directly to payment of debt service on Authority Bonds), shall be at all times at least sufficient to provide annually:

(d) Funds to pay all of the Current Expenses of the Authority; and

(e) An amount equal to 100% of the debt service requirements with respect to Authority Bonds during the then current fiscal year of the Authority,

The Authority also covenants with the holders of the Subordinate Bonds that if at any time the revenues collected shall not be sufficient to enable the Authority to comply with the provisions as set forth above, it will promptly revise its water or sewer rates, rents and other charges so that the Authority will be in compliance and so that any deficiencies in transfers of funds required to be made pursuant to the Subordinate Indenture will be remedied before the end of the next ensuing fiscal year.

Insurance Covenant

The Authority will at all times cause all of the property of the Water and Sewer System which is of a character usually insured by persons operating properties of a similar nature to be properly insured and kept insured by a reputable insurance company or companies against loss or damage by fire or other hazards to the extent such properties are usually insured by persons operating properties of similar nature in the same or similar localities.

Annual Audit

The Authority covenants to employ an independent auditor to perform such duties as are imposed on the independent auditors by the Subordinate Indenture, including preparation of an audit report for the preceding fiscal year.

Events of Default

Each of the following events is hereby declared an "Event of Default" for any Subordinate Bond issued under the Subordinate Indenture:

(f) failure by the Authority to pay the principal of, or the premium (if any) payable upon the redemption of, any Subordinate Bond when due and payable either at maturity, declaration, or by proceedings for redemption, or otherwise (no effect being given to payments made under the Bond insurance policy); or

(g) failure by the Authority to pay any installment of interest on any Subordinate Bond when due and payable (no effect being given to payments made under the Bond insurance policy); or

(h) the entry of an order or decree appointing a receiver or receivers of the Water and Sewer System, the Receipts and Revenues or the Pledged Revenues with the consent or acquiescence of the Authority, or, if such order or decree shall have been entered without the acquiescence or consent of the Authority, the failure of the Authority to cause such order or decree to be vacated or discharged or stayed on appeal within 90 days after entry; or

(i) the institution of any proceeding with the consent or acquiescence of the Authority for the purpose of effecting a composition between the Authority and its creditors, or for the purpose of adjusting the claims of such creditors pursuant to any Federal or State statute now or hereafter enacted, if the claims of such creditors are under any circumstances payable out of the Receipts and Revenues, or the Pledged Revenues or if such proceeding shall have been instituted without the consent or acquiescence of the Authority, the failure of the Authority to have such proceeding withdrawn, or any order entered therein vacated or discharged, within 90 days after the institution of such proceeding or the entry of such order; or

(j) the entry of a final judgment against the Authority, which judgment constitutes or could result in a lien or charge upon the Water and Sewer System, the Receipts and Revenues, or the Pledged Revenues or which materially and adversely affects the ownership, control or operation of the Water and Sewer System, if such judgment shall not be discharged within 90 days from the entry thereof, or if an appeal shall not be taken therefrom, or from the order, decree or process upon which or pursuant to which such judgment was granted or entered, in such manner as to conclusively set aside the execution or levy under such judgment, order, decree or process, or the enforcement thereof; or

(k) the failure of the Authority to repair or replace, with reasonable dispatch, any part of the Water and Sewer System necessary for its efficient operation which shall have been destroyed or damaged (whether such failure promptly to repair or replace the same may be due to the impracticability of such repair or replacement or the lack of funds therefor or for any other reason); or

(l) the failure or refusal of the Authority to comply with any provisions of the Municipality Authorities Act, as amended and supplemented, or the rendering of the Authority, for any reason, incapable of fulfilling its obligations under the Subordinate Indenture or the Municipality Authorities Act; or

(m) the failure of the Authority to observe any other covenant, condition or agreement of the Authority contained in the Subordinate Bonds or in the Subordinate Indenture and the continuation of such failure for a period of 60 days after written notice of such failure from the Trustee, which may give such notice in its discretion and shall give such notice at the written request of the holders of not less than 25 % in aggregate principal amount of the Subordinate Bonds then outstanding or the bond insurer, provided that, the failure of the Authority to meet the rate covenant in the Subordinate Indenture shall not constitute such an event of default thereunder and provided further that if such failure is not capable of being remedied within 60 days after such notice, no event of default shall exist if the Authority commences the actions necessary for the cure of such failure within such 60 day period and diligently pursues such actions thereafter; or

(n) there has been declared a default with respect to bonds issued pursuant to the First Lien Indenture.

Remedies Subject to First Lien Indenture

Upon the occurrence or continuance of an event of default, the Trustee may judicially seek specific performance with respect to the rate covenant. Notwithstanding any other provision hereto, however, for so long as the First Lien Indenture is operative, the Trustee may not exercise rights or remedies hereunder with respect to the Receipts and Revenues until and unless the trustee of the First Lien Indenture shall have instituted proceedings to exercise its rights under the First Lien Indenture.

Remedies

Acceleration of Principal. Subject to the Section entitled "Remedies Subject to First Lien Indenture," upon the occurrence and continuance of any event of default, the Trustee may, and at the written request of Bondholders of not less than 25% in principal amount of the Subordinate Bonds then Outstanding shall by written notice to the Authority, declare the Subordinate Bonds to be immediately due and payable, whereupon they shall, without further action, become and be immediately due and payable, anything in the Subordinate Indenture or in the Subordinate Bonds to the contrary notwithstanding, and the Trustee shall give notice thereof to the Authority and shall give notice thereof by certified mail to all holders of outstanding Subordinate Bonds. In addition, the Trustee shall be entitled to exercise any or all of the remedies granted to a trustee or under the insurance policy or the Municipality Authorities Act. In no event, so long as the insurance policy is in effect and the bond insurer is not in payment default thereunder, shall the Trustee accelerate the payment of the Subordinate Bonds without the written consent of the bond insurer.

The above provision, however, is subject to the condition that if, after the principal of said Subordinate Bonds shall have been so declared to be due and payable, all arrears of interest, if any, upon the Subordinate Bonds and interest on overdue installments of interest at the rate of interest specified therein, and the principal of all Subordinate Bonds which have matured other than by reason of such declaration, shall have been paid by the

Authority, and the Authority shall also have performed all other things in respect to which it may have been in default hereunder, and shall have paid the reasonable charges of the Trustee and its counsel and of the holders of said Subordinate Bonds, including reasonable attorneys' fees paid or incurred, then, and in every such case, the holders of not less than a majority in an aggregate principal amount of the Subordinate Bonds then outstanding, by written notice to the Authority and to the Trustee, may waive such default and its consequences and such waiver shall be binding upon the Trustee and upon all holders of Subordinate Bonds issued hereunder; but no such waiver shall extend to or affect any subsequent default or impair any rights or remedy consequent thereon. In no event, so long as the insurance policy is in effect and the bond insurer is not in default thereunder, shall the Trustee waive a default without the prior written consent of the bond insurer.

Remedies of Trustee and Bondholders; Rights of Entry

Subject to the Sections entitled "Remedies Subject to First Lien Indentures" and "Acceleration of Principal," upon the happening and during the continuance of any event of default, the Trustee may and, upon written request of the holders of not less than 25 % in aggregate principal amount of the Subordinate Bonds then outstanding, shall enter into and upon and take possession of the Water and Sewer System and each and every part thereof as for a condition broken and may exclude the Authority, its agents and employees and all persons claiming under them wholly therefrom and have, hold, use, operate, manage and control the same and each and every part thereof, and in the name of the Authority or otherwise as the Trustee shall deem best, conduct the business thereof and exercise all the rights and powers of the Authority with respect to the Water and Sewer System and use all its then existing property, assets and franchises for that purpose and out of the Receipts and Revenues, maintain, restore, insure and keep insured, the Water and Sewer System against such hazards as are ordinarily insured against by a person operating a water and sewer system similar to the Water and Sewer System and from time to time may make all such necessary or proper repairs as to it may seem expedient, and establish, levy, maintain and collect such rates, rents and charges in connection with the Water and Sewer System as it may deem necessary, proper, desirable and reasonable, and collect and receive all Receipts and venues, and after deducting therefrom the expenses of operation, maintenance and repair and all expenses incurred hereunder and all other proper outlays hereto authorized and all such payments which may be made for insurance and other proper charges, including just and reasonable compensation for its own services, and for the services of such attorneys, agents and employees as it may, in the exercise of its discretion, employ for any of the purposes aforesaid, the Trustee shall apply the rest and residue of the moneys received by it, as well as all cash and investments held by the Trustee in any fund hereunder, subject to the provisions hereof with respect to claims for principal and interest, to the payment of the principal of and interest on the Subordinate Bonds. Whenever all that is due upon such Subordinate Bonds and installments of interest and under any of the terms of the Subordinate Indenture have been paid or deposited with the Trustee and all defaults made good, the Trustee in possession shall surrender possession to the Authority, its successors or assigns. However, the same right of entry shall exist upon any subsequent default or defaults. For purposes of Article VIII of the Subordinate Indenture entitled "Remedies," the bond insurer shall, so long as no payment default has occurred under its insurance policy, be deemed to be the sole owner of the Subordinate Bonds.

Judicial Action

In case of the breach of any of the covenants or conditions of the Subordinate Indenture, the Trustee shall have the right and power to take appropriate judicial proceedings for the enforcement of its rights and the right of the Bondholders thereunder. Upon the happening of an event of default under the Subordinate Indenture, the Trustee may either after entry, or without entry, proceed by suit or suits, actions or special proceedings at laws or in equity to enforce its rights and the rights of the Bondholders hereunder, and it will be obligatory upon the Trustee to take action to that end, either by such proceedings or by the exercise of its powers with respect to entry or otherwise, as it may determine, upon being requested to do so by the holders of 25% in aggregate principal amount of the Subordinate Bonds then outstanding and upon being indemnified. For purposes of Article VIII of the Subordinate Indenture entitled Remedies, the bond insurer shall, so long as no event of payment default has occurred under its insurance policy, be deemed to be the sole owner of the Subordinate Bonds.

Anything in the Subordinate Indenture to the contrary notwithstanding, so long as the insurance policy is in effect and the bond is not in payment default, the bond insurer may direct the Trustee with respect to the taking of

each remedy provided in Article VIII of the Subordinate Indenture entitled "Remedies," and the Trustee shall not take any action directed by the Bondholders without the prior written consent of the bond insurer.

Waivers and Supplemental Indentures Not Requiring Consent of Bondholders

In addition to any supplemental subordinate indenture otherwise by the Subordinate Indenture, the Authority (with prior written consent of the bond insurer), and the Trustee may, from time to time and at any time, enter into such indentures or agreements supplemental hereto as shall not be inconsistent with the terms and provisions hereof and which shall not adversely affect the rights of the holders of the Subordinate Bonds hereunder (which supplemental indentures or agreements shall thereafter form a part thereof) for the following purposes:

(o) to cure any ambiguity, formal defect or omission in the Subordinate Indenture or any supplemental subordinate indenture;

(p) to grant or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, Authority or security that may lawfully be granted to or conferred upon the Bondholders, or the Trustee;

(q) to add to the covenants and agreements of the Authority in the Subordinate Indenture, other covenants and agreements thereafter to be observed, or to surrender any right or power herein reserved to or conferred upon the Authority;

(r) to modify any of the provisions of the Subordinate Indenture or to relieve the Authority of any of the obligations, conditions or restrictions contained in the Subordinate Indenture, provided that such modification or relief shall not, by the express terms of the particular supplemental subordinate indenture, become effective until all Subordinate Bonds outstanding on the date of the execution and delivery of such supplemental subordinate indenture shall no longer be outstanding;

(s) to make such provision in regard to matters or questions arising under the Subordinate Indenture as may be necessary or desirable and not inconsistent with the Subordinate Indenture; or

(t) to close the Subordinate Indenture against, or to restrict, in addition to the limitations and restrictions therein contained, the issue of additional bonds thereunder, by imposing additional conditions and restrictions to be thereafter observed, whether applicable in respect to all Subordinate Bonds issued and to be issued thereunder or in respect of one or more series of Subordinate Bonds, or otherwise.

Supplemental Subordinate Indentures Requiring Consent of Bondholders

With the consent of the holders of not less than 66-2/3 % in aggregate principal amount of the Subordinate Bonds then outstanding or, in the case one or more but less than all of the series of the Subordinate Bonds then outstanding are affected, then, in addition, with the consent of the holders of not less than 66-2/3 % of the principal amount of the Subordinate Bonds of each series so affected then outstanding, and with the consent of any guarantor of principal and interest of any series of Subordinate Bonds, the Authority and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental to the Subordinate Indenture for the purpose of eliminating any of the provisions of the Subordinate Indenture or of any supplemental subordinate indenture or of modifying in any manner the rights of the holders of the Subordinate Bonds so affected; provided, however, that no such supplemental indenture shall (i) extend the fixed maturity date of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce any premium payable upon the redemption thereof, without the consent of the holder of each Bond so affected, or (ii) permit the creation by the Authority of any lien prior to the lien of the Subordinate Indenture upon any part of the Pledged Revenues, or reduce the aforesaid percentage of Subordinate Bonds, the holders of which are required to consent to any such supplemental subordinate indenture, without the consent of the holders of all Subordinate Bonds then outstanding. No supplemental subordinate indenture shall be effective unless it has been consented to in writing by the bond insurer.

Discharge of Subordinate Indenture

If the Authority, its successors or assigns, shall pay or cause to be paid unto the holders of all Subordinate Bonds outstanding the principal and interest to become due thereon and the premium thereon, if any, and to the bond insurer any and all amounts due and owing under the Subordinate Indenture, then the Subordinate Indenture and the estate and rights therein granted shall cease, determine and be void, and the Trustee shall, upon the request of the Authority, deliver to the Authority such instruments as shall be requisite to satisfy the lien thereof, and reconvey to the Authority the estate and title thereby conveyed, and assign and deliver to the Authority any property at the time subject to the lien of the Subordinate Indenture which may then be in the possession of the Trustee.

Subordinate Bonds for the payment or redemption of which there shall have been deposited with the Trustee cash or direct non callable obligations of the United States of America and securities fully and unconditionally guaranteed as to the timely payment of principal and interest by the United States of America, to which direct obligation or guarantee the full faith and credit of the United States of America has been pledged, Refcorp interest strips, CATS, TIGRS, STRPS, or defeased municipal bonds rated "AAA" by S&P or "Aaa" by Moody's, any combination thereof or any other security approved by the bond insurer), the principal of and interest on which when due, will, without reinvestment of principal or interest, provide sufficient moneys to pay the Subordinate Bonds in full at maturity or the date fixed for redemption, shall be deemed to be paid. In the event of an advance refunding, the Authority shall cause to be delivered: (i) a verification report of an independent nationally recognized certified public accountant verifying the sufficiency of the escrow established to pay the Subordinate Bonds in full on the maturity date in form and substance satisfactory to the bond insurer; (ii) an escrow agreement in form and substance satisfactory to the bond insurer; and (iii) an opinion of bond counsel that the Subordinate Bonds are no longer outstanding under the Subordinate Indenture.

Removal of Trustee

The Trustee may be removed at any time by an instrument in writing signed by the Authority, without cause, so long as no event of default has occurred and is continuing, or by the holders of not less than a majority in aggregate principal amount of Subordinate Bonds outstanding if an event of default has occurred and is continuing, or by the bond insurer, without cause, so long as no event of default has occurred and is continuing. No such removal shall become effective until a successor (or temporary) trustee is appointed and has accepted the duties of Trustee.

Claims Upon the Bond Insurance Policy

The Trustee shall receive any amount paid under the bond insurance policy in trust on behalf of holders of the Subordinate Bonds and shall deposit any such amount in a Policy Payments Account established by the Trustee and distribute such amount only for purposes of making the payments for which a claim was made. Such amounts shall be disbursed by the Trustee to holders of the Subordinate Bonds in the same manner as principal and interest payments are to be made with respect to the Subordinate Bonds.

Subject to and conditioned upon payment of any interest or principal with respect to the Subordinate Bonds by or on behalf of the bond insurer, each Subordinate Bondholder, by its purchase of Subordinate Bonds, assigns to the bond insurer, all rights to the payment of interest or principal on the Subordinate Bonds, including, without limitation, any amounts due to the Subordinate Bondholders in respect of securities law violations arising from the offer and sale of the bonds, which are then due for payment. The bond insurer may exercise any option, vote, right, power or the like with respect to the Subordinate Bonds to the extent it has made a principal payment pursuant to the bond insurance policy. The foregoing assignment is in addition to, and not in limitation of, rights of subrogation otherwise available to the bond insurer to respect of such payments.

Each Subordinate Bondholder, by its purchase of bonds, and the Trustee hereby agrees that the bond insurer may at any time during the continuation of an insolvency proceeding direct all matters relating to such insolvency proceeding, including, without limitation, (i) all matters relating to any preference claim, (ii) the direction of any appeal of any order relating to any preference claim, and (iii) the posting of any surety, supersedeas or performance bond pending any such appeal. In addition, and without limitation of the foregoing, the bond insurer shall be subrogated to the rights of the Trustee and each Subordinate Bondholder in any insolvency proceeding to the extent it is subrogated pursuant to the bond insurance policy, including, without limitation, any rights of any party to an adversary proceeding action with respect to any court order issued in connection with any such insolvency proceeding.

APPENDIX C

AUTHORITY FINANCIAL STATEMENTS AS OF DECEMBER 31, 2008 AND DECEMBER 31, 2007

[THIS PAGE INTENTIONALLY LEFT BLANK]

PITTSBURGH WATER AND SEWER AUTHORITY

SINGLE AUDIT

2008

MaherDuessel

Certified Public Accountants || *Pursuing the Profession While Promoting the Public Good®*

[THIS PAGE INTENTIONALLY LEFT BLANK]

PITTSBURGH WATER AND SEWER AUTHORITY

YEARS ENDED DECEMBER 31, 2008 AND 2007

TABLE OF CONTENTS

Independent Auditor's Report

Management's Discussion and Analysis i

Financial Statements:

Statements of Net Assets 1

Statements of Revenues, Expenses, and Changes in Net Assets 3

Statements of Cash Flows 4

Notes to Financial Statements 5

Additional Information:

Schedule of Restricted Assets Composition – Schedule I 35

Schedule of Restricted Assets Activity – Schedule II 36

Schedule of Expenditures of Federal Awards 38

Notes to Schedule of Expenditures of Federal Awards 39

Independent Auditor's Reports in Accordance with OMB Circular A-133:

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards* 40

Independent Auditor's Report on Compliance with Requirements Applicable to its Major Program and on Internal Control over Compliance in Accordance with OMB Circular A-133 42

PITTSBURGH WATER AND SEWER AUTHORITY

YEARS ENDED DECEMBER 31, 2008 AND 2007

TABLE OF CONTENTS
(Continued)

Schedule of Findings and Questioned Costs	44
Summary Schedule of Prior Audit Findings	45

MaherDuessel

Certified Public Accountants || *Pursuing the Profession While Promoting the Public Good®*

Independent Auditor's Report

Board of Directors
Pittsburgh Water and Sewer Authority

We have audited the accompanying financial statements of the Pittsburgh Water and Sewer Authority (Authority), a component unit of the City of Pittsburgh (City), Pennsylvania, as of and for the years ended December 31, 2008 and 2007 as listed in the accompanying table of contents. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of December 31, 2008 and 2007, and the results of its operations and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated April 29, 2009 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and important for assessing the results of our audit.

The Management's Discussion and Analysis Section on pages i through vi is not a required part of the financial statements but is supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The additional information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, and is also not a required part of the basic financial statements of the Authority. The additional information and the schedule of expenditures of federal awards, have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Maher Duessel

Pittsburgh, Pennsylvania
April 29, 2009

Pittsburgh || Three Gateway Center – Six West • Pittsburgh, PA 15222 p412.471.5500 f412.471.5508
Harrisburg || 3211 North Front Street – Suite 101 • Harrisburg, PA 17110 p717.232.1230 f717.232.8230
Butler || 112 Hollywood Drive – Suite 204 • Butler, PA 16001 p724.285.6800 f724.285.6875

www.md-cpas.com

THE PITTSBURGH WATER AND SEWER AUTHORITY

2008 Financial Statements
Management Discussion and Analysis

The Pittsburgh Water and Sewer Authority (the "Authority") comparative 2008 and 2007 fiscal year financial statements, enclosed, have been conformed to meet the requirements of Governmental Accounting Standards Board ("GASB") Statement No. 34, *"Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments."* The financial statements incorporate three basic statements: the Statements of Net Assets, the Statements of Revenues, Expenses, and Changes in Net Assets, and Statements of Cash Flows.

This Management's Discussion and Analysis (MD&A) is based upon facts, decisions, and conditions known as of the date of the audit report. Please note that the historical information provided in the financial statements and MD&A reflect the results of past operations and is not necessarily indicative of results of future operations. Future operations will be affected by various factors, including, but not limited to, regulatory mandates, rate changes, weather, labor contracts, population changes, business environment and other matters, the nature and effect of which cannot now be determined.

Using This Financial Report – Overview of Reporting Changes

The Statements of Net Assets present information about the resources which are available to the Authority and claims against these resources. Both assets and liabilities are classified in a format which segregates current from long-term. In addition, assets available for special purposes – labeled "restricted assets" are segregated from those assets available for operations. The Authority's restricted assets represent money on deposit with the bond trustee to meet indenture, debt service, and construction program requirements. Liabilities have a similar classification, segregating claims on restricted assets from claims on assets available for operations. The net asset section of the balance sheet classifies the total net asset deficit, as invested in capital assets, restricted for capital activity and unrestricted.

The Statement of Revenues, Expenses, and Changes in Net Assets summarize operating and non-operating activity for the fiscal year and the resulting impact on the Authority's net assets.

Effective with the 2008 Statements of Revenues, Expenses, and Changes in Net Assets, the Authority began reporting Wastewater Treatment Revenues and Expenses for services provided by the Allegheny County Sanitary Authority (ALCOSAN). The Statements of Net Assets are not impacted by this change and there are no outstanding bond issues associated directly or indirectly with wastewater revenue streams.

The purpose of this change is threefold; 1) To more accurately depict the economic size of the Authority's operations in the Western Pennsylvania region in terms of aggregate revenues and expenses. 2) To recognize the Authority's obligation to keep ALCOSAN whole for all wastewater treatment services billed to residents of the city. 3) To acknowledge that were it not for the existence of ALCOSAN, the Authority would remain contractually obligated to continue to provide wastewater treatment services to its customers in some other capacity.

The Statements of Cash Flows have been prepared using the direct method. The statements provide an analysis of the Authority's cash by operating, investing and capital and related financing activities over the respective fiscal year.

Financial Highlights

In 2008, operating income decreased by 18.7% or $5.6 million resulting in a net loss of $.4 million, down from a $3.3 million net income in 2007. Below are the 2008 financial highlights:

Total operating revenues in 2008 were unchanged at $129.9 million compared to 2007. However, a net $2.1 million increase in wastewater treatment revenues due to a 9% rate increase by ALCOSAN and an increase of $1.1 million in other revenues was offset by a $3.1 million or 3.5% decline in Water Sales revenues in 2008. The decline in water utility revenues was a result of an overall drop in consumption in 2008 compared to 2007.

Total operating expenses increased by $5.6 million or 5.6% to $105.6 million from $100 million in 2007. Significant operating expenses included the following factors:

- Salary and employee benefit expense were up $.867 million or 6.0%. The increase is attributed to an average salary increase of 2.5% and staff increases in operational and Customer Service areas.

  The majority of Authority employees are represented by one of three labor unions. The Pittsburgh Joint Collective Bargaining Committee (PJCBC) represents blue-collar employees, The American Federation of State, County, and Municipal Employees (AFSCME) Local 2719 represents white-collar employees and Local 2037 represents foremen. The three-year AFSCME agreement expired in December 2008 and is currently in negotiations. A new five-year agreement with the PJCBC became effective January 1, 2008 and expires December 31, 2012. Negotiations are ongoing with the Local 2037 union.

- Overall direct operating expenses increased by $.9 million to $52.6 million in 2008 or, 2% from $51.7 million in 2007. Wastewater treatment expense increased by $2.0 million or, 5.2% to $40.1 million over $38.1 million in 2007. Sewer repairs increased by $.5 million or 77% to $1.3 million in 2008, from $.7 million in 2007. Emergency water line repairs increased by $.3 million to $1.7 million or 23% from $1.4 million in 2007. Catch basin repairs increased by $.3 million to $.7 million or 50% from $.5 million in 2007. Operating contracts-other increased by $.2 million. Repairs and maintenance expense for IT infrastructure and building repairs dropped by $2.6 million due to lower level of capital asset investment activity in 2008. IT infrastructure investment declined by $1.7 million and building & repairs fell by $.6 million compared to 2007.

- Overall G&A expenses increased by $3.3 million to $12.5 million, or 35% in 2008 compared to $9.2 million in 2007. The majority or, $2.3 million of this increase is directly associated with the decline in capital investment activity during 2008 (see above). Claims and deductible expense increased by $.6 million due to a $.5 million write-down of the Gateway reserve in 2007. Office rents increased 41% or, $.2 million due to the first full year of rents under the new 20 year lease agreement signed in 2007.

- Electricity expenses were up 7% or $.3 million to $4.7 million, from $4.4 million in 2007. Natural gas utilities increased $.3 million or 67% to $.8 million from $.5 million in 2007.

- Overall other expenses increased 3.9% or $2.2 million to $57.9 million in 2008 from $55.7 million in 2007. Non-city water subsidy increased 56% or $.4 million to $1.1 million in 2008 compared to $.7 million in 2007. Interest expense on bond debt increased 3.4% or $1 million to $29.4 million in 2008 compared to $28.4 million. Amortization of bond issue costs increased 93.3% or $.6 million to $1.2 million in 2008 compared to $.6 million in 2007.

- In 2008, collections decreased by $1.9 million or 1.5% while the accounts receivable aggregate reserve adjustment for bad debt expense decreased by 8% or, $.2M.

Other 2008 highlights include:

- In April, Michael P. Kenney was appointed by the Board of Directors to the position of Executive Director. Mr. Kenney arrived with twenty-five years of experience with the Municipal Authority of Westmoreland County (MAWC) where serving as Assistant Manager he was responsible for overseeing a system with over 125,000 connections for a population of over 400,000 spanning 5 counties. The MAWC had a work force of 270 employees including 55 management positions and 215 bargaining unit employees.

- In May of 2008, the Authority contacted Moody's and S&P for an independent rating for the first time in its history. Moody's rated the Authority Baa1 and S&P rated the Authority an A rating.

- In June 2008, the Authority issued its 2008 Bond Refunding and new Construction Fund series. To complete the restructuring, the Authority terminated its forward-start swaps established in 2007 for refunding 1998A and C Bond series, and a portion of the 2007 swaps. In addition, the Authority extended the final maturity of its debt to afford approximately $98 million in new construction monies without a rate impact. This necessitated amending the Articles of Incorporation to extend the statutory life of the Authority to May 2045.

- Currently, $403 million or, approximately 50% of the Authority's total debt portfolio consists of variable debt bonds. The variable rate debt is hedged or "synthetically fixed" at rates between 3.932% and 4.103%. Variable rate interest payments are partially offset by swap payments received from two counterparties. The degree of offset is a direct function of the weekly rate resets compared to the SIFMA Index or "trading spread."

- The 2007 VRDN bond series total approximately $82.7 million while the 2008 VRDN bond series total $320.5 million. The bonds and swaps are insured by FSA. Liquidity established under Stand By Purchase Agreements (SBPA's) is provided by JP Morgan Chase and Dexia. Liquidity on the 2007 bond series expires September 1, 2015. Liquidity on the 2008 bond series expire June 11, 2009. JP Morgan provides liquidity on approximately $123.1 million (bond series 2008C2 and 2008D2) while Dexia provides liquidity on approximately $197.4 million (bond series 2008B and 2008C1). The 2008C2's and 2008D2's have an acceleration clause requiring principal be repaid in semiannual installments over five years if liquidity is not renewed by the expiration date. The 2008B's and 2008C1's do not have an acceleration clause. The remarketing agents are JP Morgan Securities Inc. and Merrill Lynch.

- As a result of the financial market dislocation during the latter part of 2008, liquidity tightened dramatically causing the VRDN market to lose buyers while the weekly rates and trading spreads increased significantly. In addition, FSA was downgraded from Aaa to Aa3 by Moody's and put on negative credit watch by S&P while still maintaining its AAA rating. As a result of this market instability, a portion of the 2008B and C bond series experienced a lack of remarketing causing some bonds to be driven into bank bond status during October and November. In each instance, however, these bonds were successfully remarketed shortly afterwards. Since that time, all bonds have continued to be remarketed and none have returned to a bank bond status. Overall, the Authority paid approximately $2.3 million in additional debt service through year-end due to the global economic crisis. Nevertheless, availability and the cost of any renewed or replacement credit could facilitate a higher overall funding cost for PWSA.

- The Authority is currently negotiating with several financial institutions to either extend the SBPA's beyond June 11, 2009 or replace the facilities. The Authority is evaluating several offers and keeping open options that include Letters-of-Credit, Fixed Rate bonds, Cash Defeasance, Put Bonds, and other conversion instruments. While these matters are sensitive, it is estimated, based on current market conditions, liquidity costs could increase. The financial markets have continued to improve since late 2008 and a pending sale of FSA to Assured Guaranty could further stabilize the marketability of the VRDN bonds.

- Debt service coverage in 2008 and 2007 was 1.9 and 1.8, respectively. These coverage factors exceed the 1.2 coverage factor required under the bond covenant.

- The Authority contracted with a third party to provide its customers with the option to pay their monthly bill with a credit card via phone.

- Valve Replacement Program- In 2008, PWSA upgraded their water infrastructure through the valve replacement program. This program allowed for the installation of several large valves improving water service by increasing efficiency and allowing isolation for routine

maintenance and outages. Most notable projects are the installation of a 36-inch valve on the Boulevard of the Allies and the installation of a 24-inch valve in Station Square.

- Permit Counter - In 2008, the PWSA Permit Counter collected approximately $2.5 million. Generating revenue from building permits helps the Authority to meet and exceed standards while keeping costs down. This revenue is not only a reflection of the Authority's commitment to excellence but also of the development occurring every day throughout the city.

- Tough Books/GIS Mapping - The MIS, GIS, Distribution, and Facilities departments formed a joint initiative to replace paper maps with electronic maps. Field crews can now access infrastructure maps in the field saving time and streamlining our operation. This conversion allows field crews to input real-time data, and helps customer service to better assist our customers. GIS mapping is critical to our operation providing immediate access to information for emergency response.

- Partnership with Port Authority - In 2008, PWSA partnered with Port Authority and the City of Pittsburgh to construct and relocate several large water and sewer lines to accommodate the North Shore Connector. PWSA Operations and Engineering departments put forth great effort in coordinating the relocation of the water and sewer lines while providing temporary service to customers. This project is ongoing and upon completion, will improve the quality of life for city residents.

- The City of Pittsburgh is the largest of the 83 municipalities that convey raw sewage to the ALCOSAN for treatment. In January 2004, the Authority and the City of Pittsburgh executed a Consent Order and Agreement (the Order) regarding sanitary and combined sewer overflows within the City of Pittsburgh. The other signatories to the Order are the Pennsylvania Department of Environmental Protection and Allegheny County Health Department which executed the Order on April 21, 2004. The intent of the Order is to develop a regional Long-Term Control Plan to address combined and sanitary sewer overflows and ultimately improve water quality.

  The Order does not contain fines or penalties for past non-compliance, but does propose binding obligations for work on a going-forward basis. The Authority continues to meet the requirements of the Order. See Note 12, Commitments and Contingencies, for additional details.

- The City of Pittsburgh remained under financial stress in 2008. The Authority has three agreements with the City of Pittsburgh. The Authority leases the water and sewer system under the Capital Lease which was fully funded in 1998. The Authority makes payment to the City for direct and indirect services under the Cooperation Agreement. Under this Agreement, the Authority also funds on behalf of the City a rate equalization subsidy to other City water companies. Under separate agreement, the Authority, also on behalf of the City, is required to purchase delinquent wastewater treatment receivables. The Authority is financially self-sufficient and should not be adversely affected by any bankruptcy filing by the City. Any other actions by the City of Pittsburgh to increase Authority funding would require Board approval.

CONDENSED FINANCIAL STATEMENTS

CONDENSED STATEMENT OF NET ASSETS

(Dollars expressed in thousands)

	December 31,		Variance	
	2008	2007	Dollars	%
Capital assets:			Increase (Decrease)	
Producing assets	$ 416,413	$ 420,120	$ (3,707)	-0.9%
Construction in progress	27,307	22,901	4,406	19.2%
Restricted assets	135,943	51,547	84,396	163.7%
Current assets and bond costs	90,899	68,975	21,924	31.8%
Total Assets	$ 670,562	$ 563,543	$ 107,019	19.0%
Liabilities:				
Current liabilities	$ 43,695	$ 46,693	$ (2,998)	-6.4%
Long-term liabilities	661,864	551,453	110,411	20.0%
Total Liabilities	705,559	598,146	107,413	18.0%
Net Assets (Deficit):				
Invested in capital assets, net of related liabilities	(81,338)	(64,959)	(16,379)	25.2%
Restricted for capital activity and debt service	15,988	8,837	7,151	80.9%
Unrestricted	30,353	21,519	8,834	41.1%
Total Net Assets (Deficit)	(34,997)	(34,603)	(394)	1.1%
Total Liabilities and Net Assets (Deficits)	$ 670,562	$ 563,543	$ 107,019	19.0%

CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

(Dollars expressed in thousands)

	Year Ended December 31,		Variance	
	2008	2007	Dollars	%
			Increase (Decrease)	
Operating Revenues	$ 129,938	$ 129,907	$ 31	0.0%
Operating Expenses:				
Direct operating	38,346	35,328	3,018	8.5%
Wastewater treatment	40,096	38,094	2,002	5.3%
Cooperation Agreement	9,650	9,650	-	0.0%
Subsidy of non-customer City residents	1,070	684	386	56.4%
Depreciation and amortization	16,471	16,249	222	1.4%
Total Operating Expenses	105,633	100,005	5,628	5.6%
Operating Income	24,305	29,902	(5,597)	-18.7%
Non-operating revenue (expense):				
Federal grants	986	0	986	986.0%
Interest revenue	5,032	2,598	2,434	93.7%
Interest expense and other	(30,717)	(29,171)	(1,546)	5.3%
Total Non-operating Revenue (Expenses)	(24,699)	(26,573)	1,874	-7.1%
Net Gain/(Loss)	$ (394)	$ 3,329	$ (3,723)	-111.8%

Financial Condition

The Authority's financial condition in 2008 remained stable for a sixth year in a row despite the net book loss of $.394 million loss. While water utility revenues declined by 3.5%, unrestricted cash reserves from operations increased by 19.7% or $6.8 million due to debt restructuring and more focused efforts to improve collections and reporting capabilities.

The Authority's strategic plan continues to focus on improving its financial condition, customer service, improving internal efficiencies, maintaining regulatory compliance, and security while providing a culture that encourages employee development.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Executive Director, Penn Liberty Plaza I, 1200 Penn Ave., Pittsburgh, PA 15222.

[THIS PAGE INTENTIONALLY LEFT BLANK]

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF NET ASSETS

(Dollars expressed in thousands)

DECEMBER 31, 2008 AND 2007

Assets	2008	2007
Current assets:		
Cash and cash equivalents	$ 41,914	$ 35,024
Accounts receivable, net:		
Water:		
Billed	10,159	11,012
Unbilled	4,245	4,037
Total water	14,404	15,049
Wastewater treatment:		
Billed	4,894	5,527
Unbilled	3,235	2,957
Total wastewater treatment	8,129	8,484
Other receivables	2,137	1,339
Total accounts receivable, net	24,670	24,872
Prepaid expenses	190	434
Inventory	1,564	1,572
Total current assets	68,338	61,902
Noncurrent assets:		
Restricted assets:		
Accrued interest receivable	484	338
Cash and cash equivalents	22,366	6,593
Investments	113,093	44,616
Total restricted assets	135,943	51,547
Capital assets, not being depreciated	27,307	22,901
Capital assets, net of accumulated depreciation	416,413	420,120
Bond issue costs, net of accumulated amortization	22,561	7,073
Total noncurrent assets	602,224	501,641
Total Assets	$ 670,562	$ 563,543

(Continued)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF NET ASSETS

(Dollars expressed in thousands)

DECEMBER 31, 2008 AND 2007

(Continued)

Liabilities and Net Assets	2008	2007
Liabilities:		
Current liabilities:		
Bonds and loans payable, current portion	$ 14,625	$ 17,936
Accrued payroll and related obligations	673	940
Accounts payable wastewater treatment	13,757	12,168
Accounts payable and other accrued expenses	3,326	4,323
Accounts payable from restricted assets	1,610	3,319
Accrued interest payable from restricted assets	9,704	8,007
Total current liabilities	43,695	46,693
Noncurrent liabilities:		
Deferred revenue	356	378
Accrued payroll and related obligations	1,150	1,183
Bonds and loans payable, net of current portion	660,358	549,892
Total noncurrent liabilities	661,864	551,453
Total Liabilities	705,559	598,146
Net Assets:		
Invested in capital assets, net of related debt	(81,338)	(62,961)
Restricted for capital activity and debt service	15,988	8,837
Unrestricted	30,353	19,521
Total Net Assets	(34,997)	(34,603)
Total Liabilities and Net Assets	$ 670,562	$ 563,543

(Concluded)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET ASSETS

(Dollars expressed in thousands)

YEARS ENDED DECEMBER 31, 2008 AND 2007

	2008	2007
Operating Revenues:		
Residential, commercial, and industrial water sales	$ 86,627	$ 89,766
Wastewater treatment	39,439	37,381
Other	3,872	2,760
Total operating revenues	129,938	129,907
Operating Expenses:		
Direct operating expenses	38,346	35,328
Wastewater treatment	40,096	38,094
Cooperation agreement operating expenses:		
Indirect cost allocation - sewer conveyance	4,415	4,415
Indirect cost allocation - water	5,235	5,235
Expense of water provided by other entities:		
Subsidy of customers located in the City	1,070	684
Depreciation	13,914	13,692
Amortization of capitalized lease assets	2,557	2,557
Total operating expenses	105,633	100,005
Operating Income	24,305	29,902
Non-operating Revenues (Expenses):		
Federal grants	986	-
Interest revenue	5,032	2,598
Interest expense - bonds	(29,362)	(28,394)
Interest expense - other	(153)	(155)
Amortization of bond issue costs	(1,202)	(622)
Total non-operating revenues (expenses)	(24,699)	(26,573)
Net Income (Loss)	(394)	3,329
Net Assets:		
Beginning of year	(34,603)	(37,932)
End of year	$ (34,997)	$ (34,603)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF CASH FLOWS

(Dollars expressed in thousands)

YEARS ENDED DECEMBER 31, 2008 AND 2007

	2008	2007
Cash Flows From Operating Activities:		
Cash received from customers	$ 130,718	$ 128,470
Cash paid to suppliers and employees and customer refunds	(39,567)	(36,228)
Cash paid to City of Pittsburgh under the Cooperation Agreement	(9,650)	(9,650)
Cash paid to other water companies for subsidy of customers located in the City of Pittsburgh	(1,070)	(684)
Cash paid to ALCOSAN for wastewater treatment	(38,507)	(35,802)
Net cash provided by (used in) operating activities	41,924	46,106
Cash Flows From Investing Activities:		
Purchase of investment securities	(706,271)	(243,000)
Proceeds from sale and maturities of investment securities	619,421	257,372
Interest income	4,886	2,732
Net cash provided by (used in) investing activities	(81,964)	17,104
Cash Flows From Capital and Related Financing Activities:		
Purchase/construction of property, plant, and equipment	(16,738)	(23,153)
Proceeds from federal grants	408	-
Proceeds from issuance of long-term debt	419,276	159,165
Payment to refunding bond escrow agent	(300,489)	(159,188)
Principal payments on debt	(15,531)	(17,299)
Interest paid on borrowings	(24,223)	(22,345)
Net cash provided by (used in) capital and related financing activities	62,703	(62,820)
Increase (Decrease) in Cash and Cash Equivalents	22,663	390
Cash and Cash Equivalents:		
Beginning of year	41,617	41,227
End of year	$ 64,280	$ 41,617
Consists of:		
Restricted cash and cash equivalents	$ 22,366	$ 6,593
Unrestricted cash and cash equivalents	41,914	35,024
	$ 64,280	$ 41,617
Reconciliation of Operating Income to Net Cash Provided by (Used in) Operating Activities:		
Operating income	$ 24,305	$ 29,902
Adjustments:		
Depreciation and amortization	16,471	16,249
Reserve for uncollectible amounts	1,788	2,364
Change in assets and liabilities:		
Change in:		
Accounts receivable	(788)	(3,931)
Other accounts receivable	(220)	131
Wastewater accounts payable	1,589	1,578
Accounts payable and other accrued expenses	(997)	(2,025)
Accrued interest on restricted assets	(1,709)	801
Accounts payable restricted assets	1,697	1,433
Other	(212)	(396)
Net cash provided by (used in) operating activities	$ 41,924	$ 46,106

The notes to financial statement are an integral part of this statement.

1. ORGANIZATION

The Pittsburgh Water and Sewer Authority (Authority) provides water to approximately 83,000 residential, commercial, and industrial customers located in the City of Pittsburgh (City), Pennsylvania and collects wastewater throughout the City.

A Board of Directors (Board) appointed by the Mayor of the City governs the Authority.

The Authority is a body politic and corporate, organized and existing under the Pennsylvania Municipalities Authorities Act. The Authority was established by the City in 1984 to assume responsibility from the City for management, operation, maintenance, and improvement of virtually the entire City water supply, distribution, and wastewater collection systems (the "Water and Wastewater System" or "System"). At inception, the City contributed $5.3 million to the Authority in the form of customer accounts receivable.

On March 14, 2008, the Authority agreed to amend its term of existence to 2045.

The Authority has the right to establish user fees and charges without being subject to the approval of any department, board, or agency of Pennsylvania or the City. The Authority is also authorized to issues bonds and notes payable solely from the Authority's revenues.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

These financial statements present the financial position, income, changes in net assets, and cash flows of the Authority. The Authority is a component unit of the City as defined in Governmental Accounting Standards Board (GASB) Statement No. 14, *"Financial Reporting Entity."* The Authority's financial statements are not intended to present the financial position or results of operations of the City taken as a whole.

Basis of Accounting and Measurement Focus

The accompanying financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America, as prescribed by GASB. Revenues are recorded when earned and expenses are recorded when a liability is incurred,

regardless of the timing of related cash flows. The Authority applies only the Financial Accounting Standards Board pronouncements issued before November 30, 1989.

The Authority functions as a Business-Type Activity, as defined by GASB. The significant GASB standards followed by the Authority are described as follows:

Classification of Net Assets

In accordance with the provision of GASB Statement No. 34, *"Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments,"* net assets are classified into three components – invested in capital assets, net of related debt; restricted; and unrestricted. These classifications are defined as follows:

- Invested in capital assets, net of related debt – This component of net assets consists of capital assets net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets net of bond issue costs, premiums and discounts and remaining deferred refunding losses.

- Restricted – This component of net assets consists of constraints placed on net asset use through external restrictions.

- Unrestricted – This component of net assets consists of net assets that do not meet the definition of "restricted" or "invested in capital assets, net of related debt." The net investment in joint ventures is also reflected here.

When an expense is incurred that can be paid using either restricted or unrestricted resources, the Authority's policy is to first apply the expense towards restricted resources and then towards unrestricted resources.

Deferred Interest

Interest expense, net of related earnings on funds restricted for the purpose of capital improvements, is deferred and allocated to the cost of capital assets. Accordingly, during 2008, the Authority's interest expense of $797, net of deferred interest earnings of $56, resulted in net capitalized interest expense of $741.

Cash and Cash Equivalents

Cash and cash equivalents include all highly liquid investments, both restricted and unrestricted, with maturity of three months or less at date of purchase.

Bond Issue Costs, Premiums, and Discounts

Bond issue costs are deferred and amortized over the life of the related bonds using the effective interest method. The unamortized balance is an asset on the statements of net assets.

Original issue bond premiums and discounts are amortized over the life of the related bonds using the effective interest method of amortization. The unamortized balance of premiums and discounts is presented net on the statements of net assets as a decrease to bonds payable.

Deferred Refunding Loss

In accordance with GASB Statement No. 23, *"Accounting and Reporting for Refunding of Debt by Proprietary Activities,"* the excess of the reacquisition price over the net carrying amount of debt refunded with proceeds from the Series 1993, 1998, 2003, 2007, and 2008 Bonds were recorded as deferred refunding losses. The deferred refunding losses are being amortized using the effective interest method over the originally scheduled life of the defeased issues which extend to 2037. The unamortized balances are reflected as a reduction of bonds payable.

Interest Rate Swap Termination Costs

Termination costs associated with the defeasance of hedged debt are included in the net carrying amount of the old refunded debt when calculating the deferred refunding loss. During 2008, the Authority paid approximately $6 million in swap termination costs associated with the partial refunding of the Series 2007 Bonds.

Capital Assets

Capital assets owned by the Authority are recorded at cost including that portion of deferred interest that is ultimately capitalized. Depreciation of fixed assets owned by the Authority is provided on the straight-line method based on the estimated useful lives of the various classes of assets. Utility assets have estimated useful lives ranging from 30 to 40 years. Non-utility assets have estimated useful lives ranging from 5 to 10 years.

The water and sewer system represents the assets leased from the City. Amortization of capital lease assets is provided on the straight-line basis applying an estimated average remaining useful life of forty years from the inception of the lease.

Maintenance and repairs are charged to expense as incurred.

Clarification of Revenues

The Authority has classified its revenues as either operating or non-operating revenues according to the following criteria:

- Operating revenues – Operating revenues include activities that have the characteristics of exchange transactions, such as residential, commercial, and industrial water sales.

- Non-operating revenues – Non-operating revenues include activities that have the characteristics of non-exchange transactions, such as interest income and other revenue sources that are defined as non-operating revenues by GASB Statement No. 9, *"Reporting Cash Flows of Proprietary and Non-expendable Trust Funds and Governmental Entities that Use Proprietary Fund Accounting"* and GASB Statement No. 34.

Compensated Absences

A liability for vacation, personal, and sick days is accrued when related benefits are attributable to services rendered and to the extent it is probable that the Authority will ultimately compensate employees.

Inventory

Inventory is stated at cost, on a moving average price basis.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of continent assets and liabilities at the date of the financial statements and the reported amounts

of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain amounts from the prior year financial statements were reclassified to conform to the current year presentation.

Change in Accounting Principle

In prior periods, the Authority has accounted for revenue for wastewater treatment net of related expenses. During 2008, the Authority elected to change their method of accounting for wastewater treatment. The Authority currently reports wastewater treatment revenue and wastewater treatment expenses gross on the Statement of Revenues, Expenses, and Changes in Net Assets. This method of accounting is preferable as it presents the wastewater treatment activity consistent with the Authority's responsibility for this activity. The current presentation allows for the reporting of operational income and losses related to wastewater treatment which is consistent with other Authorities with similar activities. Financial statements of prior years have been restated to apply the new method retroactively. The effect of the accounting change has been to gross up prior year income and expense for wastewater treatment. There is no effect on net income as previously reported for 2007 or any prior year.

Pending Pronouncements

In June 2008, GASB issued Statement No. 53, *"Accounting and Financial Reporting for Derivative Instruments."* This Statement addresses the recognition, measurement, and disclosure of information regarding derivative instruments entered into by state and local governments. This Statement is intended to improve how state and local governments report information about derivative instruments - financial arrangements used by governments to manage specific risks or make investments - in their financial statements. The Statement specifically requires governments to measure most derivative instruments at fair value in their financial statements that are prepared using the accrual basis of accounting. The guidance in this Statement also addresses hedge accounting requirements and will be effective for the Authority's financial statements for the year ended December 31, 2010. The Authority is currently considering the impact that this new pronouncement will have on the financial statements.

3. TRANSACTIONS WITH THE CITY OF PITTSBURGH

In 1984, pursuant to a Lease and Management Agreement, the Authority leased the System from the City and assumed responsibility for establishing and collecting user fees and charges and for maintaining and improving the System. The Lease and Management Agreement provided for the City to operate and maintain the System for the Authority subject to the general supervision of the Authority.

The City and the Authority agreed to terminate the Lease and Management Agreement in July 1995 and concurrently entered into a Capital Lease Agreement and a Cooperation Agreement (collectively referred to as the "Agreements").

Cooperation Agreement

Under the terms of the Cooperation Agreement, City water department employees became employees of the Authority. As a result, the Authority assumed various personnel-related obligations from the City's water department. Other direct costs of the System's water operations are now generally paid directly by the Authority under the Cooperation Agreement, rather than paid by the City and reimbursed by the Authority. The City provides the Authority with various services in accordance with the Cooperation Agreement and the Authority reimburses the City for direct and indirect costs attributed by the City to the operation and maintenance of the System.

Under the Agreements, the Authority provides up to 600 million gallons of water annually for the City's use without charge. Also, the Authority assumes the City's obligation for the cost of subsidizing water service to residents of the City situated beyond the Authority's service area so that those water users pay charges which mirror the rates of the Authority.

System Leases

The Capital Lease Agreement stipulates minimum lease payments of approximately $101 million, all of which were satisfied during the initial three years of the capital lease.

The Capital Lease Agreement has a term of thirty years and provides the Authority with the option to purchase the System for one dollar in 2025.

Pension

Employees of the Authority participate in the City's Municipal Pension Fund Plan (Plan). Employees who became members of the Plan prior to January 1, 1988 are required to contribute 5% of pre-tax pay. Those joining thereafter are required to contribute 4%. Substantially, all the Authority's 2008 payroll of $11,255 was covered by the Plan. Employee contributions for the year amounted to approximately $482.

The City's obligations relative to the Plan are determined in accordance with various Pennsylvania statutes. The extent of the Authority's participation in such obligations with respect to those former City employees whose membership continued upon becoming employees of the Authority is determined by the shared interpretation of the City and Authority of the intent of the Cooperation Agreement.

The 2008 Minimum Municipal Obligation calculated for the City's Plan indicated a 2008 normal cost of $555 associated with those former City employees whose participation continued upon becoming employees of the Authority as provided by the Cooperation Agreement. The Authority estimates that the normal cost for 2008, together with other elements of expense for employee service during 2008 would not exceed the sum of the 2008 contributions made by the Authority and employees.

Uncertainty exists about the future obligation of the Authority and its employees to make contributions to the Plan. Such contributions are contingent upon the continuing eligibility of the Authority's employees to participate in the City's Plan. Eligibility for ongoing employee participation in the City's Plan could end if the Authority were to introduce another pension plan. At this time, the Authority and City have no definite plans to establish another pension plan for the Authority, other than an agreement in principle that the Authority should have its own plan in the future. Future obligations of the Authority to make contributions to the Plan may also be subject to other amendments of the existing arrangement agreed-upon by the Authority and the City.

Normal retirement benefits are available upon attainment of age sixty and completion of twenty service years. Early retirement benefits are available upon attainment of age fifty and completion of eight service years. Early retirement benefits may be deferred until age sixty or may be obtained upon retirement at a reduced level. A member who terminates employment after attaining age forty and completing eight service years can sustain eligibility for benefits by continuing contributions through age fifty. A member who terminates employment after attaining fifteen service years, but has been a member since before January 1, 1975, can be vested by continuing contributions through age fifty.

Retirement benefits for employees who were members of the Plan are based upon a percentage of either three-year or four-year average pay, depending on date of hire, subject to certain specified minimum monthly benefit amounts. Special membership and benefit rules apply to those experiencing disability.

The "pension benefit obligation," which is an actuarial present value of credited projected benefits, is a standardized measure for financial statement disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future by the Plan as a result of members' service to date. The measure is intended to help users assess the Plan's funding status on a going concern basis, assess progress made in accumulating sufficient assets to pay benefits when due and make comparisons among public employee retirement systems. The Plan has not reported or attributed measurements of assets or the pension benefit obligation on the basis of the group of members who are Authority employees.

Additional information about the Plan and ten-year historical trend information showing the Plan's progress in accumulating sufficient assets to pay benefits when due is presented in the City's Comprehensive Annual Financial Report.

4. REVENUE AND ACCOUNTS RECEIVABLE

Water

Water sales revenue is recognized as earned during the period when water is supplied to customers. Customers are billed on a monthly billing cycle by the Authority based on actual or estimated meter readings. The Authority recognizes unbilled accounts receivable for water service provided prior to year-end that is billed during the following year.

Water accounts receivable are presented net of a reserve for uncollectible amounts. This reserve, based upon historical experience, is recognized coincident with recognition of revenue. At December 31, 2008 and 2007, the reserve for uncollectible water accounts was approximately $17.1 million and $15.6 million, respectively. The Authority has rights to utilize collection agencies, service terminations, liens, and real property sales to protect its interests, limit further losses, and motivate payments from delinquent customers.

Wastewater Treatment

Although the Authority does not provide wastewater treatment, it assumed responsibility for certain wastewater treatment revenue and expenses beginning in 1996. Pursuant to a 1955 agreement, the City was responsible for paying the Allegheny County Sanitary Authority (ALCOSAN) face amounts for delinquent wastewater treatment receivables. Until 1996, the City undertook to bill and collect these delinquent accounts directly. In 1996, the City and the Authority entered into a memorandum of understanding (MOU) whereby the Authority received assets including rights to wastewater treatment receivables assigned by the City and assumed the City's obligation to pay ALCOSAN for delinquencies. During 2004, the Authority and ALCOSAN executed a first amendment to the 1955 agreement whereby the Authority elected to change the billing structure. Effective May 2004, the Authority began direct billing City residents for current and delinquent wastewater treatment charges and remitting to ALCOSAN the aggregate amount of service charges billed. Wastewater treatment activity and the related assets and liabilities appear on the statements of revenue, expenses and changes in net assets and the statements of net assets, respectively. At December 31, 2008 and 2007, the reserve for uncollectible wastewater accounts was approximately $8.66 million and $8.4 million, respectively.

5. Capital Assets

Capital assets consisted of the following at December 31, 2008 and 2007:

	Balance at December 31, 2007	Additions	Transfers	Balance at December 31, 2008
Capital assets not being depreciated:				
Construction in progress	$ 22,901	$ 13,549	$ (9,143)	$ 27,307
Capital assets being depreciated:				
Water and sewer system	102,167	-	-	102,167
Utility assets	468,557	13,321	(966)	480,912
Non-utility assets	15,842	392	(6)	16,228
Total capital assets being depreciated	586,566	13,713	(972)	599,307
Total capital assets	609,467	27,262	(10,115)	626,614
Accumulated depreciation	(166,446)	(16,448)	-	(182,894)
Capital assets, net	$ 443,021	$ 10,814	$ (10,115)	$ 443,720

	Balance at December 31, 2006	Additions	Transfers	Balance at December 31, 2007
Capital assets not being depreciated:				
Construction in progress	$ 16,658	$ 10,256	$ (4,013)	$ 22,901
Capital assets being depreciated:				
Water and sewer system	102,167	-	-	102,167
Utility assets	454,715	13,891	(49)	468,557
Non-utility assets	12,774	3,089	(21)	15,842
Total capital assets being depreciated	569,656	16,980	(70)	586,566
Total capital assets	586,314	27,236	(4,083)	609,467
Accumulated depreciation	(150,197)	(16,249)	-	(166,446)
Capital assets, net	$ 436,117	$ 10,987	$ (4,083)	$ 443,021

6. PAYROLL AND RELATED OBLIGATIONS

Payroll and related obligations presented on the statements of net assets are comprised of:

	Balance at December 31, 2007	Change	Balance at December 31, 2008	Current Portion
Compensated absences	$ 778	$ 17	$ 795	$ 16
Workers' compensation	644	(7)	637	266
Early retirement incentive	7	(7)	-	-
Payroll, withholdings, and taxes	694	(304)	390	391
	$ 2,123	$ (301)	$ 1,822	$ 673

	Balance at December 31, 2006	Change	Balance at December 31, 2007	Current Portion
Compensated absences	$ 766	$ 12	$ 778	$ 33
Workers' compensation	590	54	644	206
Early retirement incentive	7	-	7	7
Payroll, withholdings, and taxes	625	69	- 694	694
	$ 1,988	$ 135	$ 2,123	$ 940

7. BONDS AND LOANS PAYABLE

To finance its initial capital improvement program, the Authority issued Daily Adjustable Demand Water and Wastewater System Revenue Bonds of $93,600 in 1984 ("1984 Bonds"). In 1985, the Authority issued Water and Wastewater System Adjustable Rate Tender Revenue Bonds ("1985 Bonds") that accomplished an advance refunding which defeased the 1984 Bonds. In 1986, the Authority issued $134,700 Water and Wastewater System Adjustable Rate Tender Revenue Bonds ("1986 Bonds") to finance the next phase of its capital improvement program. In July 1991, the Authority issued $248,329 Water and Wastewater System Revenue Refunding Bonds, Series A of 1991 ("1991 Bonds") which refunded the outstanding 1985 and 1986 Bonds. The principal of defeased 1986 Bonds still outstanding at December 31, 2008 and 2007 is $136,490 and $148,995, respectively.

Series 1993

In November 1993, the Authority issued $278,970, Series A Refunding Bonds, ("Series A-1993 Bonds") and $10,785 Series B Revenue Bonds, ("Series B-1993 Bonds") to finance additional capital improvements. Series A-1993 Bond proceeds of $276,613 (net of $3,402 in underwriting fees, FGIC insurance, and other issuance costs) defeased the 1991 Bonds through an advance refunding. The principal of defeased 1991 Bonds still outstanding at December 31, 2008 and 2007 was $0 and $12,940, respectively.

During 2008, the bond insurance company for the Series 1993 Bonds was downgraded to a credit rating of CAA1 by Standard & Poor's.

The Series A-1993 Bonds bear interest at a fixed rate of 6.5%, payable semi-annually at March 1 and September 1. The outstanding 1993 Bonds are not subject to optional or mandatory redemption.

Fair value of the 1993 Bonds at December 31, 2008 and 2007, with carrying amounts of $27 million and $49 million, respectively, based on quoted market prices, is approximately $30 million and $56 million, respectively.

Series 1998

In March 1998, the Authority issued $93,355, Series A First Lien Revenue Bonds ("1998 Series A Bonds"), the proceeds of which were used to defease through an advance refunding the entire balance of 1995 Series A Bonds outstanding ($89,850), $36,440 Series B First Lien Revenue Bonds ("1998 Series B Bonds"), the proceeds of which are dedicated to a capital improvements program, and $101,970 Series C Subordinate Revenue Bonds ("1998 Series C Bonds"), the proceeds of which were used to defease through an advance refunding the entire balance of the 1995 Series B Bonds outstanding ($98,410). At December 31, 2008 and 2007, the remaining unamortized deferred refunding loss of $569 and $2,920, respectively, on the transaction is shown as a reduction of the long-term debt and will be amortized through 2028.

Fair value of the 1998 Bonds at December 31, 2008 and 2007, with carrying amounts of $56 million and $253 million, respectively, based on quoted market prices, is approximately $56 million and $261 million, respectively.

The 1998 Series A Bonds and 1998 Series C Bonds bear interest at fixed rates ranging from 5.0% to 5.25%, payable semi-annually at March 1 and September 1. The 1998 Series B Bonds are capital appreciation bonds with an original issuance amount of $36,440. The 1998

Series B Bonds have maturity values of $2.3 million to $31.8 million from 2017 to 2030. The bonds were issued to yield rates from 5.18% to 5.3%. The 1998 Series B Bonds accrue and compound interest on a semi-annual basis and are carried at cost plus accrued interest. Total maturity value of the 1998 Series B Bonds is $146.8 million.

A portion of the 1998 Bonds are subject to optional redemption in various face amounts beginning March 1, 2008.

Series 2003

On September 23, 2003, the Authority issued $167,390,000 of Water and Sewer System Revenue Refunding Bonds ("2003 Bonds"). The proceeds of the 2003 Bonds were used to provide funds for the current refunding of a portion of the 1993 Bond Series. In connection with the 2003 debt refundings, the Authority recorded a deferred refunding loss of $3,162 which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. The unamortized balance of the deferred refunding adjustment is $1,468 and $2,251 at December 31, 2008 and 2007, respectively.

The 2003 Bonds were issued at a bond discount of $830, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method.

The 2003 Bonds bear interest at rates ranging from 1.45% to 4.75%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. Stated maturities for the 2003 Bonds are at various face amounts on September 1 of each year beginning September 1, 2004 through 2023. The 2003 Bonds which mature after September 1, 2014, are subject to redemption prior to maturity at the option of the Authority.

The fair market value of the 2003 Bonds at December 31, 2008 and 2007, with carrying amounts of $67 million and $116 million, respectively, based on quoted market prices, is approximately $69 million and $118 million, respectively.

Series 2007

During March 2007, the Authority issued $158,895 Series 2007 First Lien Water and Sewer Revenue Bonds ("2007 Bonds"): $43,720 Series A of 2007 (fixed rate), $57,585 Series B-1 of 2007 (variable rate demand), and $57,590 Series B-2 of 2007 (variable rate demand). The purpose of this bond issue was to refund the Series 2002 and Series 2005 Bonds (the refunded bonds). Proceeds of the 2007 Bonds were invested in an escrow account to pay principal and interest on the refunded bonds from the time of refunding through the bonds'

earliest optional call dates. In connection with the debt refundings, the Authority recorded a deferred refunding loss of which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. At December 31, 2008 and 2007, the remaining unamortized deferred refunding loss of $5,759 and $8,099, respectively. At December 31, 2008, the principal of the defeased Series 2002 Bonds outstanding was $97,145, and the defeased 2005 Bonds outstanding was $47,545.

The 2007 Bonds were issued at a bond premium of $2,660, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. Bond issuance costs of $598 are also being amortized over the life of the 2007 Bonds using the effective interest method.

The 2007 Series A Bonds bear interest at rates ranging from 4.00% to 5.00%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The 2007 Series A Bonds are subject to extraordinary redemption prior to maturity at the option of the Authority in the event of a condemnation, damage or destruction of the water and sewer system.

The 2007 Series B Bonds bear interest at a variable rate with interest payments due on the first business day of each month. The 2007 Series B Bonds that mature on September 1 of 2018-2033 are subject to mandatory sinking fund redemption.

The fair market value of the 2007 Bonds at December 31, 2008 and 2007, with carrying amounts of $124 million and $156 million, respectively, based on quoted market prices, is approximately $127 million and $161 million, respectively.

Series 2008

During May 2008, the Authority issued $93,635 Series 2008 Water and Sewer System First Lien Revenue Bonds ("2008 Fixed Rate Bonds"): $68,970 Series A of 2008 (fixed rate, taxable) and $24,665 Series D-1 of 2008 (fixed rate). The purpose of this bond issue was to advance refund portions of certain maturities of the Series 1993A and Series 2003 Bonds, to fund the costs of certain capital additions, to fund the premium for the Bond Insurance Policy securing payments on 2008 Fixed Rate Bonds, and to fund termination payments on certain interest rate swaps.

During June 2008, the Authority issued $320,515 Series 2008 Water and Sewer System First Lien Revenue Bonds ("2008 Variable Rate Demand Bonds"): $145,495 Series B of 2008 (variable rate demand), $51,910 Series C-1 of 2008 (variable rate demand), $51,885 Series

C-2 of 2008 (variable rate demand), and $71,225 Series D-2 of 2008 (variable rate demand). The purpose of this bond issue was to currently refund the Series 1998A and Series 1998C, to currently refund certain maturities of the Series 2007 B-1 and Series 2007 B-2 Bonds, to advance refund certain maturities of the Series 1998B Bonds, to fund approximately $98 million of certain capital additions, to fund the premium for the Bond Insurance Policy securing payments on 2008 Variable Rate Demand Bonds, and to fund termination payments on certain interest rate swaps.

In connection with these advance refundings, portions of the proceeds of the 2008 Bonds were deposited into irrevocable trusts with an escrow agent to provide for certain debt service payments on the refunded bonds. The advance refunding resulted in a deferred refunding loss of $18,119 that will be amortized as an adjustment to interest expense over the life of the 2008 Bonds using the effective interest method. At December 31, 2008, the principal of the defeased Series 1993A Bonds outstanding was $21,875 and the defeased 2003 Bonds outstanding was $34,530. The maturity value of defeased 1998B compound interest bonds outstanding at December 31, 2008 was $19,300.

The Taxable 2008 Series A Bonds bear interest at rates ranging from 6.36% to 6.61%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The Taxable 2008 Series A Bonds are subject to optional redemption, in whole or in part, on any date, at the option of the Authority. The Taxable 2008 Series A Bonds that mature in 2018 and 2024 are subject to mandatory sinking fund payments beginning in 2017 and continuing through 2024.

The 2008 Series D-1 Bonds (together with the Taxable 2008 Series A Bonds are the 2008 Fixed Rate Bonds) bear interest at rates ranging from 4.50% to 5.00%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The 2008 Series D-1 Bonds which mature on or after September 1, 2019 are subject to optional redemption, in whole or in part, on any date, at the option of the Authority at any time on or after September 1, 2018, at 100% of the principal amount plus accrued interest.

The 2008 Series B, C, and D-2 Bonds (2008 Variable Rate Bonds) bear interest at a variable rate with interest payments due on the first business day of each month. Interest rates are reset weekly; the fluctuating rate per annum to be determined by the respective remarketing agents. The weekly rate is subject to a cap of 12% per annum. Variable Rate Bonds are subject to optional redemption, in whole or in part, on any date, at the option of the Authority. The 2008 Series B Bonds that mature on September 1 of 2039 are subject to mandatory sinking fund redemption. The 2008 Series C Bonds that mature on September 1 of

2035 are subject to mandatory sinking fund redemption. The 2008 Series D-2 Bonds that mature on September 1 of 2040 are subject to mandatory sinking fund redemption.

The 2008 Series Bonds are subject to extraordinary redemption prior to maturity at the option of the Authority in the event of a condemnation, damage or destruction of the water and sewer system.

The 2008 Fixed Rate Bonds were issued at a bond premium of $824, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. Bond issuance costs of $7,459, including $5,036 of swap termination fees, are also being amortized over the life of the Bonds using the effective interest method.

The 2008 Variable Rate Bonds issuance costs of $9,337, including $594 of swap termination fees, are being amortized over the life of the Bonds using the effective interest method.

The fair market value of the 2008 Bonds at December 31, 2008, with carrying amounts of $414 million, based on quoted market prices, is approximately $413 million.

The 2008 bond transactions were entered into to obtain approximately $98 million of new funds while maintaining a specified level of current debt service by extending the maturity of previously held debt. As a result, debt service for the refunded bonds is approximately $185 million higher over the life of the 2008 Bonds.

Variable rate bonds require a liquidity facility and/or a letter of credit. The Authority is subject to the risk that the bank does not renew the credit facility and/or that the pricing changes throughout the life of the bonds. Additionally, the Authority purchased insurance as a credit enhancement on the variable rate bonds. Trading spreads on the bonds and the preservation of the liquidity facility may be largely linked to the credit quality of the insurance provider. Therefore, if there is an event that would adversely affect the investor's perception of the credit quality of the insurer, the Authority could be subject to paying higher credit spreads on the bonds and risk losing the liquidity facility.

During 2008, the Authority experienced delays in remarking certain 2008 Variable Rate Demand Bonds (bonds). These bonds were not able to be remarketed on a timely basis due to downgrades in the bond insurer's credit rating and other market concerns. The bonds were temporarily considered to be Bank Bonds as they were purchased by banks as governed by the respective series' Standby Bond Purchase Agreement. The yield on bank bonds was 7% per annum. As of December 31, 2008, all of the 2008 Variable Rate Bonds had been remarketed and were no longer considered to be bank bonds.

Currently, Dexia and JP Morgan provide liquidity for the Authority's 2007 and 2008 variable rate demand bonds through Standby Bond Purchase Agreements. The JP Morgan and Dexia agreements related to the 2008 variable rate demand bonds are scheduled to expire on June 11, 2009. If the Authority is unable to extend or replace JP Morgan as the liquidity provider for approximately $123 million of outstanding bonds, the maturity of these bonds will be accelerated and will become due with scheduled maturities over a five year period. Dexia has provided notification to the Authority that they will not be extending the liquidity on approximately $197 million of bonds. The Authority is currently researching other means to provide liquidity or credit support for these bonds. In the event that liquidity or credit support is not provided, these bonds are not subject to an accelerated maturity but will be purchased by the current liquidity provider Dexia and held as Bank Bonds.

In conjunction with the issuance of the 2008 Variable Rate Bonds, the Authority entered into various pay fixed/receive variable interest rate swaps to effectively change the Bonds' variable interest rates to synthetic fixed rates. These swap transactions are discussed in Footnote 8: Interest Rate Swaps.

Bonds and state loans payable (PENNVEST), consisted of the following at December 31, 2008 and 2007:

	Balance at December 31, 2007	Additions	Reductions	Balance at December 31, 2008
Bonds and loans payable:				
Revenue bonds	$ 574,121	$ 417,041	$ (302,997)	$ 688,165
State loans (PENNVEST)	14,165	-	(800)	13,365
	588,286	417,041	(303,797)	701,530
Less: deferred refunding loss	(20,543)	(18,119)	9,728	(28,934)
Unamortized bond (discount)/premium	85	2,384	(82)	2,387
Total bonds and loans	$ 567,828	$ 401,306	$ (294,151)	$ 674,983

	Balance at December 31, 2006	Additions	Reductions	Balance at December 31, 2007
Bonds and loans payable:				
Revenue bonds	$ 579,685	$ 161,981	$ (167,545)	$ 574,121
State loans (PENNVEST)	14,689	270	(794)	14,165
	594,374	162,251	(168,339)	588,286
Less: deferred refunding loss	(14,784)	(7,593)	1,834	(20,543)
Unamortized bond (discount)/premium	(884)	2,493	(1,524)	85
Total bonds and loans	$ 578,706	$ 157,151	$ (168,029)	$ 567,828

Debt service payments of the State Loans at December 31, 2008 are as follows:

	State Loans		
	Principal	Interest	Total
2009	$ 811	$ 156	$ 967
2010	820	146	966
2011	830	136	966
2012	841	126	967
2013	851	116	967
2014-2018	4,415	419	4,834
2019-2023	4,246	142	4,388
2024-2025	551	4	555
	$ 13,365	$ 1,245	$ 14,610

Debt service payments on the 1993, 1998, 2003, 2007, and 2008 Bonds at December 31, 2008 are as follows:

	Revenue Bonds		
	Principal	Interest	Total
2009	$ 13,820	$ 38,047	$ 51,867
2010	15,620	36,394	52,014
2011	14,885	32,251	47,136
2012	12,465	31,399	43,864
2013	14,155	40,893	55,048
2014-2018	80,195	171,270	251,465
2019-2023	95,612	128,366	223,978
2024-2028	61,951	177,231	239,182
2029-2033	106,257	123,866	230,123
2034-2038	170,365	47,845	218,210
2039-2040	79,115	6,213	85,328
	664,440	$ 833,775	$ 1,498,215
Accretion	23,725		
Total	$ 688,165		

Interest payments were calculated for the Variable Rate Bonds using the effective interest rates as of December 31, 2008 and ranged between the lowest rate 4.632% and the highest rate of 5.848%.

Interest incurred for the years ended December 31, 2008 and 2007 on bonds payable, exclusive of capitalized interest and amortization of refunding losses was approximately $29 million. Interest costs for 2008 and 2007 included $2.0 million and $2.4 million, respectively, of amortization of the deferred refunding losses.

In accordance with the provisions of the trust indentures for the 1993, 1998, 2002, 2007, and 2008 Bonds, the Authority has created a number of funds that are restricted for specific purposes. The complement of these restricted funds, collectively referred to on the statements of net assets as "Restricted Assets" at December 31, 2008 and 2007, was:

	2008	2007
Capital project funds	$ 110,112	$ 27,511
Debt service and reserve funds	10,314	15,199
Operating reserve account	8,476	8,269
Capitalized interest fund	6,466	-
Other funds	575	568
	$ 135,943	$ 51,547

Among the Authority's debt covenants is one which requires that rates charged by the Authority will be sufficient to satisfy a formula which is intended to ensure that the Authority will be able to satisfy debt service requirements. The trust indenture also requires that revenue collections be deposited into a Revenue Fund and disbursed therefrom as provided for in the trust indenture. This Revenue Fund constitutes the vast majority of unrestricted funds cash and cash equivalents.

8. INTEREST RATE SWAPS

Description of 2008 Swaps

During fiscal year 2008, the Authority entered into five pay-fixed, receive-variable interest rate swap contracts. The interest rate swaps were effective June 12, 2008. Beginning September 1, 2008, the Authority began to make semi-annual interest payments on the 1st of

each March and September through September 1, 2035 (two swaps); September 1, 2039 (two swaps); and, September 1, 2040 (for one swap), respectively. The Counterparties make monthly interest payments on the 1st of each calendar month, which began July 1, 2008 through September 1, 2035 for two of the swaps; September 1, 2039 for two of the swaps; and, September 1, 2040 for one swap.

The intention of the 2008 swaps is to effectively change the Authority's variable interest rate on the $145,495 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds Series B of 2008, on the $71,225 Water and Sewer System (Variable Rate Demand) First Lien Revenue Bonds Series D-2 of 2008, and on the $103,795 Water and Sewer System (Variable Rate Demand) Subordinate Revenue Refunding Bonds Series C of 2008 (the bonds) to synthetic fixed rates of 4.038%, 4.103%, and 3.998%, respectively.

The bonds will accrue interest at a weekly rate that is determined by a remarketing agent on each effective rate date. The interest rate on the bonds may not exceed 12%. Per the interest rate swap agreements, the Authority will receive SIFMA Municipal Swap Index while paying a fixed rates of 4.038%, 4.103%, and 3.998%, respectively.

The interest payments on the interest rate swaps are calculated based on notional amounts, all of which reduce, beginning on September 1, 2035, so that the notional amounts approximate the principal outstanding on the respective bonds. The interest rate swaps expire consistent with the final maturity of the respective bonds.

As of December 31, 2008, the 2008 swaps had the following notional amounts and market values: $72,747 notional amount and ($16,508) market value; $41,518 notional amount and ($8,383) market value; $72,747 notional amount and ($16,183) market value; $62,277 notional amount and ($12,287) market value; and, $71,225 notional amount and ($17,238) market value. The market value is an estimated net present value of the expected cash flows calculated using relevant mid-market data inputs and based on the assumption of no unusual market conditions or forced liquidation.

As of April 16, 2009, the market value of the 2008 interest rate swaps was ($11,744); ($6,234); ($11,894); ($9,444); and, ($12,520), respectively.

Description of 2007 Swaps

During fiscal year 2007, the Authority entered into two pay-fixed, receive-variable interest rate swap contracts. The interest rate swaps were effective March 9, 2007. Beginning September 1, 2007, the Authority began to make semi-annual interest payments on the 1st of

each March and September through September 1, 2033. The Counterparties makes monthly interest payments on the 1st of each calendar month, beginning April 1, 2007 through September 1, 2033. During 2008, a portion of the 2007 interest rate swaps were terminated as the underlying bonds were refunded. The Authority paid $594 in termination costs related to the termination of these 2007 interest rate swaps.

The intention of the 2007 swaps is to effectively change the Authority's variable interest rate on the $41,320,000 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds Series B-1 of 2007 and on the $41,325,000 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds Series B-2 of 2007 (the bonds) to synthetic fixed rates of 3.932%, respectively.

The bonds will accrue interest at a weekly rate that is determined by a remarketing agent on each effective rate date. The interest rate on the bonds may not exceed 12%. Per the interest rate swap agreements, the Authority will receive SIFMA Municipal Swap Index while paying a fixed rate of 3.932%.

The interest payments on the interest rate swaps are calculated based on notional amounts, both of which reduce, beginning on September 1, 2018, so that the notional amounts approximate the principal outstanding on the respective bonds. The interest rate swaps expire on September 1, 2033 consistent with the final maturity of the bonds.

As of December 31, 2008, the 2007 swaps had the following notional amounts and market values: $41,325 notional amount and ($6,495) market value; and, $41,320 notional amount and ($6,288) market value. The market value is an estimated net present value of the expected cash flows calculated using relevant mid-market data inputs and based on the assumption of no unusual market conditions or forced liquidation.

As of April 16, 2009, the market value of the 2007 interest rate swaps was ($5,193); and, ($5,206), respectively.

Additionally, during 2007 in anticipation of the issuance of additional bonds, the Authority entered into four forward starting pay-fixed, receive-variable interest rate swaps. These swaps were terminated and cash settled by the Authority during 2008. Termination costs of approximately $5,063 were paid by the Authority from proceeds of the 2008 bond issues. As the 2007 forward starting swaps were entered into to lock interest rates in anticipation of issuing the 2008 bonds the cost of terminating the swaps were considered to be bond issue costs of the 2008 bonds. Bond issue costs are deferred and amortized into expense over the life of the related bonds.

Accounting and Risk Disclosures

During the years ended December 31, 2008 and 2007, the Authority paid $7,614 and $2,164, respectively, fixed and received $4,964 and $3,426, respectively, variable related to their outstanding swap agreements.

The Authority has the ability to early terminate the interest rate swaps and to cash settle the transaction on any business day by providing at least two business days written notice to the counterparty. Evidence that the Authority has sufficient funds available to pay any amount payable to the counterparty must be provided at the time notice is given. At early termination, the Authority will be required to pay or receive a settlement amount which is comprised of the market value of the terminated transaction(s) based on market quotations and any amounts accrued under the contract(s).

Through the use of derivative instruments such as this interest rate swap, the Authority is exposed to a variety of risks, including credit risk, interest rate risk, termination risk, basis risk, and rollover risk.

- Credit risk is the risk that a counterparty will not fulfill its obligations. On December 31, 2008, the interest rate swap counterparties were both rated A1 by Moody's Investors Services, Inc., a nationally recognized statistical rating organization. If a counterparty failed to perform according to the terms of the interest rate swap agreement, there is some risk of loss to the Authority, up to the fair market value of the swaps.

  It is the Authority's policy to require counterparty collateral posting provisions in its non-exchange traded derivative instruments. There terms require collateral to be posted if the respective counterparty's credit rating falls below BBB+ by Standard and Poor's and the swap insurer becomes bankrupt. The amount of collateral to be posted is calculated based on derivatives in asset positions to the Authority. As of year-end, the counterparties had not and were not required to post collateral for these transactions.

- Termination risk is the risk that a derivative's unscheduled end will affect the Authority's asset/liability strategy or will present the Authority with potentially significant unscheduled termination payments to the counterparty. The counterparties to the interest rate swaps do not have the ability to voluntarily terminate the interest rate swap; however, the Authority is exposed to termination risk in the event that the one or more of the counterparties default.

- Basis risk is the risk that arises when variable interest rates on a derivative and an associated bond or other interest-paying financial instrument are based on different indexes. The Authority is subject to basis risk as the interest index on the variable rate arm of the swaps is based on the SIFMA Municipal Swap Index and the variable interest rate on the bonds is based on a different index, a weekly rate that is determined by a remarketing agent. Although expected to correlate, the relationships between different indexes vary and that variance could adversely affect the Authority's calculated payments, and as a result cost savings or synthetic interest rates may not be realized. During 2008, the weekly rate paid by the Authority on the underlying bonds exceeded the amount received on the various interest rate swaps.

  The Authority is further subject to basis risk in the event that the underlying bonds become fixed rate Bank Bonds or that the maturity of the underlying bonds is accelerated as discussed in Footnote 7: Bonds and Loans Payable.

- Rollover risk is the risk that a derivative associated with the Authority's debt does not extend to the maturity of that debt. When the derivative terminates, the associated debt will no longer have the benefit of the derivative. The Authority is not exposed to rollover risk as the swap agreements terminate on the same day the last payment is due on the respective bonds.

Contingencies

All of the Authority's derivative instruments, include provisions that require the Authority to post collateral in the event that the credit ratings of its credit support provider's senior long term, unsecured debt credit rating falls below BBB+ by Standard and Poor's and FSA the swap insurer becomes bankrupt. The amount of collateral to be posted is calculated based on derivatives in negative market value positions to the Authority. The collateral is to be posted in the form of cash, US Treasuries or other approved securities. As of year-end, the Authority had not and was not required to post collateral for these transactions.

9. INVESTMENTS AND DEPOSITS WITH FINANCIAL INSTITUTIONS

The Authority is authorized to invest in: obligations of the U.S. Government and government-sponsored agencies and instrumentalities; fully insured or collateralized certificates of deposits; commercial paper of the highest rating; repurchase agreements collateralized by government obligations or securities; highly rated bank promissory notes or investment funds or trusts; and, as to trusteed assets, as otherwise permitted by the trust

indenture as supplemented and amended in 1998. Throughout the years ended December 31, 2008 and 2007, the Authority invested its funds in such authorized investments. The Authority does not have a formal investment policy which addresses custodial credit risk, interest rate risk, credit risk, or concentration of credit risk.

GASB Statement No. 40, *"Deposit and Investment Risk Disclosures,"* requires disclosures related to the following deposit and investment risks: credit risk (including custodial credit risk and concentration of credit risk), interest rate risk, and foreign currency risk. The following is a description of the Authority's deposit and investment risks.

Custodial Credit Risk – Custodial credit risk is the risk that in the event of a bank failure, the Authority's deposits may not be returned to it. As of December 31, 2008 and 2007, $42,153 and $34,828, respectively, of the Authority's bank balance of $42,653 and $35,128, respectively, was exposed to custodial credit risk. These amounts are collateralized in accordance with Act 72 of the Pennsylvania state legislature which requires the institution to pool collateral for all governmental deposits and have the collateral held by an approved custodian in the institution's name. These deposits have carrying amounts of $41,914 and $35,024 as of December 31, 2008 and 2007, respectively, all of which is reported as current assets in the statements of net assets.

In addition to the deposits noted above, included in cash and cash equivalents as non-current restricted assets on the statements of net assets are the following short-term investments at December 31, 2008 and 2007: money market funds of $22,366 and $6,027, respectively, and repurchase agreements of $0 and $566, respectively. Of the Authority's $0 and $566 investment in repurchase agreements, at December 31, 2008 and 2007, respectively, all of the underlying securities are held by the investment's counterparty, not in the name of the Authority.

At December 31, 2008, the Authority held the following investment balances:

	Carrying value	Maturity in years: Less than 1 year
Guaranteed Investment Contracts	$ 8,464	$ 8,464
Money market	22,366	22,366
Repurchase agreements	575	575
Commercial paper	102,450	102,450
U.S. Treasury	1,604	1,604
Total	$ 135,459	$ 135,459

At December 31, 2007, the Authority held the following investment balances:

	Carrying value	Maturity in years: Less than 1 year
Guaranteed Investment Contracts	$ 25,221	$ 25,221
Money market	6,027	6,027
Repurchase agreements	566	566
Commercial paper	11,149	11,149
INVEST	8,246	8,246
Total	$ 51,209	$ 51,209

With the exception of the guaranteed investment contracts, the carrying value of the Authority's investments is the same as their fair market value amount. The Guaranteed investment contracts are carried at amortized cost. Investments of $113,093 and $44,616 are included as noncurrent restricted investments on the statements of net assets at December 31, 2008 and 2007, respectively. Investments of $22,366, consisting of money market funds of $22,366 are included as noncurrent restricted cash and cash equivalents on the statements of net assets at December 31, 2008. Investments of $6,593, consisting of money market funds of $6,027 and repurchase agreements of $566, are included as noncurrent restricted cash and cash equivalents on the statements of net assets at December 31, 2007. The fair value of the Authority's investments in the external investment pool (INVEST) is the same as the value of the pool shares.

Interest Rate Risk – Interest rate risk, the risk that changes in the interest rates will adversely affect the fair market value of the Authority's investments. The Authority is not subject to interest rate risk as all of its investments at December 31, 2008 and 2007 had maturities of less than one year.

Credit Risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. As of December 31, 2008, the Authority's investments in the guaranteed investment contracts were rated AAA by Standard & Poor's. The counterparty to the Authority's guaranteed investment contracts is the Commonwealth of Pennsylvania. The Authority's investments in commercial paper at December 31, 2008 was rated AAA by Standard & Poor's. Additionally, at December 31, 2008, the Authority had various repurchase agreements. The underlying securities of these repurchase agreements consist primarily of U.S. Treasuries, and are therefore not subject to credit risk.

Concentration of Credit Risk – Concentrations of credit risk is the risk of loss attributed to the magnitude of a government's investments in a single issuer. The Authority places no limit on the amount it may invest in any one issuer. More than five percent of the Authority's investments are in Federal National Mortgage Association, Federal Home Loan Bank, and Commonwealth of Pennsylvania. These investments are 12.7%, 62.1%, and 6.2%, respectively, of the Authority's total investments at December 31, 2008.

10. NET ASSETS

Net assets represent the difference between assets and liabilities. An analysis of net asset amounts is as follows:

Invested in capital assets, net of related liabilities:		
Net property, plant, and equipment in service	$ 443,720	$ 443,021
Debt subject to capital improvements	(633,699)	(537,365)
Accrued interest payable	(9,704)	(8,007)
Accounts payable for capital items	(1,610)	(3,320)
Funded debt from restricted assets:		
Unspent debt proceeds:		
Capital projects	109,680	27,511
Debt service and reserve funds	10,275	15,199
	(81,338)	(62,961)
Restricted for capital activity and debt service:		
Restricted cash and cash equivalents	22,366	6,593
Restricted investments	113,093	44,616
Restricted receivables	484	338
Liabilities payable from restricted assets:		
Unspent debt proceeds:		
Capital projects	(109,680)	(27,511)
Debt service and reserve funds	(10,275)	(15,199)
	15,988	8,837
Unrestricted	30,353	19,521
Total Net Assets	$ (34,997)	$ (34,603)

11. Operating Lease

During 2007, the Authority entered into a new lease for office space from an unrelated party. The term of the lease is for twenty years commencing on August 1, 2007 and ending on July 31, 2027. The lease is subject to an automatic roll over for five years, if the Authority does not communicate in writing one year prior to expiration that is desires not to extend the lease. The general terms of the lease requires the lessor to provide for utilities, building repairs, maintenance, and real estate taxes.

The total minimum future commitments under the lease for year ending December 31, 2008 are as follows:

2009	$	593
2010		593
2011		593
2012		599
2013		616
2014-2018		3,136
2019-2023		3,336
2024-2027		2,566
	$	12,032

The total annual rental for office space was approximately $593 for 2008 and $421 for 2007. The 2007 rent included eight months under the old lease and four months under the new lease.

12. COMMITMENTS AND CONTINGENCIES

The Authority is proceeding with a capital improvement program which the Authority's independent engineer has estimated will entail expenditure of the existing construction funds and potential future bond issues. As of December 31, 2008, $80 million of the program is complete and $52 million is under active contract.

In addition to the matters discussed in Note 13, Consent Agreement, various other claims and lawsuits are pending against the Authority. The ultimate outcome of these claims and lawsuits cannot presently be determined and, accordingly, no provision for amounts arising from settlements has been made in these financial statements. In the opinion of management, the effect on the financial statements of potential losses associated with any such claim and/or lawsuit should not be material.

The Authority was insured for general liability coverage through 2001; however, effective January 1, 2002 became self-insured. In previous years, the Authority established a fund to pay for deductibles, small claims, and other litigation costs. At year-end, the balance in this fund was approximately $565. This fund is grouped with "Restricted Assets" on the statements of net assets. During 2008 and 2007, the Authority paid $0 from this fund for claims, and there is $0 and $500 accrued as of December 31, 2008 and 2007, respectively.

13. CONSENT AGREEMENT

The Authority is subject to federal regulation under the Clean Water Act (1977) and regulations adopted under that Act. Among the specific requirements applicable to the Authority's system are those imposed by the United States Environmental Protection Agency's Combined Sewer Overflow (CSO) Policy (1994). On January 29, 2004, the Authority and the City of Pittsburgh executed a Consent Order and Agreement (Order) regarding wet weather sewer overflows within the City. The other signatories to the Order are the Pennsylvania Department of Environmental Protection (DEP) and the Allegheny County Health Department (ACHD).

Generally, the Order requires the Authority and the City to assess the City sewers in order to develop a plan with ALCOSAN to address wet weather sewer overflows within the City. The Order is part of a sewer assessment program for all municipalities served by ALCOSAN. Most assessment activities for critical sewers and separate sanitary sewers are to be completed by 2010. Assessment activities for non-critical sewers are to be completed on a longer schedule with some tasks to be completed by 2012. In addition to the assessment, the Order requires the Authority and the City to implement the Nine Minimum Controls to reduce combined sewer overflows, and to perform repairs and maintenance of deficiencies revealed by the assessment. Deficiency corrections identified during assessment in critical sewers and separate sanitary sewers are to be completed by 2010, and in non-critical sewers are to be completed by 2012.

Given the scope of the Order, the size of the City sewer system, and the various conditions and/or deficiencies that may be discovered by the assessment, it is difficult to predict the total cost of compliance with the Order. Moreover, it is difficult to predict what, if any, large-scale and/or regional capital improvements may be required after the completion of the assessment to address wet weather sewer overflows in the City and in the ALCOSAN service area. Large-scale and/or regional capital improvements are not covered by the Order. The Authority has hired two engineering firms to assess and model the sewer system, and it is moving forward with its plans to comply with the Order. Costs associated with Order compliance will be reflected in the capital improvement program and funded by proceeds of potential future bond issuances.

Additional Information

PITTSBURGH WATER AND SEWER AUTHORITY

SCHEDULE OF RESTRICTED ASSETS COMPOSITION - SCHEDULE I

(Dollars expressed in thousands)

DECEMBER 31, 2008

				Cash Equivalents	Investments			
	Total	Unrealized Gain/(Loss)	Accrued Interest Receivable	*(1) Dreyfus U.S. Gov't Securities	Commonwealth of PA Revenue Bonds	*(2) State & Local Gov't Securities (DDDSLGS)	*(3) Federal Home Loan MTG Corp	Tri-Party-Repo Investments
Capital project and construction funds:								
2005 Capital Project Fund	$ 7,494	$ -	$ 5	$ 7,489	$ -	$ -	$ -	$ -
2007 Depository Agr-Project Fund	5,165	-	2	4,463	-	700	-	-
2008 Construction Fund	97,454	1,242	425	2,047	-	-	93,740	-
	110,113	1,242	432	13,999	-	700	93,740	-
Debt service funds:								
1993 Debt Service Fund	601	7	3	3	-	-	588	-
2003 Debt Service Fund	4,327	124	19	6	-	-	4,178	-
2007 A Debt Service Fund	1,962	35	9	5	-	-	1,913	-
2007 B-1 Var Debt Service Fund	90	-	-	90	-	-	-	-
2007 B-2 Var Debt Service Fund	93	-	-	93	-	-	-	-
2008A Debt Service Fund	1,536	18	7	2	-	-	1,509	-
2008B Debt Service Fund	371	-	-	371	-	-	-	-
2008C1 Debt Service Fund	201	-	-	201	-	-	-	-
2008C2 Debt Service Fund	169	-	-	169	-	-	-	-
2008D1 Debt Service Fund	815	-	-	815	-	-	-	-
2008D2 Debt Service Fund	149	-	-	149	-	-	-	-
	10,314	184	38	1,904	-	-	8,188	-
1993 Operating Reserve Fund	8,474	-	10	-	8,464	-	-	-
2008 Capitalized Interest Fund	6,467	-	4	6,463	-	-	-	-
Self-Insured Escrow Fund	575	-	-	-	-	-	-	575
	$ 135,943	$ 1,426	$ 484	$ 22,366	$ 8,464	$ 700	$ 101,928	$ 575

(1) Dreyfus Gov't Cash Mgmt Agency with the Bank of New York Mellon, yielding .81%.

(2) As per Depository Agreement with the Bank of New York Trust Co., investment in Daily Demand Deposit State & Local Gov't Series Securities.

(3) As per Investment Agreement with Cantor Fitzgerald dtd 9/17/08, yielding between 1.85%-2.28%, maturing through 10/20/09.

PITTSBURGH WATER AND SEWER AUTHORITY

SCHEDULE OF RESTRICTED ASSETS ACTIVITY - SCHEDULE II

(Dollars expressed in thousands)

YEAR ENDED DECEMBER 31, 2008

	Series 1993 Bonds		Series 1998 Bonds		Series 2002 Bonds			Series 2003 Bonds	Series 2005 Bonds		
	Debt Service Fund	Operating Reserve Account	Series A Debt Service Fund	Series C Debt Service Fund	Capital Projects Fund	Debt Service Fund	Debt Service Reserve Fund	Debt Service Fund	Capital Project Fund	Debt Service Fund	Subtotal
Increases:											
Interest	$ 35	$ 205	$ 55	$ 57	$ 11	$ 30	$ -	$ 450	$ 590	$ 12	$ 1,445
Total increases	35	205	55	57	11	30	-	450	590	12	1,445
New Refunding Bond issue	-	-	-	-	-	-	-	-	-	-	-
Decreases:											
Capital projects	-	-	-	-	522	-	-	-	12,162	-	12,684
Interest	2,481	-	2,352	2,515	-	-	-	3,578	-	-	10,926
Bond principal/refunding escrow	-	-	-	-	-	-	-	14,425	-	-	14,425
Other	-	-	2	-	-	1	-	-	-	-	3
Total decreases	2,481	-	2,354	2,515	522	1	-	18,003	12,162	-	38,038
Interfund Transfers:											
Nontrusteed accounts	1,976	-	1,936	2,070	-	-	-	15,602	-	-	21,584
1998A Debt Svc Fund	-	-	(1,217)	-	-	-	-	-	-	-	(1,217)
1998C Debt Svc Fund	-	-	-	(1,301)	-	-	-	-	-	-	(1,301)
2002 Capital Interest Fund	-	-	-	-	(761)	-	-	-	-	-	(761)
2002 Debt Service Fund	-	-	-	-	-	(2,551)	-	-	-	-	(2,551)
2005 Capital Project Fund	-	-	-	-	-	-	-	-	-	(1,004)	(1,004)
2007A Debt Service Fund	-	-	-	-	-	-	-	-	-	-	-
2007B1 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
2007B2 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
2008 Capitalized Interest Fund	-	-	-	-	-	-	-	-	-	-	-
2008B Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
2008C2 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
2008D1 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
2008D2 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-
Total interfund transfers	1,976	-	719	769	(761)	(2,551)	-	15,602	-	(1,004)	14,750
Net activity	(470)	205	(1,580)	(1,689)	(1,272)	(2,522)	-	(1,951)	(11,572)	(992)	(21,843)
Balance:											
Beginning of year	1,071	8,269	1,580	1,689	1,272	2,522	-	6,278	19,066	992	42,739
End of year	$ 601	$ 8,474	$ -	$ -	$ -	$ -	$ -	$ 4,327	$ 7,494	$ -	$ 20,896

(Continued)

PITTSBURGH WATER AND SEWER AUTHORITY

SCHEDULE OF RESTRICTED ASSETS ACTIVITY - SCHEDULE II

(Dollars expressed in thousands)

YEAR ENDED DECEMBER 31, 2008
(Continued)

		Series 2007 Bonds					Series 2008 Bonds								
	Clearing Fund	2007 CPF/Project Fund	2007A Debt Service Fund	2007 B1 Debt Service Fund	2007 B2 Debt Service Fund	Self-Insured Escrow Account	2008 Cap. Int. Fund	2008A Debt Svc Fund	2008B Debt Svc Fund	2008C1 Debt Svc Fund	2008C2 Debt Svc Fund	2008D1 Debt Svc Fund	2008D2 Debt Svc Fund	2008 Cap. Proj. Fund	Total
Increases:															
Interest	$ -	$ 304	$ 70	$ 4	$ 5	$ 7	$ 61	$ 27	$ 1	$ 1	$ 3	$ 3	$ 2	$ 2,398	$ 4,331
Total increases	-	304	70	4	5	7	61	27	1	1	3	3	2	2,398	4,331
New Refunding Bond issue	-	-	-	-	-	-	-	-	-	-	-	-	-	97,346	97,346
Decreases:															
Capital projects	-	2,312	-	-	-	-	-	-	-	-	-	-	-	2,274	17,270
Interest	-	-	1,949	3,053	3,096	-	-	994	3,442	1,345	1,248	268	1,463	-	27,784
Bond principal/refunding escrow	-	-	305	-	-	-	-	-	-	-	-	-	-	-	14,730
Other	-	-	-	-	-	-	2	-	-	-	-	-	-	16	21
Total decreases	-	2,312	2,254	3,053	3,096	-	2	994	3,442	1,345	1,248	268	1,463	2,290	59,805
Interfund Transfers:															
Nontrusteed accounts	-	-	3,391	2,941	2,986	-	-	2,502	2,595	1,545	113	-	1,004	-	38,661
1998A Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,217)
1998C Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,301)
2002 Capital Interest Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(761)
2002 Debt Service Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,551)
2005 Capital Project Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,004)
2007A Debt Service Fund	-	-	(2)	-	-	-	-	-	-	-	-	-	-	-	(2)
2007B1 Debt Svc Fund	-	-	-	43	-	-	-	-	-	-	-	-	-	-	43
2007B2 Debt Svc Fund	-	-	-	-	43	-	-	-	-	-	-	-	-	-	43
2008 Capitalized Interest Fund	-	-	-	-	-	-	6,408	-	-	-	-	-	-	-	6,408
2008B Debt Svc Fund	-	-	-	-	-	-	-	-	1,217	-	-	-	-	-	1,217
2008C2 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	1,301	-	-	-	1,301
2008D1 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-	1,080	-	-	1,080
2008D2 Debt Svc Fund	-	-	-	-	-	-	-	-	-	-	-	-	607	-	607
Total interfund transfers	-	-	3,389	2,984	3,029	-	6,408	2,502	3,812	1,545	1,414	1,080	1,611	-	42,524
Net activity	-	(2,008)	1,205	(65)	(62)	7	6,467	1,535	371	201	169	815	150	97,454	84,396
Balance:															
Beginning of year	-	7,173	757	155	155	568	-	-	-	-	-	-	-	-	51,547
End of year	$ -	$ 5,165	$ 1,962	$ 90	$ 93	$ 575	$ 6,467	$ 1,535	$ 371	$ 201	$ 169	$ 815	$ 150	$ 97,454	$ 135,943

(Concluded)

PITTSBURGH WATER AND SEWER AUTHORITY

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

YEAR ENDED DECEMBER 31, 2008

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Expenditures
U.S. Environmental Protection Agency:		
Passed through 3 Rivers Wet Weather, Inc.:		
Surveys, Studies, Investigations and Special Purpose Grants	66.606	$ 1,184,444
Passed through Pennsylvania Infrastructure Investment Authority:		
Capitalization Grants for Clean Water State Revolving Funds	66.458	3,215
Total Federal Expenditures		$ 1,187,659

See accompanying notes to schedule of expenditures of federal awards.

PITTSBURGH WATER AND SEWER AUTHORITY

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

YEAR ENDED DECEMBER 31, 2008

1. BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards of the Pittsburgh Water and Sewer Authority (Authority) is presented in accordance with the requirements of *OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations*. Therefore, some amounts may differ from amounts presented in, or used in the preparation of the basic financial statements.

2. BASIS OF ACCOUNTING

The information in this schedule is presented using the accrual method of accounting.

3. SUBRECIPIENTS

Of the federal expenditures presented in this schedule, The Pittsburgh Water and Sewer Authority provided federal awards to the subrecipient, Township of Ross, Pennsylvania, as follows:

Program Name	Federal CFDA	Amount
U.S. Environmental Protection Agency:		
Passed through program from 3 Rivers Wet Weather, Inc.:		
Surveys, Studies, Investigations and Special Purpose Grants	66.606	$ 88,721

PITTSBURGH WATER AND SEWER AUTHORITY

INDEPENDENT AUDITOR'S REPORTS IN ACCORDANCE WITH OMB CIRCULAR A-133

YEAR ENDED DECEMBER 31, 2008

MaherDuessel

Certified Public Accountants || *Pursuing the Profession While Promoting the Public Good®*

MaherDuessel

Certified Public Accountants || *Pursuing the Profession While Promoting the Public Good®*

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Board of Directors
Pittsburgh Water and Sewer Authority

We have audited the financial statements of the Pittsburgh Water and Sewer Authority (Authority) as of and for the year ended December 31, 2008, and have issued our report thereon dated April 29, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered the Authority's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with accounting principles generally accepted in the United States of America, such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of the internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in the internal control that might be significant deficiencies and, accordingly, would not necessarily disclose all significant deficiencies that are also considered to be material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of the Authority in a separate letter dated April 29, 2009.

* * * * * * * * * *

Pittsburgh || Three Gateway Center – Six West • Pittsburgh, PA 15222 p412.471.5500 f412.471.5508
Harrisburg || 3211 North Front Street – Suite 101 • Harrisburg, PA 17110 p717.232.1230 f717.232.8230
Butler || 112 Hollywood Drive – Suite 204 • Butler, PA 16001 p724.285.6800 f724.285.6875

www.md-cpas.com

This report is intended solely for the information and use of the Board of Directors, management, and others within the Authority, and applicable federal and state agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

Maher Duessel

Pittsburgh, Pennsylvania
April 29, 2009

Independent Auditor's Report on Compliance with Requirements Applicable to its Major Program and on Internal Control over Compliance in Accordance with OMB Circular A-133

Board of Directors
Pittsburgh Water and Sewer Authority

Compliance

We have audited the compliance of the Pittsburgh Water and Sewer Authority (Authority) with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) *Circular A-133 Compliance Supplement* that are applicable to its major federal program for the year ended December 31, 2008. The Authority's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts, and grants applicable to its major federal program is the responsibility of the Authority's management. Our responsibility is to express an opinion on the Authority's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on the Authority's compliance with those requirements.

In our opinion, the Authority complied, in all material respects, with the requirements referred to above that are applicable to its major federal program for the year ended December 31, 2008.

Internal Control over Compliance

The management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the requirements of laws, regulations, contracts, and grants applicable to federal programs. In planning and performing our audit, we considered the Authority's internal control over compliance with requirements that could have a direct and material effect on its major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A control deficiency in an entity's internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect noncompliance with a type of compliance requirement of a federal program on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to administer a federal program such that there is more than a remote likelihood that noncompliance with a type of compliance requirement of a federal program that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that material noncompliance with a type of compliance requirement of a federal program will not be prevented or detected by the entity's internal control.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above.

* * * * * * * * * *

This report is intended solely for the information and use of the Board of Directors, management, others within the Authority, and federal awarding agencies and pass-through entities, and is not intended to be and should not be used by anyone other than these specified parties.

Maher Duessel

Pittsburgh, Pennsylvania
April 29, 2009

PITTSBURGH WATER AND SEWER AUTHORITY

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

YEAR ENDED DECEMBER 31, 2008

1. Summary of Auditor's Results:

   i. The auditor's report on the financial statements was an unqualified opinion.

   ii. There were no significant deficiencies or material weaknesses in internal control that were disclosed by the audit of the financial statements.

   iii. There were no instances of noncompliance material to the financial statements, which would be required to be reported in accordance with *Government Auditing Standards*, disclosed during the audit.

   iv. There were no significant deficiencies or material weaknesses in internal control over its major federal program that was disclosed during the audit.

   v. The auditor's report on compliance for its major federal program was an unqualified opinion.

   vi. The audit did not disclose an audit finding, which the auditor is required to report in accordance with Section 510(a) of OMB Circular A-133.

   vii. The major federal program was:

      a. CFDA #66.606 - Surveys, Studies, Investigations and Special Purpose Grants

   viii. The dollar threshold used to distinguish between type A and type B programs was $300,000.

   ix. Pittsburgh Water and Sewer Authority (Authority) was evaluated as a low risk auditee.

2. Findings related to financial statements, which are required to be reported in accordance with GAGAS.

   No matters were reported.

3. Findings and questioned costs for federal awards.

   No matters were reported.

PITTSBURGH WATER AND SEWER AUTHORITY

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

YEAR ENDED DECEMBER 31, 2008

None

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX D

CERTAIN INFORMATION REGARDING THE CITY OF PITTSBURGH

[THIS PAGE INTENTIONALLY LEFT BLANK]

City of Pittsburgh, Pennsylvania

The City of Pittsburgh located in Western Pennsylvania, is the county seat of Allegheny County. As of the 2000 census, the City had a total population of 334,563 (metropolitan area 2,358,695), making it the second-largest city in the state.

THE GOVERNMENT OF PITTSBURGH

Three principal government entities provide services in the Pittsburgh area: the City, the County and the School District. Information relating to the County and the School District may be found in the "OTHER GOVERNMENTAL ENTITIES" section below.

The City was incorporated in 1816, and became a home rule community on January 5, 1976. Its powers are set forth in the Charter which became effective January 5, 1976. The Charter was adopted by the electorate pursuant to Article IX, Section 2 of the Constitution of the Commonwealth and the Home Rule Charter and Optional Plans Law, Act of April 13, 1972, P.L. 184, No. 162. Under the Charter, the City has all home rule powers and may perform any function and exercise any power not denied by the Constitution of the Commonwealth, the laws of the Commonwealth or the Charter. The Charter provides, among other things, for the election of the Mayor and the powers and duties of the executive and administrative branch; the election, organization, powers and duties of the legislative branch; the method by which the City's capital and operating budgets are adopted; the rules which govern City personnel; and the financial disclosure requirements for elected officials.

Under the Charter, the executive, administrative and law enforcement powers of the City are vested in the Mayor, who is directed to control and be accountable for the executive branch of the City government. The Charter establishes a "strong mayor" form of government in which the Mayor controls and has wide powers of appointment over the units of the City government, and has the power to initiate and veto legislation and to propose the City's operating and capital budgets, to which proposals the City's legislative body, the City Council, must react within a definite time period. The Mayor is elected to a four-year term and may be re-elected for subsequent consecutive terms without limitation.

The Controller of the City is elected to a four-year term in a different municipal election year from the mayoral election, and may be re-elected for subsequent consecutive terms without limitation. As provided in the Charter, the Controller audits all units of City government, countersigns all City contracts, controls all City disbursements and prepares reports on revenues, expenditures, debt and the financial condition of the City. The Controller serves ex-officio as controller of the School District.

The City's financial management functions are carried out by the Department of Finance, headed by the Director of Finance who is appointed by the Mayor, subject to confirmation by City Council. The Department of Finance is responsible for the treasury functions of revenue and tax collection, certain real estate functions, the investment of City funds, and debt management, and for preparing and monitoring the operating and capital budgets. The City Treasurer serves as ex-officio treasurer of the School District where his sole responsibility is the collection of taxes.

The legislative power of the City is vested by the Charter in the City Council, which consists of nine members, all of whom are elected by district to four-year terms that are staggered so that four members are elected at the same time as the Mayor. Members may be re-elected for subsequent and consecutive terms without limitation. Under the Charter, the members of the City Council elect, by majority vote, one member to serve as President. The President of Council presides at meetings of City Council, appoints all committees, and refers proposed legislation to the proper committee.

City Officials.

LUKE RAVENSTAHL, Mayor - Mr. Ravenstahl became the 59th Mayor of Pittsburgh on September 1, 2006. Mr. Ravenstahl was elected to City Council on November 4, 2003 and was elected President of City Council in December 2005. Mr. Ravenstahl became Mayor following the death of Mayor Bob O'Connor. Mayor Ravenstahl is a graduate of North Catholic High School and received his B.A. Degree in Business Administration from Washington and Jefferson College in December 2002.

MICHAEL LAMB, City Controller - Mr. Lamb was elected Controller of the City of Pittsburgh in November of 2007, and took office on January 7, 2008. Prior to being elected City Controller, Michael was the Prothonotary of Allegheny County, the chief record keeper of the Court of Common Pleas. Prior to working in the Prothonotary's office, Michael Lamb served as a research and legislative assistant to Pittsburgh City Council and was the Assistant Regional Director of the Pennsylvania Higher Education Assistance Agency.

SCOTT KUNKA, Director of Finance - Mr. Kunka was appointed Director of the Office of Management and Budget in March 2006 and as Director of Finance in November 2006. He is responsible for overseeing the operating and capital budgets. Previously, Mr. Kunka held positions in the Controller's Office, Office of Management and Budget and Department of General Services, and as the Budget Director for City Council.

GEORGE SPECTER, ESQ., City Solicitor - Mr. Specter serves as counsel for the City of Pittsburgh. He is responsible for rendering legal opinions and advice to the Mayor, City officials, City Council, and the administrative units of City government. The City Solicitor also functions as Solicitor for the Comprehensive Municipal Trust Fund Board. Mr. Specter was appointed to his position in July 2006 following a long career in the City Law Department.

Members of City Council.

President of City Council

DOUG SHIELDS – Mr. Shields was elected to represent City Council District 5 and was sworn in on January 5, 2004. He was elected President of City Council on September 5, 2006. Councilman Shields serves as the Chairman for the http://www.city.pittsburgh.pa.us/council/html/committees.html - hearings Committee on Hearings (held by the President of Council),

Members of Council

THERESA KAIL-SMITH – Mrs. Kail-Smith was elected to Pittsburgh City Council from District 2 in a special election and was sworn in on February 19, 2009. Councilwoman Kail-Smith serves as the Chairperson for the Committee on Urban Recreation.

PATRICK DOWD – Dr. Dowd was sworn in as the Member of Council from District 7 on January 7, 2008. Councilman Dowd currently serves as the Chairman for the Committee on Intergovernmental Affairs.

DARLENE M. HARRIS – Ms. Harris was elected in a special election in November 2006 to represent District 1 following the appointment of Mr. Ravenstahl as Mayor in 2006. Councilperson Darlene Harris serves as the Chairperson for the Committee on Public Works.

BRUCE KRAUS – Mr. Kraus was sworn in as the Member of Council from District 3 on January 7, 2008. Councilman Kraus serves as the Chairman for the Committee on Public Safety Services

JIM MOTZNIK – Mr. Motznik was elected to Pittsburgh City Council on February 27, 2001 and took office on March 13, 2001.. Councilman Motznik serves as the Chairman of the Committee on General and Government Services

TONYA PAYNE – Ms. Payne was elected to City Council in November of 2005 and took office on January 3, 2006. Councilperson Payne serves as the Chairperson for the Committee on Human Resources

WILLIAM PEDUTO – Mr. Peduto was elected to City Council in 2001. Councilman Peduto serves as the Chairman for the Committee on Finance and Law

RICKY BURGESS – Mr. Burgess was sworn in as the Member of Council from District 9 on January 7, 2008. He is currently the President Pro Tem for City Council, and currently serves as the Chairman for the Committee on Land Use and Economic Development

City Departments and Services.

The Charter provides that all units of the City government, except those mandated by the Charter as described below, may be established, revised, or abolished by ordinance, which may be introduced by the Mayor or City Council. Under the Charter, the Mayor appoints the heads of all major administrative units, subject to the approval of City Council. The Charter also provides that the Mayor shall, subject to the approval of City Council, appoint the City Solicitor, the members of all boards and commissions, and, except as otherwise required by law, all board members of authorities. Under the Charter, a member of City Council must serve on each authority board, but no member may serve concurrently on more than one board.

The Charter mandates the establishment of a 15-member Human Relations Commission, which is directed to investigate, report, hold hearings and otherwise enforce the rights of citizens in connection with unlawful discrimination. The Charter also mandates the appointment by the Mayor, subject to the approval of City Council, of City Magistrates who preside in the City's Magistrate Courts, which are part of the Commonwealth's unified judiciary system. The Mayor is required to designate a Chief Magistrate to administer the Magistrate Courts.

The City Solicitor acts as counsel for the City and its officials, although the City Controller, City Council and the Human Relations Commission are empowered to retain their own counsel. The Department of Personnel and the Civil Service Commission administer all the City's personnel policies, civil service requirements and the City's Workforce Investment Act (formerly JTPA) Program. The Department of Personnel and the Civil Service Commission are also responsible for City payroll, benefits, and workers' compensation matters. The Department of City Planning makes recommendations to the Mayor and City Council regarding the allocation of resources for the orderly development and redevelopment of the City. It also assists the Department of Finance in formulating the City's Capital Improvement Program, undertakes planning studies and administers zoning requirements.

The Department of Public Safety, created in 1985, carries out the traditional police, fire and emergency medical service functions, as well as the enforcement of building codes. The Department of Public Works exercises responsibility for the maintenance of all the City's streets, sewers, parks, bridges and steps, for the construction of minor public works capital improvements, and operates sanitation services and is responsible for engineering and the design of projects in the City's Capital Improvement Program. The Department of Parks and Recreation provides recreational opportunities to the City's residents.

COMMONWEALTH FISCAL OVERSIGHT

Background

Changes in the economic geography of the City, its population and demographics occurring over several decades have eroded the tax base that supports necessary municipal services, while significant growth has occurred in sectors wholly or substantially exempt from local tax, such as hospitals and universities, financial institutions and utilities. In addition, although the City's major economic and physical transformation continued, the translation of various economic development initiatives into higher tax revenues (real estate, earned income, business privilege, and parking) has not yet been fully realized.

As a matter of administration policy, since 1994 there had been no increase in the rate of earned income tax on residents or in the tax rate on real estate, although the rate was modified in 2001 by the adoption of a unitary tax

rate structure. Debt refinancings and other one-time revenue and cost cutting measures were used to balance the annual operating budgets. The working capital fund of $109 million created by the 1995 capital lease agreement between the City and the Pittsburgh Water and Sewer Authority and the sale of tax liens provided a fiscal cushion through 2003.

Notwithstanding workforce reductions and efficiencies in service delivery, structural deficits persisted and grew over time as recurring revenues were outpaced by expenditure increases averaging 3-4% per year. Many of these annual cost increases were beyond the fiscal control of the City as they related to legacy costs, such as pension and retiree health care benefits and workmen's compensation claims, and to historic debt service costs.

Act 47. As part of its fiscal recovery and tax restructuring strategy, on or about December 29, 2003, the City successfully sought to be declared a "distressed" municipality by the Secretary of the Department of Community and Economic Development ("DCED") under the Municipalities Financial Recovery Act ("Act 47"). Act 47 requires the Secretary of DCED (the "Secretary") to appoint a Coordinator to "prepare and administer a plan designed to relieve the financial distress" of the City. The Act 47 Coordinator is charged with the duty of developing and implementing a plan, which includes, among other things, assurance that "the recommendations in the plan are being accomplished by the dates set in the plan." In January 2004, the Secretary made the dual appointment of the law firm of Eckert Seamans Cherin & Mellot, LLC and Public Financial Management, Inc. as Act 47 Coordinators (collectively, the "Act 47 Coordinators"). A total of 19 municipalities in the Commonwealth of Pennsylvania had been granted relief under Act 47 prior to the City's petition.

Act 11. The Pennsylvania General Assembly also reacted to the City's financial crisis by enacting the Intergovernmental Cooperation Authority Act for Cities of the Second Class ("Act 11"), which is likewise intended to help the City recover from its financial crisis and to bring long-term fiscal health and stability to the City. For its implementation, Act 11 establishes the Intergovernmental Cooperation Authority for Cities of the Second Class (the "ICA"), which is charged with fiscal oversight and approval of a financial plan for the City, which includes projected revenues and expenditures of the principal operating funds of the City for five (5) fiscal years. In accordance with Act 11, the City and the ICA entered into an Intergovernmental Cooperation Agreement (the "Cooperation Agreement") on September 21, 2004.

The ICA has five members. The President Pro Tem Pore and the Minority Leader of the Senate, the Speaker and the Minority Leader of the House of Representatives, and the Governor each appoint one member who serves at their respective pleasures. The Pennsylvania Secretary of Administration and Budget, and the City's Finance Director are ex officio, nonvoting members of the ICA.

The Pennsylvania General Assembly contemplated that the Act 47 Coordinators and the ICA would operate concurrently and equally in their separate legal capacities to assist the City in its return to fiscal stability.

A recovery plan prepared by the Act 47 Coordinator (the "Act 47 Plan") was approved and adopted by City Council on June 29, 2004 and approved by the Mayor of the City on June 30, 2004. The Act 47 Plan was revised and the revised plan was adopted by City Council on June 30, 2009 and approved by the Mayor of the City on June 30, 2009. The revised Act 47 Plan is available at http://www.city.pittsburgh.pa.us/council/assets/09_Ord16_Final_Amended_ACT47_Recovery_Plan_6-30-09.pdf.

In accordance with Act 11, the City and the ICA entered into an Intergovernmental Cooperation Agreement (the "Cooperation Agreement") on September 21, 2004. Similarly, the ICA approved the City's 2005 Operating and Capital Budgets and Five-Year Financial Forecast and Performance Plan (the "Financial Plan") on December 21, 2004. The Financial Plan took into account the Act 47 Coordinator's implementation of the recommendations and the provisions of the Act 47 Plan with respect to financial requirements and collective bargaining workforce rules and recommendations critical to the City's sustainable financial recovery. The Cooperation Agreement and the Financial Plan were duly adopted by City Ordinance. The Financial Plan established operating and capital budgets for fiscal year 2005 and budgetary forecasts for fiscal years 2006 through 2009.

A copy of the Cooperation Agreement is available at http://www.pghica.org/.

Certain Provisions of Act 11.

Under Act 11, after the Financial Plan is approved, the City is required to implement the Financial Plan.

If the ICA determines, based upon reports and information submitted by the City, that the City's actual revenues and expenditures vary from those estimated in the Financial Plan, the ICA shall require the City to provide such additional information as the ICA deems necessary to explain the variation.

In response to the request for additional information concerning the variation, the Mayor of the City shall provide to the ICA reports describing actual or current estimates of revenues and expenditures compared to budgeted revenues and expenditures for such period reflected in its cash flow forecast. Each such report shall indicate any variance between actual or current estimates and budgeted revenues, expenditures and cash for the period covered by such report.

Additionally, if, after the approval of the Financial Plan, the City executes a collective bargaining agreement, which is not in compliance with the Financial Plan, the City shall submit to the ICA a proposed revision to the Financial Plan which demonstrates that revenues sufficient to pay the costs of the collective bargaining agreement will be available in the affected fiscal years of the Financial Plan.

If the City fails to submit to the ICA a revision to a Financial Plan, report or other information required to be filed pursuant to Act 11, the ICA, in addition to all other rights which the ICA may have at law or in equity, shall have the right by mandamus to compel the City and the officers, employees and agents thereof to file with the ICA the Financial Plan, revision to a Financial Plan, report or other information which the City has failed to file.

Certain Provisions of the Cooperation Agreement.

Under the provisions of the Cooperation Agreement, if the ICA determines – based upon reports submitted by the City, as well as reports necessitated by changed conditions or unexpected events which may affect the City's adherence to its then-current Financial Plan – that the City's actual revenues and expenditures vary from the Financial Plan, the ICA shall notify the City, in writing, of its determination that a variance exists. In response, the City shall within ten (10) days after the request by the ICA, provide the ICA such additional information as the ICA deems necessary to explain the variance. The Cooperation Agreement provides that a "variance" for this purpose, which would change the reporting requirement from quarterly to monthly, shall be deemed to have occurred as of the end of a reporting period based on the reports submitted for such period if: (i) a net adverse change of more than one percent (1%) of the revenues or expenses for such fiscal year is reasonably projected to occur; or (ii) the actual net cash flows of the City for that fiscal year are reasonably projected to be less than ninety-eight percent (98%) of the net cash flows originally forecast at the time of the adoption of the budget.

In the event that the ICA, by a majority vote, determines that the City's written explanation for the variance is unsatisfactory, the ICA shall certify such non-compliance with the Secretary of the Budget and shall notify the City. Upon receipt of the prescribed notice, the City's Director of Finance and the Controller shall certify to the ICA forthwith the amount of New Revenue, and shall cause such certified amount to be aggregated, transferred and deposited as directed by the ICA in trust for the exclusive benefit of the City in an account designated as the "New Revenue Account" established under the Cooperation Agreement.

"New Revenue" is defined as "in the aggregate, any revenues received by the City with respect to any taxes or fees from any source whatsoever which are not solely derived by virtue of existing taxing or legislative power possessed by the City under its Home Rule Charter or applicable law, it being the intent of this provision that New Revenue shall not include taxes or fees, including any increases thereof, which the City presently levies or has the power to levy. New Revenue shall not be reduced, diminished or offset by any existing taxes or fees which may be eliminated or reduced in connection with the City's financial recovery. New Revenues shall not include (1) any moneys received by the City as grants from public or private entities, whether for profit or non profit, as a conduit for third parties, 2) any revenues pledged or held as security for bonded indebtedness or related insurance existing on the effective date of Act 11 and approved by the ICA as part of the City's Financial Plan . . . ."

New Revenue received after the date of initial deposit into the New Revenue Account shall also be deposited to the credit of the New Revenue Account.

Under the Cooperation Agreement, the City further agreed that as soon as they become available, it shall provide to the ICA copies of all significant or requested reports, documents, budgetary and financial planning data and any other information prepared by or on behalf of the City regarding the revenues, expenditures, budgets, costs, plans, operations, estimates and any other financial or budgetary matters of the City.

Additionally, if, after the approval of the Financial Plan, the City executes a collective bargaining agreement which is not in compliance with the plan, the City shall as soon as practicable (but in no event later than fifteen (15) Days after the execution by the City of such contract) submit to the ICA a proposed revision to the Financial Plan which demonstrates to the reasonable satisfaction of the ICA that revenues sufficient to pay the costs of the contract will be available in the affected fiscal years of the Financial Plan.

Both Act 47 and Act 11 have specific provisions relating to the content and form of any approved Financial Plan. Similarly, both provide mechanisms for intercepting and escrowing of certain funds (with the exception of funds for capital projects under contract, disaster relief funds, pension fund disbursements, and funds pledged to repay bonds and notes) due the City from the Commonwealth in the event the City fails to adhere to the Act 47 Plan or permits a certain financial variance from the ICA approved Financial Plan.

New Tax Structure.

In 2004, legislation was passed eliminating the occupational privilege tax payable by residents and nonresident employees at $10 per year and replaced it with the Emergency and Municipal Services Tax, now named the Local Services Tax, payable by residents and nonresident employees at $1 per week, exempting those earning less than $12,000 per year and authorized the City to levy a gross payroll tax at the rate of 0.55% on all non-charitable businesses. The legislation also required the City to eliminate the 2 mill mercantile tax and to reduce the City's business privilege tax from 6 mills to 2 mills for 2005 and 2006, 1 mill for 2007 through 2009 and eliminating it in 2010.

Termination of Oversight. Under Act 47, termination of municipal financial distress status may be initiated either by the Secretary of DCED or by the City. This process is designed to determine whether or not the conditions which led to the earlier determination of distressed status have been addressed adequately, including the elimination of accrued deficits and municipal operations for a period of at least one year under a positive current operating fund balance.

Under Act 11, the ICA was established for a minimum term of seven years. If after seven years the City has had annual operating budgets and financial plans which satisfy prescribed standards, the ICA's existence and the status of the City as an "assisted city" may be terminated.

Under both Act 11 and Act 47, the core functions and management of the City remain the responsibility of the Mayor and City Council. As confirmed in the Cooperation Agreement, the City retains all of its powers and authority granted under the Home Rule Charter of the City of Pittsburgh, except as specifically set forth in the Cooperation Agreement.

Extraordinary Contracts. The Cooperation Agreement established a new requirement that the City provide notice to the ICA of the intention to enter into any "Extraordinary Contract." The term Extraordinary Contract is defined to mean, among other things, any agreement which relates to the borrowing of money by the City. Prior to entering into any Extraordinary Contract, the City must deliver to the ICA: (i) a summary of the terms of such Extraordinary Contract; and (ii) a written statement by the City's Director of Finance stating whether or not in the opinion of said officer the performance of the Extraordinary Contract would be consistent with the Financial Plan of the City then in effect. In the case of a bond purchase agreement, the City is required to provide such information regarding the agreement not less than three days prior to the execution of the agreement. The Cooperation Agreement provides that the ICA may make comments and suggestions with respect to such Extraordinary Contracts, which comments and suggestions the City is obligated to consider prior to its execution of the

Extraordinary Contract. The Cooperation Agreement does not, however, grant the ICA the power to approve or disapprove Extraordinary Contracts.

Reporting Requirements. On an ongoing basis, the City will be subject to the financial reporting requirements described in Act 11 and Act 47, and to the continuing financial oversight of the ICA. The financial reporting requirements now in effect provide, among other things, that within 45 days after the end of each fiscal quarter, the City will provide reports to the ICA describing actual or current estimates of revenues and expenditures compared to budgeted revenues and expenditures for the quarter as reflected in its cash flow forecast.

REVENUE SOURCES OF THE CITY

General

In 2008, Real Estate Taxes accounted for approximately 28.75% of the receipts of the General Fund, followed by Earned Income Tax at 14.72%, Business Privilege Tax at 2.0% and all other taxes at 29.26%. The remaining 25.27% of receipts was from miscellaneous non-tax revenue. Under the City's new tax structure, it is expected that Real Estate Taxes will continue to be the City's most significant source of revenue. The Business Privilege Tax was lowered by two-thirds in 2005, reduced by fifty percent for 2007 through 2009 and will be eliminated in 2010. Payroll Preparation Tax revenues are expected to offset the loss of Business Privilege Tax revenues in the coming years.

Real Estate Taxes

The City has the power to levy and collect ad valorem taxes, without limitation as to rate or amount, on all taxable real estate located within the City. The City shares the real estate tax base with the County of Allegheny (the "County") and the School District of Pittsburgh (the "School District"), separate taxing bodies. A ten-year history of real estate tax rates levied by the City, the County and the School District is presented in Table 1 below.

TABLE 1
CITY OF PITTSBURGH
REAL ESTATE TAX RATES OF THE CITY
AND OVERLAPPING JURISDICTIONS
(mills)

Year	Land	Building	Total City [1]	School District	County [2]	Total
2000	184.5	32.00	59.000	59.700	25.500	144.200
2001 [3]	10.8	10.8	10.8	13.92	4.72	29.41
2002	10.8	10.8	10.8	13.92	4.69	29.41
2003	10.8	10.8	10.8	13.92	4.69	29.41
2004	10.8	10.8	10.8	13.61	4.69	29.10
2005	10.8	10.8	10.8	13.92	4.69	29.41
2006	10.8	10.8	10.8	13.92	4.69	29.41
2007	10.8	10.8	10.8	13.92	4.69	29.41
2008	10.8	10.8	10.8	13.92	4.69	29.41
2009	10.8	10.8	10.8	13.92	4.69	29.41

(1) Determined by multiplying the respective assessed valuation by the millage rate and dividing by the total assessed valuation.
(2) Includes levy by Allegheny County Institution District (the "Institution District").
(3) Four changes took place that affected the 2001 real estate tax rates: (i) the County conducted a property revaluation program that resulted in an approximate 57% increase in taxable property values for the City; (ii) the County changed the ratio of assessed value to market value from 25% to 100%; (iii) the City changed from a bifurcated (land and building) tax rate to a single, unified tax rate for both land and buildings; and (iv) the School District raised its effective millage rate by approximately 27%.

Sources: City; School District; County.

Table 2 below sets forth information regarding assessed values, tax rates and budgeted and actual levies and assessments from 1999 to 2008.

Table 2

CITY OF PITTSBURGH, PENNSYLVANIA

ASSESSED VALUE, TAX RATE, LEVY, AND COLLECTIONS

LAST TEN YEARS

($'s In Thousands)

Fiscal Year	Assessed valuation of land and buildings	Land millage	Building millage	Original net levy	Adjusted net levy (1)	Budgeted	(3) Receipts	Percent of original net levy collected	Percent of adjusted net levy collected	Percent of budget collected	Collection Budget	Collection Receipts	Percent of budget collected
1999	2,096,829	184.50	32.00	122,053	117,382	113,715	112,569	92.2	95.9	99.0	5,686	5,397	94.9
2000	2,125,768	184.50	32.00	125,422	119,649	112,010	110,644	88.2	92.5	98.8	4,500	2,967	65.9
2001	13,346,238	10.80	10.80	144,139	127,784	115,900	118,150	81.9	92.9	101 9	3,500	2,689	76.8
2002	14,677,667	10.80	10.80	158,454	131,245	121,500	123,692	78.1	94.2	102.0	4,300	4,359	101.0
2003	13.578,918	10.80	10.80	146,652	131,484	123,132	123,015	83.9	93.6	99.9	3,139	1,069	34.1
2004	13,237,682	10.80	10.80	142,966	127,864	122,500	119,918	83.9	93.8	97.9	5,500	4,435	80.6
2005	13,234,645	10.80	10.80	142,934	126,124	124,000	124,906	87.4	99.0	100.7	4,500	3,173	70.5
2006	13,371,108	10.80	10.80	143,596	126,077	121,000	127,114	88.5	100.8	105.1	3,758	6,622	176.2
2007	13,325,234	10.80	10.80	144,761	124,973	121,257	127,505	88.1	102.0	105.2	2,741	289	105.0
2008	13,254,877	10.80	10.80	142,526	136,603	122,300	127,273	89.3	93.2	104.1	3,245	4,891	150.7

Notes:

(1) Represents net levy as of December 31 of the tax year (i.e., net of exonerations, discounts, and additions granted in that year).

(2) In 2001, assessed value percent of market value increased to 100% and a unified millage rate was enacted.

(3) 2001 through 2005 receipts are net of refunds.

Table 3 below shows the ten largest real estate taxpayers in the City as of December 31, 2008.

TABLE 3
CITY OF PITTSBURGH
TEN LARGEST REAL ESTATE TAXPAYERS
DECEMBER 31, 2008

TAXPAYER	LAND ASSESSMENT	BUILDING ASSESSMENT	TOTAL ASSESSMENT	PERCENTAGE OF TOTAL TAX LEVIED
1) 500 Grant St. Associates One Mellon Bank Center	$22,516,200	$422,676,200	$445,192,400	3.37%
2) Buncher Company	32,472,000	163,957,400	196,429,400	1.49%
3) Market Associates Limited Partnership (PPG)	14,590,400	170,409,600	185,000,000	1.40%
4) PNC Corporation	17,291,700	149,838,600	167,130,300	1.27%
5) 600 GS Properties LP	10,000,000	150,000,000	160,000,00	1.21%
6) Oxford Development	4,186,800	110,813,200	115,000,000	0.87%
7) Grant Liberty Development Group	9,020,600	100,979,400	110,000,000	0.83%
8) Liberty Avenue Holding LLC	4,000,000	45,210,000	49,210,000	0.37%
9) Hertz Gateway Center LP	13,603,700	32,096,300	45,700,000	0.35%
10) Harrah's Forest City Associates	16,244,500	22,792,400	39,036,900	0.30%

Source: City Finance Department.

Real Estate Assessments

The City has the power to levy and collect ad valorem taxes on all taxable real estate within its boundaries without limitation as to rate or amount. The City does not have a statutory limit on real estate taxes.

In recent years, changes have occurred to the system by which real estate taxes are assessed by the County. These changes have affected revenues from taxable real property in the City.

Beginning in 2001, the County changed the ratio of assessed value to market value to 100% from 25%. As a result of the County's related assessment, land values in the City significantly increased. To lessen the burden on residential property owners while maintaining an adequate tax base, the City determined to change from a bifurcated system of taxation (where land was taxed at a higher rate than buildings) to a unified system. Thus in February of 2001, the City of Pittsburgh amended its City Code to provide for a unified tax rate of 10.8 mills, while also enacting a Homestead Exemption (which allowed qualifying homeowners to exempt the first $10,000 of property value from taxation) to lessen the burden the unified system would have on neighborhoods where the land values did not significantly increase.

Currently, the County is using 2002 as a "base year" for assessments (i.e. generally setting a property's assessment value at its worth in 2002, with exceptions for situations such as improvements having been made to the property). The Pennsylvania Supreme Court ruled on April 29, 2009 that the base year method for property valuation as applied by Allegheny County violates the uniformity clause of the State Constitution and as such is unconstitutional. A reassessment was ordered for 2010 and is anticipated to provide a boost in future revenue. Allegheny County is contemplating a Federal lawsuit in response to the ruling. In addition, there have been, and will continue to be, appeals to assessed values. The county of Allegheny filed property appeals on behalf of property owners whose property values increased due to successful appeals by municipalities during 2003 through 2006. The net result was a significant increase in refunds issued in 2007, which began to decrease in 2008. City real estate tax refunds for 2005, 2006, 2007 and 2008 were approximately $3.6 million, $3.0 million, $4.3 million and $1.9 million, respectively.

The City makes tax abatements available for commercial and industrial properties for the assessment increase attributable to rehabilitation and abates new construction at varying degrees. The abatements have not had a substantial impact on the City's revenues.

Properties with delinquent taxes of one year or more are liened and are subject to Treasurer's sales.

Non-Real Estate Taxes

In addition to ad valorem taxes on real estate, the City is empowered by the Local Tax Enabling Act and the Home Rule Charter and Optional Plans Law to levy taxes for general revenue purposes, on persons, transactions, occupations, privilege, and upon the transfer of real property or interest therein. All non-real estate taxes, except the Deed Transfer Tax, which is payable at the time of transfer, are payable annually, by April 15, quarterly or monthly depending on the tax.

The City currently levies the following non-real estate taxes:

Earned Income Tax – The Earned Income Tax or "Wage-Tax" is levied at the rate of 1.25% on the wages or net profits earned by residents of the City. The majority of the tax payments are deducted from payrolls and remitted by employers to the City.

Business Privilege Tax – The Business Privilege Tax is presently levied at the rate of 1 mill on the gross receipts of businesses operating in the City. Under the City's Act 47 Recovery Plan, the tax was reduced to 1 mill in 2007 and will continue at 1 mill until eliminated in 2010.

Parking Tax – A tax equal to 37.5% of the consideration paid for each parking transaction is levied on the patrons of non-residential parking places in the City. There is a no planned reduction for this tax in 2010.

Amusement Tax – This tax is levied at the rate of 5% on the admission price paid by patrons of all manner and forms of amusement. Nonprofit charitable performing arts groups were granted exempt status in 2008.

Deed Transfer Tax – The Deed Transfer Tax is levied on real property sales within the City at the rate of 2% of the gross sales price.

Local Services Tax – This $52 tax is levied upon each individual whose principal place of employment is located in the City, regardless of residence. Legislative action requires collection at $1 per week, remitted according to a calendar quarter, with an exemption for wage earners making less than $12,000 per year.

Facility Usage Fee – The Facility Usage Fee is levied on all non-resident individuals who use the City's sport stadiums or arena to engage in an athletic event or otherwise render a performance for which they receive remuneration. The fee is assessed at 3% of payroll amounts generated as a result of the business activity.

Institution Service Privilege – This 6 mill tax is levied on certain receipts of non-profit, non-charitable organizations providing a service within the City.

A. *Payroll Preparation Tax* – ***This tax is imposed on all for-profit companies in an amount equal to .55% of the total wages of all employees who perform work in the City.***

RAD Tax Revenues

The Allegheny Regional Asset District (the "RAD"), a special purpose area wide unit of local government created in 1993 to provide supplemental sources of revenue for local governments in the southwestern region of Pennsylvania, imposes a 1% regional sales tax (the "RAD Tax") on sales of products and services in the County that are subject to the Pennsylvania State Sales Tax. The proceeds of the RAD Tax are distributed as follows: one-half to the RAD, one-fourth to the County and one-fourth to all other eligible municipalities, including the City.

For 2007 and 2008, the City's share of the RAD Tax proceeds, which are classified as General Fund revenues, amounted to $12,616,535 and $12,765,256, respectively. From its share of RAD Tax proceeds, the City pledged $7.5 million through 2014 to provide for debt service payments on certain Urban Redevelopment Authority of Pittsburgh bonds issued to create a $60 million development fund.

In addition to the City's share of RAD Tax proceeds, the RAD provides support payments to the City with respect to certain regional assets located in the City.

Other Revenues

Locally generated non-tax revenues primarily include federal and state grants, licenses and fees, charges for the provision of services, fines and forfeits, investment earnings and revenues from City self-supporting trust funds. These revenues generated $105,301,459 million in 2007 and $95,911,782 million in 2008.

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX E

CONSULTING ENGINEER'S REPORT

[THIS PAGE INTENTIONALLY LEFT BLANK]

The Pittsburgh Water
and Sewer Authority

Allegheny County, Pennsylvania

Consulting Engineer's Annual Report

March 2009

The Pittsburgh Water and Sewer Authority
Allegheny County, Pennsylvania

Consulting Engineer's Annual Report

March 2009

Prepared by: Charles J. Jordan, P.E.

Approved by: John R. Balewski, P.E.

Project No.: 08-3548-RET-01

CHESTER ENGINEERS

260 Airside Drive - Moon Township, PA 15108
412-809-6600 - Fax 412-809-6611

THE PITTSBURGH WATER AND SEWER AUTHORITY
CONSULTING ENGINEER'S ANNUAL REPORT
TABLE OF CONTENTS

Page No.

Executive Summary vii
History and Background 1
General 1
Initial Authority Operation 1
First Bond Issue 1
1993 Bond Issue and Refinancing 2
1995 Bond Issue 2
1998 Bond Issue and Refinancing 3
2002 Bond Issue 3
2003 Bond Refinancing 3
2005 Bond Issue 3
2007 Bond Advance Refunding 4
2008 Bond Advance Refunding 4
PENNVEST Funding 5
Summary of Funding Sources 5
Water System 6
Sewer System 7
Advice and Recommendations as to Maintenance, Repair, and Operation 8
Water System 8
Water Distribution System 8
Water Pump Stations 9
Water Storage Tanks and Reservoirs 11
Highland No. 1 Microfiltration Plant 11
Water Treatment Plant 11
Sewer System 12
Regulatory Agency Orders and Problem Areas 13
Future Needs 15
Capital Additions 17
General 17

CONSULTING ENGINEER'S ANNUAL REPORT
TABLE OF CONTENTS (CONT.)

Page No.

Contract Awards and Authorizations for Bidding 20
2008 Requisitions 22
Pennvest Financing 23
Renewal and Replacement Fund.....24
Findings on Current Conditions.....25
Estimate on Revenues and Current Expenses.....26
General.....26
Estimated Receipts and Revenues 26
Current Expenses 29
Rate Covenant Calculations.....29

Exhibit A
Capital Improvement Program Budget 2002 Bond Issue as of December 1, 2008

Exhibit B
Capital Improvement Program Budget 2005 Bond Issue as of December 31, 2008

Exhibit C
Capital Improvement Program Budget 2007 Depository Agreement Fund Budget as of December 31, 2008

Exhibit D
Capital Improvement Program Budget 2008 Bond Issue as of December 31, 2008

Exhibit E
PENNVEST Program Budget as of December 31, 2008

Exhibit F
2002 Bond Issue Status Report as of December 31, 2008

CONSULTING ENGINEER'S ANNUAL REPORT
TABLE OF CONTENTS (CONT.)

Page No.

Exhibit G
2005 Bond Issue Status Report as of December 31, 2008

Exhibit H
2007 Depository Agreement Fund Status Report as of December 31, 2008

Exhibit I
2008 Construction Fund Status Report as of December 31, 2008

Exhibit J
Pennvest Status Report as of December 31, 2008

Exhibit K
Facilities Inspection Reports

LIST OF TABLES

Page No.

Table 1
Capital Improvement Program Bond Fund Status Report – 2007 vs. 2008..... viii

Table 2
Debt Service Coverage Factor ix

Table 3
Sources of Capital Improvement Funds.....5

Table 4
Capital Improvements Program Budget.....18

Table 5
Capital Improvement Program 2002, 2005, 2007, and 2008 Fund Status Report - 2007 vs. 2008.....19

Table 6
2008 Contract Awards 22

Table 7
2008 Authorizations to Advertise 22

Table 8
2008 Requisition Drawdown by Month.....23

Table 9
PENNVEST Loans Annual Debt Payment (Principal and Interest).....24

Table 10
Total Funds Available.....28

Table 11
Expenses 30

Table 12
Debt Service Coverage Factor 31

Table 13
Total Income vs. Total Operating Costs 32

LIST OF FIGURES

Page No.

Figure 1
Bond Fund Drawdown by Month 21

Figure 2
Income as a Percentage of Total Operating Costs 33

PITTSBURGH WATER AND SEWER AUTHORITY
CONSULTING ENGINEER'S ANNUAL REPORT

EXECUTIVE SUMMARY

This annual report, prepared for The Pittsburgh Water and Sewer Authority (Authority), presents a review of the Water and Sewer Systems' operations and the status of the Capital Improvements Program (CIP) for Fiscal Year 2008.

A summary of the conclusions and recommendations as contained herein are as follows:

1. The existing Water and Sewer Systems have been properly maintained and are in adequate operating condition; however, the systems are in need of certain improvements and/or replacements which are being carried out under the Authority's CIP. The Operating Budget for 2009, as adopted by the Authority Board of Directors at a regular meeting on December 12, 2008, and reviewed herein, is sufficient for maintaining proper operations in 2009.
2. Work has continued during the past year on the CIP implemented in 1984. Current capital project fund resources were made available in March 2002 through the issuance of additional bonds (2002 Bond Issue), in June 2005 through the issuance of additional bonds (2005 Bond Issue), in March of 2008 through the advanced refunding of the 2002 and 2005 Bonds, (2007 Depository Agreement Fund) and in June of 2008 through the issuance of additional bonds (2008 Construction fund). Details as to the use of these funds are included in Exhibits "A", "B", "C", "D", "E", "F", "G", "H", "I", AND "J".
3. During 2009, work should continue on the projects identified in the CIP. In addition to current ongoing projects, other projects will have to be undertaken for the replacement of old and worn facilities, emergencies, and new facilities, which may include projects being undertaken by the City of Pittsburgh, the Urban Redevelopment Authority (URA) and the Sports and Exhibition Authority (S&EA).
4. During 2002, the Authority established a Capital Improvements Committee to oversee the capital projects of the Authority. This includes evaluating projects presented to the Authority by the City of Pittsburgh, URA and S&EA and reviewing change orders and work directives. In early 2009, the Committee should prioritize projects identified for inclusion in the next phase of the CIP program.

5. A comparison as to the status of the CIP as of December 2007 and December 2008 is indicated in Table 1.

Table 1
Capital Improvement Program
Bond Fund Status Report - 2007 vs. 2008

	December 2007	**December 2008**
Completed Contracts	$438,345,457.03	$468,734,773.50
Active Contracts	71,653,658.57	140,076,059.86
TOTAL	509,999,115.60	608,810,833.36
TOTAL BUDGET	$511,762,620.81	$610,701,476.41
Percent of Budget	99.7%	99.7%
Funds Paid from Construction Fund	$486,981,342.52	$505,436,856.72
Percent of Budget	95.2%	82.8%

6. Current deposits in the Authority's 2005 Bond Fund, and 2007 Depository Agreement Fund and 2008 Construction Fund Fund are at $107,738,984. It is estimated that these funds will carry the Capital Improvements Program through late 2012 according to the current Capital Expenditure Plan.
7. Current deposits in the Authority's 2005 Bond Fund, 2007 Depository Agreement Fund, and 2008 Construction Fund are well in excess of $7,000,000. As a result, there is no need for the Authority to deposit any funds into the Renewal and Replacement Fund during the next fiscal year.
8. Projected 2008 end-of-year Revenues and Operating Expenses as presented in this report indicate that the Authority will satisfy the 2008 Rate Covenant Test as provided for in the Trust Indenture.
9. It is the Consulting Engineer’s opinion, based upon estimated 2009 Revenues, Operating Expenses, and Operating Cash Reserves, that the existing schedule of rates will provide sufficient funds in 2009 to cover operating expenses and to satisfy the Rate Covenant Test as provided for in the Trust Indenture.

A summary of the Rate Covenant Test is indicated in Table 2.

Table 2
Debt Service Coverage Factor

	Projected 2008	Budget 2009
Cash – Beginning of Year	35,149,982	$35,149,9835
Operating Revenue	87,045,808	88,493,000
Interest Earnings	3,502,666	5,623,937
Fund Transfer	1,461,395	4,200,000
Tap Fee Collections	2,457,395	4,700,000
Sewage Collections	37,277,842	46,200,000
Other Collections	1,137,312	1,300,000
Total Available Funds	$171,195,795	$182,666,920
Operating Expenses	88,320,707	99,948,588
Capital Projects	0.00	3,000,000
Net Available for Debt Service	82,875,087	79,718,332
Debt Service Requirements	43.685,653	44,568,349
Coverage Factor	1.90	1.79

PITTSBURGH WATER AND SEWER AUTHORITY
CONSULTING ENGINEER'S ANNUAL REPORT

HISTORY AND BACKGROUND

General

In February 1984, the City of Pittsburgh established The Pittsburgh Water and Sewer Authority (Authority) under the provisions of the Commonwealth of Pennsylvania. The City charged the Authority with the responsibility of carrying out a major Capital Improvements Program (CIP) recommended in a comprehensive study report entitled "Evaluation of the Water and Sewer Systems of the City of Pittsburgh," dated December 9, 1983.

Initial Authority Operation

The Authority took over operations of the Water and Sewer Systems on May 1, 1984 pursuant to the terms of a Lease and Management Agreement between the City of Pittsburgh and the Authority. Under this agreement, the City leased the Water and Sewer Systems to the Authority for a term of fifty years with renewal provisions. The Authority was authorized to operate and maintain the Water and Sewer Systems, construct all necessary improvements, establish and collect rates and charges for its service, and finance its operations and improvements through revenue collections and sale of bonds and notes payable solely from the Authority's revenues. The Authority appointed and designated the City as the Authority's agent to manage, operate, and maintain the Water and Sewer Systems for the term of the lease, subject to the general supervision, direction, and control of the Authority.

First Bond Issue

On April 19, 1984 the Authority Board adopted a major CIP by Resolution No. 19 of 1984. The Program was designed to maintain a satisfactory level of service to the Water and Sewer Systems' current users, to improve operating efficiency of the Water and Sewer Systems, and to address future user requirements. In July 1984, the Authority issued $93,600,000 Daily Adjustable Demand Water and Sewer System Revenue Bonds, Series of 1984 in order to implement the initial phase of this program. From proceeds of this bond issue, $78,777,000 was deposited into the Construction Fund for the initial phase of the CIP. In June 1986, the Authority issued an additional $134,700,000 Revenue Bonds, Series of 1986. From the 1986 Bond Issue, $115,000,000 was available to continue the program. An additional $7,000,000 was made available for capital

improvements by Resolution No. 72 of 1993, adopted August 18, 1993. These additional funds were provided through a transfer from the Debt Service Reserve Fund in accordance with Section 6.04 of the Trust Indenture, which provided for the required funds for Debt Service Reserve Fund to be in the form of cash, a letter of credit or other credit instrument, a surety bond or a combination thereof. The Authority Board elected to replace the monies in the fund with a surety bond. As a result, $7,000,000 was transferred to the Construction Fund for capital improvements, and the balance of monies were transferred to the Debt Service Fund.

1993 Bond Issue and Refinancing

In 1993, the Authority issued two series of Water and Sewer System Revenue Bonds to: (i) advance refund all of the outstanding previously issued bonds, (ii) provide additional funds for capital improvements to the Authority's Water and Sewer Systems, and (iii) pay all fees and expenses incurred in connection with issuance of the 1993 Bonds. Series A of 1993 Bonds, in the aggregate principal amount of $278,970,000 was for the advanced refunding of outstanding bonds and Series B of 1993 Bonds, in the aggregate principal amount of $10,785,000, was for additional capital improvements.

The new Trust Indenture dated October 15, 1993 and applicable to the Series A and B of 1993 Bond Issues eliminated the requirements for a fund balance to be maintained in the "Renewal and Replacement Fund" unless determined necessary annually by the Consulting Engineer. Therefore, the $2,009,523 which was being maintained in the Fund under the previous Trust Indenture was transferred to the "Prior Bonds Construction Fund" for use for capital improvements. From the Series B of 1993 Bond Issue, $9,990,477 was deposited into the 1993 Bond Construction Fund for additional capital improvements.

1995 Bond Issue

In 1995, the Authority recognized that the funding for the CIP implemented in 1984 was almost depleted. In order to ensure a continued supply of safe drinking water and proper sewer service to the Authority's current and future users and to address future demands on the Water and Sewer Systems, a new CIP was developed and adopted.

The Authority also negotiated a Capital Lease Agreement with the City of Pittsburgh, which terminated the Lease and Management Agreement and provided for the Authority to acquire the Water and Sewer Systems from the City.

The Authority issued additional bonds in 1995 to fund the 1995 CIP and to pay certain obligations of the Authority to the City of Pittsburgh under the Capital Lease Agreement. Water and Sewer System First Lien Revenue Bonds, Series A of 1995 in the aggregate principal amount of $89,850,000 were issued on July 15, 1995 to pay for capital improvements as identified in a new CIP. On July 15, 1995, the Authority issued Water

and Sewer System Subordinate Revenue Bonds, Series B of 1995, in the aggregate principal amount of $103,020,000 in order to pay the obligation of the Authority to the City of Pittsburgh under the Capital Lease Agreement. From the 1995 Series A Bonds, $80,000,000 was deposited into the Series A 1995 Capital Project Fund to fund the new CIP of the Authority.

1998 Bond Issue and Refinancing

Early in 1998, additions to the CIP were proposed that addressed future needs of the Authority. These centered on covering Highland Reservoir No. 1, City of Pittsburgh and Urban Redevelopment Authority projects, and improvements to the water distribution and sewerage systems.

The Authority issued 1998 Series A, B, and C Water and Sewer Revenue Bonds on March 2, 1998. The 1998 Series A Bonds were used to provide for the refunding of the Authority's outstanding 1995 Series A Bonds. The 1998 Series B Bonds were used to fund additions to the CIP, and the 1998 Series C Bonds were used to refund the Authority's outstanding 1995 Series B Bonds. The Series B Bonds enabled $36,001,908 to be deposited in the 1998 Capital Projects Fund, funding the CIP into the year 2000.

2002 Bond Issue

At the end of 2000, the capital project funds of the Authority were largely spent with only about $345,000 in reserve for the construction of capital projects. The Authority had anticipated this draw down of funds and had begun work to issue additional bonds in early 2002. The Capital Projects Fund provided through this issue provided $90,494,400 to provide for the construction of capital projects and to meet the needs of emergencies that may require the use of capital funds.

2003 Bond Refinancing

During the fourth quarter of 2003, the Authority issued revenue refunding bonds in the amount of $167.4 million for the purpose of partially refunding the 1993 Bond Issue. The 2003 Refunding Bonds, with an average yield of 3.8%, generated a reduction in annual debt service payment of approximately $4.0 million for 2004.

2005 Bond Issue

In June of 2005, the Authority issued first lien revenue bonds in the amount of $50,385,000 to provide for continuation of the capital improvements program and to meet the needs of emergencies that may require the use of capital funds. The 2005 Revenue Bonds, with an average yield of 4.23%, created an increase in annual debt service payments of approximately $3.2 million for the first 12 years.

2007 Bond Advance Refunding

Pursuant to Resolution No. 23 of 2007, adopted on February 9, 2007, the Authority issued Water and Sewer System First Lien Revenue Refinancing Bonds Series A of 2007 $43,720,000 (Fixed Rate) W, Series B-1 of 2007 $57,585,000 (Variable Rate Demand), and Series B-1 of 2007 $57,590,000 (Variable Rate Demand). The 2007 Bond Issue refunded the 2002 Bonds and the 2005 Bonds. The 2007 Bond Advance Refunding also resulted in a deposit of $6,319,014 into the 2007 Depository Agreement Fund. These funds are available for capital projects and must be exhausted by December 2009.

2008 Bond Advance Refunding

In June of 2008, and pursuant to Resolution No. 54 of 2008, adopted on April 11, 2008, the Authority issued (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series of 2008 consisting of:

- $145,495,000 (Variable Rate Demand) Water and Sewer First Lien Revenue Refunding Bonds, Series B of 2008
- $71,225,000 (Variable Rate Demand) Water and Sewer Subordinate Revenue Refunding Bonds, Series D-2 of 2008, $51,910,000

On the same date and resolution, the Authority issued (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series of 2008 consisting of:

- $51,910,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008
- $51,885,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-2 of 2008

On the same date and resolution, the Authority issued (Fixed Rate) Water and Sewer System First Lien revenue Refunding Bonds consisting of:

- $68,970,000 (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008 Taxable.
- $24,665,000 (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series D-1 of 2008.

The 2008 Bond Issue refunded the Authority's 1998A Bonds, 1998C Bonds, certain maturities of the 2007B-1 and 2007 B-2 Bonds, advanced refunding of certain maturities of the 1998B Bonds, and $98,062,183.58 for the continuation of the capital improvements program and to meet the needs of emergencies that may require the use of capital funds.

The issuance of the 2008 Bonds resulted in no rate increase and initially leveled the Authority's debt service requirements at approximately $42,000,000 until 2040. The

crisis that hit the financial sector in last quarter of 2008 will affect the Authority's annual debt service. Given the volatility of the market, the lasting effect is not known. The Authority and its Financial Advisor are continually monitoring the market crisis to ensure the Authority remains in the best possible position.

PENNVEST Funding

Act 16 of 1988 established the Pennsylvania Infrastructure Investment Authority (PENNVEST) to assist local governments in financing sewer and water projects. The PENNVEST program provides loans and grants for acquisition, construction, improvement, expansion, extension, repair, and/or rehabilitation of all or part of any water or sewage system. Funding under the PENNVEST program is primarily in the form of low-interest, twenty-year loans.

To date, the Authority has secured a total of six PENNVEST loans totaling $15,451,875. Three water projects, two sewage projects and one storm sewer project have been funded through this program. Construction of all projects has been completed.

On October 27, 2008, PENNVEST approved the Authority's $5,772,500 Sewer Improvement Project – Phase I. The project consists of sewer rehabilitation and replacement. The loan closing is scheduled for June 9, 2009.

Summary of Funding Sources

Because of the various bond issues and PENNVEST loans that have been secured, a total of $488,394,969 has been made available for capital improvements since the establishment of the Authority in 1984. Table 3 contains a summary of the source of these funds:

Table 3
Sources of Capital Improvement Funds

Source	Amount
1984 Bond Issue	$ 78,777,000
1986 Bond Issue	115,000,000
Transfer from Debt Service Reserve Fund	7,000,000
Transfer from Renewal and Replacement Fund	2,009,523
1993 Series B Bond Issue	9,990,477
1995 Series A Bond Issue	80,000,000
1998 Series B Bond Issue	36,001,908

Table 3
Sources of Capital Improvement Funds (continued)

2002 Bond Issue	90,494,400
2005 Bond Issue	49,799,037
2007 Depository Agreement Fund	6,319,014
2008 Construction Fund	98,062,184
Sub-Total (Bond Funds)	$573,453,543
PENNVEST Funds	25,095,124
TOTAL (Total Funds)	$598,548,667

WATER SYSTEM

The water supply and distribution system consists of a 117 million gallon per day (mgd) rapid sand type treatment plant that was placed into service in 1969, 1,200 miles of mains and service lines, 30,000 valves, 8,000 fire hydrants, nine pumping stations, four reservoirs, and twelve storage tanks. The total storage capacity of the reservoirs and tanks is approximately 455 million gallons. Based on the average usage over the past several years, this capacity is sufficient to provide storage equivalent of approximately three to five days of normal water usage.

The sole source of water for the Water System is the Allegheny River. The Pennsylvania Department of Environmental Resources (now DEP) issued a Water Allocation Permit to the Authority in March 1989. This permit allows for water withdrawal of up to 100 mgd from the river. The DEP has advised that the permitted allocation would be reevaluated in the future should the Authority's demand increase as a result of growth within the City or through the sale of water to surrounding municipalities. The current average water withdrawal from the Allegheny River is approximately 72.0 mgd, and the maximum withdrawal made on any one day was approximately 94.9 million gallons during the past year.

The Water System currently provides approximately 83,000 residential, commercial, industrial, and public customers with potable water and water for fire protection within the geographic boundaries of the City. This represents approximately 84 percent of the total customers within the City.

The Pennsylvania-American Water Company provides service to approximately 30,150 customers in the southern and western sections of the City, while two small areas, one in the eastern and the other in the western end of the City, are served by the Wilkinsburg-Penn Joint Water Authority and the West View Water Authority, respectively. In each of these areas, the distribution system elements (waterlines, valves, hydrants, etc.) are owned and maintained by the respective independent water purveyor. In addition, the

Authority, through a number of interconnections with other systems, provides water for supply and/or emergency use to several adjacent municipalities.

SEWER SYSTEM

The wastewater collection system is part of a regional system that provides service to about 550,000 people, nearly 325,000 of whom live within the City. The total drainage area served by the regional system is approximately 80 square miles. The City of Pittsburgh comprises about 55 square miles, or nearly 70 percent of the total drainage area. The Sewer System comprises an extensive network of approximately 1,400 miles of sewer lines and four wastewater pumping stations. The average age of the sewer lines is between 60 and 70 years old, with some portions reaching nearly 150 years in age.

The Sewer System conveys wastewater generated within the City boundaries to the Allegheny County Sanitary Authority (ALCOSAN) interceptors located along the rivers for conveyance to ALCOSAN's wastewater treatment facility for treatment prior to discharge into the Ohio River. The ALCOSAN treatment facility is operating in compliance with the National Pollutant Discharge Elimination System (NPDES) under Permit No. 0025984.

The Sewer System also is utilized by twenty-four suburban municipalities pursuant to agreements with the City to convey their wastewater to the ALCOSAN treatment facility. Many of the agreements with the suburban municipalities do not provide for sharing Sewer System maintenance and reconstruction costs.

The Sewer System is designed so that during wet weather a portion of the collected stormwater and diluted wastewater is discharged to natural watercourses by diversion chambers located throughout the Sewer System and at connections to the ALCOSAN interceptors. The Sewer System is in satisfactory operating condition and has adequate capacity for the dry weather wastewater flows; however, during wet weather events the Sewer System has often been taxed beyond its capacity and has resulted in overflows, bypassing, and flooding.

The U.S. Environmental Protection Agency (EPA) has adopted regulations regarding overflows from combined sewers during events that result in the discharge to receiving water of untreated sanitary sewage. These combined sewer overflows (CSOs) contain pollutants that are present in domestic and industrial wastewater, as well as those in the urban stormwater runoff that enter the combined Sewer System. The EPA regulations require owners of any sewer system having CSOs to acquire NPDES discharge permits for each site. The owner's of these systems implemented the EPA's "Nine Minimum Control Measures" in January of 1997.

Essentially all of the Authority sewers are combined sewers, and there are well over 100 CSOs within the system. The most efficient and cost-effective method of eliminating or

controlling the CSOs is unknown; however, the Authority has undertaken the task of inventorying and monitoring CSOs and the sewer collection and conveyance system in an effort to evaluate the impact of the CSO discharges on receiving streams. The Authority has commissioned detailed studies from two engineering consultants in an effort to develop a long-term control plan (LTCP) for addressing all CSO related issues. The Authority entered into an administrative consent order during 2004 in order to address the EPA regulations and extend deadlines for compliance. This is discussed further later in this report.

ADVICE AND RECOMMENDATIONS AS TO MAINTENANCE, REPAIR, AND OPERATION

Water System

The Pittsburgh Water and Sewer Authority (Authority) is directly responsible for the operation and maintenance of the Water System, including intake, treatment, pumping, distribution, storage, and metering. The overall procedures and programs established and currently being followed by the Authority in the operation of the Water System is satisfactory and should be continued during the coming fiscal year.

The Authority has renovated and replaced treatment equipment, chemical feed equipment, pumps, motors, waterlines, valves, hydrants, and storage tanks under the current Capital Improvements Program (CIP). These projects have been implemented at a cost of hundreds of millions of dollars. In order to realize the full life of these improvements and to maintain and improve the condition of the existing system, the Authority has used outside consultants to develop a computerized maintenance program that will enable tracking and reporting of scheduled and unscheduled maintenance and repairs of pumps, motors, valves, mechanical equipment, and electrical and control systems at the treatment plant and pumping stations.

In 2008, the following work was performed in repair and replacement of capital facilities outside of normal operations:

Water Distribution System

- Performed preventive maintenance on 192 gate valves.
- Repaired or replaced 37 large water meters.
- Repaired or replaced 5,583 residential water meters.

Water Pump Stations

Bruecken Pump Station

- Repaired control valve for Pump No. 2.
- Repaired RTU Unit.
- Repaired electrical main breaker.
- Rebuilt control valve for Pump No. 1.

Fox Chapel Pump Station

- No repairs made.

Herron Hill Pump Station

- Repaired pump line valve.
- Repaired lock-out condition to Pumps No. 1 and 2.
- Rebuilt Pump No. 5 electric check valve.
- Repaired communication lines.
- Repaired lock-out condition to Pumps No. 4 and 5.
- Repaired Pump No. 4 control valve.
- Repaired and repacked Pump No. 5.

Howard Street Pump Station

- Repaired boiler.
- Repaired Pump No. 5 ball valve.
- Repaired Pump No. 6 ball valve.
- Corrected RTU failure.
- Replaced Pump No. 1 thrust bearing.

Mission Street Pump Station

- Repaired switchgear and Pump No. 5 motor.
- Repacked Pump No. 1.
- Replace 480 volt transformer.
- Rebuilt 16-inch valve.

Saline Pump Station

- Repaired lock-out condition to Pump No. 3.
- Repaired Pump No. 1.
- Repaired Pump No. 2 discharge gate.
- Replaced bearing and repacked Pump No. 2.
- Refurbished Pump No. 2 control valve.
- Repaired communication network.
- Corrected several lock-out conditions.
- Installed new bearings on Pump No. 3.

Lincoln Pump Station

- Repacked Pump No. 3.
- Replaced all discharge valves.
- Repaired Pump No. 3 control valve.
- Retrofitted Pump No. 3 cone control valves.
- Corrected malfunction on Pump No. 1 valve.

Herron Hill Tank Pump Station

- No repairs made.

Highland Pump Station

- Rebuilt Pump No. 1 electrical breaker.
- Rebuilt Pump No. 1.
- Rebuilt Pump No. 2 electric check valve.
- Rewound and repaired damaged wires to Auto-Transformer.

Aspinwall Pump Station

- Restore shut down of Pumps No. 3 and 4.
- Corrected lock-out conditions.

Coral and Pacific Pump Station

- No repairs made.

Ross Pump Station

- Repaired Pump No. 1.

Water Storage Tanks and Reservoirs

- Inspected Squirrel Hill Tank.
- Inspected Lincoln Tank.

Highland No. 1 Microfiltration Plant

Highland No. 1 Microfiltration Plant

- Microfiltration Plant – Resolved chlorine pump failure.
- Microfiltration Plant – Corrected emergency stoppage due to due power outage.
- Microfiltration Plant – Corrected emergency stop due to compressor failure.
- Microfiltration Plant – Corrected conditions resulted from several power outages.

Water Treatment Plant

- Repaired fence around sedimentation basins.
- Replaced Turbidity Meter No. 7 at the Rapid Sand Filters.
- Repaired main entrance gate.
- Capped Rapid Sand Filters Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 13 with anthracite coal.
- Cleaned or replaced soda ash feed lines.
- Replaced or cleaned sodium hypochlorite lines.
- Repaired chlorine meter.
- Installed new rapid mixers.

As Consulting Engineer for the Authority, Chester Engineers recommends the following actions be undertaken in the coming year to further enhance the Authority's ability to provide a reliable source of potable water to City residents:

1. The Authority should continue its inspection of water storage facilities within the existing water system.

2. The Authority should continue to update the computerized Supervisory Control and Data Acquisition (SCADA) Control System for the water system. An annual maintenance program should be instituted to keep this technology up to date and in good working order.
3. The Authority should aggressively continue tracking "lost and unaccounted for" water through increased leak detection efforts, a routine annual meter replacement program, installing meters on unmetered uses, and scheduling regular calibrations of large meters (both internal and point-of-sale). The Operations and Engineering Departments should continue to combine resources and develop a detailed long-range program for tracking and controlling "lost and unaccounted for" water.
4. The Authority should continue updating and calibrating the existing computerized hydraulic water model of the Water System. The updated model is an efficient and effective tool for evaluating current and future needs in the water system.
5. The Authority should evaluate existing electrical motor control centers and other electrical equipment at its pump stations and plan for replacement of outdated equipment.
6. The Authority should continue its study and design of backup power equipment at Bruecken Pump Station. In addition, the Authority should begin the study and design of backup power at Ross Pump Station.
7. The Authority should continue its investigation of the clarification and filtration processes at its Aspinwall Water Treatment Plant.

It is the engineer's opinion that sufficient funds are provided in the proposed 2009 Operating Budget of the Authority to continue the current procedures and programs for operation, maintenance, and routine repair of the Water System.

Sewer System

The Authority assumed operation and maintenance responsibilities for the Sewer System in 1999.

In conjunction with developing the computerized maintenance program for the Water System, the Authority has developed a similar computerized system to track and report inspection, cleaning, and maintenance activities related to sewer lines, manholes, and catch basins throughout the sewer system.

The Authority owns and operates equipment for cleaning, flushing, and internally televising sewer lines on an as-needed basis. The equipment is used to identify needed repairs and/or replacements throughout the system. When required, Authority efforts are

supplemented by the use of outside contractors to promptly address problem areas in the Sewer System.

The funding provided under the Authority's 2008 Operating Budget will provide for the proper maintenance, routine repair, and operation of the Sewer System during the coming fiscal year.

Regulatory Agency Orders and Problem Areas

2004 Consent Order and Agreement (COA)

During 2004, the Authority and City of Pittsburgh jointly executed a COA with the Pennsylvania Department of Environmental Protection (DEP) and the Allegheny County Health Department (ACHD). This COA closely resembles COAs that were proposed and executed between the regulatory agencies and the other 82 communities that currently convey sewage to the Allegheny County Sanitary Authority (ALCOSAN) for treatment. The long-term intent of the order is to develop a regional Long Term Control Plan (LTCP) for addressing combined and sanitary sewer overflows and ultimately improve water quality within Western Pennsylvania.

The COA requires that the Authority extensively inventory and inspect the entire sewer collection and conveyance system over a three year period. In addition, flow monitoring must be performed and deficiencies identified as a result of the sewer system inspections must be corrected.

As previously noted, the Authority has commissioned two engineering consultants to perform detailed system investigations and flow monitoring within the COA schedule. The Consultants have also been tasked with developing a LTCP for the Authority so that it may adequately comply with the requirements of the COA.

In 2006, the Authority engaged two Consultants for COA Program Management. Tasks involved with this project include manhole inspection and mapping, catch basin inspection and mapping, dye testing, and regulatory support. The project is approximately 60% complete.

Nine Mile Run

The Authority entered into a Consent Order and Agreement (COA) with the DEP on May 22, 2000 concerning problems identified in the Nine Mile Run Interceptor. PWSA was ordered to complete necessary repairs of its Nine Mile Run Interceptor sewer and to provide access to maintain the interceptor by November 30, 2004.

The Authority completed comprehensive mapping of the system and developed a plan for rehabilitating the sewer. Rehabilitation of the Upper Nine-Mile Run Interceptor was completed in August 2002 at a cost of $1,210,908.65. Rehabilitation of the Lower Nine-Mile Run Interceptor was completed in June 2005 at a total cost of $2,500,094.07.

The requirements of the Nine Mile Run COA were incorporated into the 2004 COA and this project is considered complete.

Saw Mill Run Corrective Action Plan and Streets Run Corrective Action Plan

Corrective Action Plans (CAPs) were developed in the Saw Mill Run and Streets Run Watersheds to address sewer surcharging problems. CAPs are agreements to perform a series of tasks to eliminate sewer problems. The DEP imposed sewer tap restrictions in both of these watersheds, and the Authority has undertaken a series of projects to correct surcharging in each of these watersheds. Projects range from small sewer separation projects to lining and replacement of sewers. Like the Nine Mile Run COA, these watershed specific CAPs are incorporated into the 2004 COA. Upon execution of the COA, all tap restrictions were lifted.

Sewage Pumping Stations

The Authority has also received orders to address problems at its four sewage pumping stations. These stations have been identified as having chronic bypassing problems that must be addressed. The first stage in this process was to install flow monitoring devices at each of the pumping stations. These devices were ordered and placed into operation during January 2002. Flow monitoring results have been tabulated and reviewed. The Authority has entered into an Engineering Services Agreement to develop rehabilitation plans for each station, and the costs are included in the current Capital Expenditure Plan. The design of the improvements is approximately 80% complete. The Authority is also negotiating with ALCOSAN and the West Mifflin Sanitary Sewer Municipal Authority (WMSSMA) to eliminate two pump stations in the Lincoln Place section of the City. The pump stations can be eliminated by construction of a gravity sewer to the WMSSA Thompson Run Trunk Sewer and treatment at the Thompson Run Treatment Plant. This will eliminate the long term maintenance costs associated with the pump stations.

Future Needs

In addition to routine maintenance and the work that has taken place through the Capital Improvement Program (CIP) in the past, both the water and sewerage systems are in need of repair, replacement, and improvement.

A broad list of projects was prepared for the 2002 CIP that included needs throughout the water and sewerage systems. Because of the extensive nature of the list, it was prioritized into five levels. The projects that were identified as having the highest priority level were included in the list of projects to be funded through the 2002 Bonds.

A Capital Expenditure Plan was developed in November 2004 and included a list of projects for inclusion in the CIP Bond issued in 2005. The Plan included brief project descriptions, classifications, estimated costs, and ratings to identify critical projects through 2009.

A Capital Expenditure Plan was developed in March 2008 and included a list of projects for inclusion in the CIP Bond issued in 2008. The Plan included brief project descriptions, classifications, estimated costs, and ratings to identify critical projects through June of 2012.

Key importance is the continued funding of projects related to upgrades at the Water Treatment Plant and COA, including the Combined Sewer Overflow (CSO) program and COA Program Management.

With respect to upgrades at the Water Treatment Plant, the Authority awarded a Study and Design contract to perform an investigation of the clarification and filtration processes at its Aspinwall Water Treatment Plant and to prepare a report of their findings. The current budget for this phase is $2,208,000.

The study resulted in a comprehensive treatment plant improvement plan to meet the following major project goals:

- Develop a strategy to position the plant for meeting current and potentially more stringent future regulatory requirements.
- Evaluate the filters and identify optimization strategies.
- Evaluate alternatives to collect, store and treat backwash water.
- Evaluate existing facilities and identify potential improvements.
- Evaluate retrofit and new facilities.
- Evaluate costs and schedule of implementing various improvements.
- Minimize footprint of new facilities due to limited real estate.
- Utilize not more than a maximum daily discharge to ALCOSAN of 1 mgd.

The report's recommendations included the following plant improvements:

- Replacement of the clarifier chain and scraper equipment
- Rehabilitation of the rapid sand filters
- Construction of a filter backwash recycling system

The estimated construction cost for the improvements is $25,000,000.

In 2002, two contracts for the preparation of the Long Term Control Plan (LTCP) were awarded. The contract value for these contracts is now $15,589,285. As of December 31, 2008, a total of $13,763,987.94 has been paid toward completing this work. The two contracts, originally scheduled to be completed by May 1, 2005, were extended to April 30, 2008. At the completion of this study phase, the Authority will have a proposed plan and schedule to meet its CSO obligations, as well as an estimate of the cost of implementation.

In 2006, two contracts totaling $4,900,000.00 were awarded for the COA Compliance Program Management. As of December 31, 2007 a total of $4,240,939.92 has been paid toward completing this work. In July 2008, the PWSA authorized additional dye testing in the amount of $550,000.00. This increased the value of the two contracts to $4,900,000.00. At the completion of this work, the Authority will have met several of their obligations outlined in the COA.

Many future projects identified in the 2007 Annual Report were funded via the 2008 Construction Fund issued in June of 2008. A partial list of projects not funded by the 2008 Construction Fund and for future CIP funding consideration is as follows:

- Water Distribution System
  - Waterline replacement in areas with chronic breaks (currently funded, but will require additional CIP funding).
  - Inspecting river crossings.
  - Miscellaneous small fire protection projects (currently funded, but will require additional CIP funding).
- Pumping and Storage
  - Rehabilitating booster pump stations.
  - Inspecting and painting water storage tanks not included in 2008 Construction Fund.
  - Replacing pump station switchgear and motor control centers not included in 2008 Construction Fund.
- Water Treatment Plant

- Repair and upgrade clearwell (currently under study).
- Replacing switchgear and motor control centers not included in 2008 Construction Fund.
- Sedimentation basin fencing/security upgrades.

- Miscellaneous
  - Engineering computer upgrades.
  - GIS hardware.
- Sewer System
  - Sewer rehabilitation contracts (currently funded, but will require additional CIP funding).
  - Sewer internal inspection contracts (currently funded, but will require additional CIP funding).
  - Sewer line point repairs (currently funded, but will require additional CIP funding).
  - Sewer separation where economically feasible.
  - Eliminating small CSOs.
  - MS4 Stormwater compliance (currently funded, but will require additional CIP funding).

CAPITAL ADDITIONS

General

The initial Capital Improvements Program (CIP) was recommended in a report entitled "Evaluation of the Water and Sewer Systems of the City of Pittsburgh," dated December 9, 1983, prepared by Green International, Inc. This program has been continually reviewed and modified as required to reflect changing conditions in order to maintain a satisfactory level of service to current users, to improve operating efficiency, and to address future requirements.

The CIP was developed to ensure a continued supply of safe drinking water and proper sewer service to the Authority's current and future users and to address future demands on both the Water and Sewer Systems. In developing this program, the following factors and conditions were considered:

- Identification of improvements not currently funded.
- Rehabilitation and/or replacement of existing facilities that exceed their useful lives.

- Improvements required for sale of water to communities within the region.
- Water and Sewer system improvements required in association with planned City of Pittsburgh capital improvement projects, Urban Redevelopment Authority planned redevelopment projects, and Sports & Exhibition Authority projects.
- Improvements required under current and anticipated safe drinking water standards.
- Implementation of combined sewer overflow controls (CSOs) as required by the U.S. Environmental Protection Agency.
- Compliance with the 2004 COA.

The Authority has provided 573,453,543 through various Revenue Bond Issues to fund the CIP since 1984 to ensure that the above noted objectives are met.

Table 4 presents a summary of the CIP Budget by major components for both the Water System and the Sewer System.

Table 4
Capital Improvements Program Budget

	Funds Budgeted
WATER SYSTEM	
Distribution System	$ 24,566,812.28
Pumping and Storage	10,439,819.90
Treatment Plant	40,935,292,.12
TOTAL WATER SYSTEM	$ 75,941,924.30
SEWER SYSTEM	
Sanitary Sewer	$ 892,888.62
Combined Sewer	36,171,089.10
Pump Station	4,001,623.83
TOTAL SEWER SYSTEM	$41,065,601.55
CITY AND URA PROJECTS	$ 10,986,745.53
ENGINEERING & CONSTRUCTION MANAGEMENT	$ 18,676,645.13
TOOLS AND EQUIPMENT	$ 7,009,191.13
IT / GIS	$ 221,596.88
CONTINGENCIES	$1,986,148.21
TOTAL 2002 BOND ISSUE	$ 90,494,400
TOTAL 2005 BOND ISSUE	$ 49,799,037

Table 4
Capital Improvements Program Budget (Continued)

	Funds Budgeted
TOTAL 2007 DEPOSITORY AGREEMENT FUND	$ 6,319,014
TOTAL 2008 CONSTRUCTION FUND	$98,062,184
COMPLETED BOND ISSUES	$ 419,273,308
TOTAL BOND FUNDS APPROPRIATED	$ 573,453,543

Exhibits "A", "B", "C", and "D" attached to this report, provide details by individual projects that are included in the active CIP as of December 31, 2008.

As of December 31, 2008, contracts have been completed having a value of approximately $435,326,843. Current active contracts are valued at approximately $49,481,443. Figure 1 shows the monthly status and progress of the program since January 1, 1999 through December 2008. It is noted that this graph also indicates the accumulated amounts paid by month from the 2002 Bond Issue, 2005 Bond Issue, 2007 Depository Agreement Fund, and 2008 Construction Fund.

Table 5 presents a summary of the status of the 2002 and 2005 Bond Issue funds for capital improvements as of December 1, 2007 and December 31, 2008.

Table 5
Capital Improvement Program
2002, 2005, 2007, and 2008 Fund Status Reports - 2007 vs. 2008

	December 2007	December 2008
2002 Bond Fund		
Completed Contracts	$65,163,225.72	$91,551,551.26
Active Contracts	25,621,838.78	0.00
TOTALS	90,785,064.50	$91,551,551.26
Percent of Budget (1)	98.77%	100%
2005 Bond Fund		
Completed Contracts	$6,166,340.55	$16,053,534.90
Current Budgeted Projects	43,899,434.71	35,453,120.09
TOTALS	50,065,775.26	51,506,654.99
Percent of Budget (1)	100.00%	100.00%

Table 5
Capital Improvement Program
2002, 2005, 2007, and 2008 Bond Fund Status Reports - 2007 vs. 2008 (continued)

	December 2007	December 2008
2007 Depository Agreement Fund		
Completed Contracts	Not Active	$0.00
Current Budgeted Projects	Not Active	$6,319,014.16
TOTALS	Not Active	$6,319,014.16
Percent of Budget (1)	Not Active	100.00%
2008 Construction Fund		
Completed Contracts	Not Active	$0.00
Current Budgeted Projects	Not Active	$98,062,183.58
TOTALS	Not Active	$98,062,183.58
Percent of Budget (1)	Not Active	100.00%

Exhibit "A" provides budget details on each individual project paid from the 2002 Bond Issue. A copy of the 2002 Bond Issue Status Report as of December 31, 2008 is attached as Exhibit "F".

Exhibit "B" provides details on each active and closed individual project paid from the 2005 Bond Issue. A copy of the 2005 Bond Issue Status Report as of December 31, 2008 is attached as Exhibit "G".

Exhibit "C" provides details on each active and closed individual project paid from the 2007 Depository Agreement Fund. A copy of the 2007 Depository Agreement Fund Status Report as of December 31, 2008 is attached as Exhibit "H".

Exhibit "D" provides details on each active and closed individual project paid from the 2008 Construction Fund. A copy of the 2008 Construction Fund Status Report as of December 31, 2008 is attached as Exhibit "I".

Contract Awards and Authorizations for Bidding

During 2008, the Authority awarded nearly $5.3 million in construction contracts for water treatment, water distribution, and sewage collection facilities. A summary of these contract awards is shown in Table 6. In addition, the Authority authorized a number of projects to be advertised for bidding. Some of these projects have been awarded as construction contracts, while others are still pending. A list of authorizations for bidding that were made during 2008 is shown in Table 7.

Figure 1 - Bond Fund Drawdown by Month

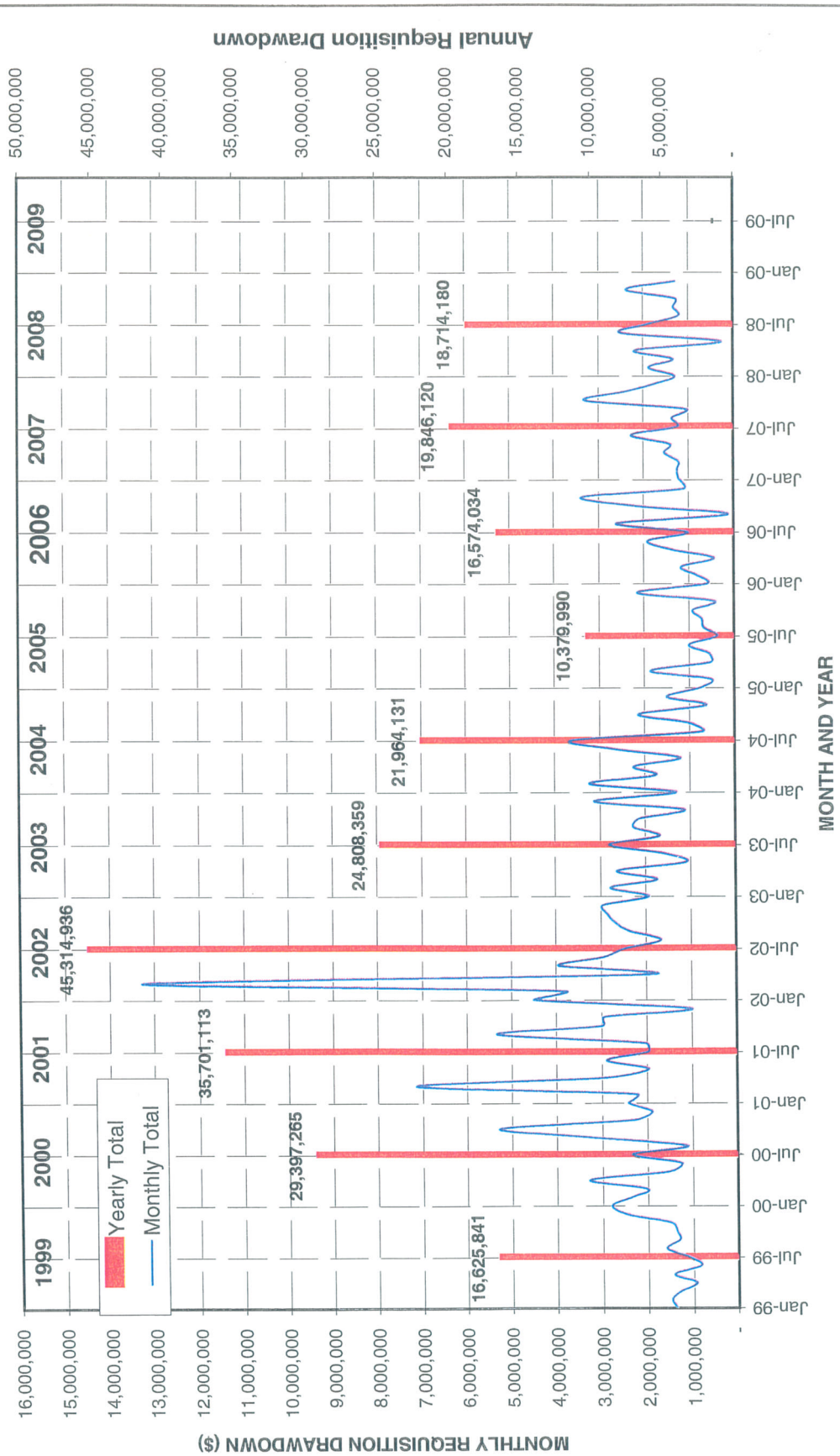


Table 6
2008 Contract Awards

Resolution No.	Project No.	Description	Original Contract Value
01-08	R-A1.07014-21	Fire Hydrants	$88,700.00
14-08	R-E1.08022-21	2008 Street Repaving, Sewer Risers and Lids	$400,000.00
42-08	R-B2.08015-21	Manhole, Catch Basin and Sewer Line Point Repair	$743,731.50
53-08	R-E1.08005-21	Purchase of Small Water Meters	$677,209.00
55-08	R-A1.08016-21	Fifth Avenue Water Line Relay	$284,858.00
56-08	R-A3.06032-21	Traveling Screens and Sluice Gate Replacement - General and Mechanical	$1,099,563.68
57-08	R-A3.06032-22	Traveling Screens and Sluice Gate Replacement - Electrical	$83,775.00
77-08	R-A3.05006-23	Clarifier No. 4 Sludge Collector Equipment Replacement	$934,000.00
91-08	R-A2.07009-21	Water Valve and Fire Hydrant Replacement	$969,286.66
		TOTAL CONTRACT VALUE	$5,281,123.84

Table 7
2008 Authorizations to Advertise

Resolution No.	PWSA Project Number	Description	Project Budget
13-08	R-B2.08015-21	Manhole, Catch Basin and Sewer Line Point Repair	$850,000.00
13-08	R-A1.08016-21	Fifth Avenue Water Line Relay	$220,000.00
41-08	R-A3.05006-23	Clarifier No. 4 Sludge Collector Equipment Replacement	$1,000,000.00
90-08	R-B2.08117-21	Sewer Improvement Contract	$1,000,000.00
		TOTAL CONTRACT VALUE	$3,070,000.00

2008 Requisitions

Table 8 shows the total drawdown of capital funds during fiscal year 2008 from the 2002 Bond Issue, the 2005 Bond Issue, the 2007 Depository Agreement Fund, and the 2008 Construction Fund. This information is presented for each month of the year 2008.

Table 8
2008 Requisition Drawdown by Month

Month	2002 Bond Issue	2005 Bond Issue	2007 Depository Agreement Fund	2008 Construction Fund
January	$495,811.42	$ 787,302.07		
February	20,570.94	1,850,678.68		
March	5,243.91	1,156,474.98	$ 157,903.44	
April	-	1,945,658.13	225,593.19	
May	-	233,172.20	19,138.26	
June	-	2,426,769.61	37,750.59	
July	-	1,078,383.76	829,238.78	
August	-	1,121,028.12	-	$ 85,464.82
September	-	709,226.08	377,862.62	231,171.50
October	-	1,019,181.75	95,381.41	156,620.51
November	-	309,023.10	392,618.19	1,672,471.29
December	-	969,041.62	176,797.96	128,600.60
TOTAL	$521,626.27	$13,605,940.10	$2,312,284.44	$2,274,328.72

Pennvest Financing

To date, the Authority has applied for and obtained six PENNVEST loans for a variety of water, sewage, and stormwater projects at various locations in the City of Pittsburgh. On October 27, 2008, PENNVEST approved the Authority's $5,772,500 application for Sewer Improvement Project – Phase I. The project consists of sewer rehabilitation and replacement. The loan closing is scheduled for June 9, 2009.

In early 2009 the Authority submitted a $10,000,000 application for Water System Improvements – Phase V and a $10,000,000 application for Sewer Improvement project – Phase II. At least three additional application cycles will occur in 2009 during which the PWSA may make application. Depending on Federal Stimulus Funds, additional application cycles may be added.

Table 9 presents a list of the projects for which PENNVEST funding has been obtained. A copy of the PENNVEST Program Budget as of December 31, 2007 is attached as Exhibit "C" and a copy of the PENNVEST Status Report as of December 31, 2007 is attached as Exhibit "F".

Table 9
PENNVEST Loans
Annual Debt Payment (Principal and Interest)

Loan No.	Project Name	PENNVEST Loan Amount	Debt Service Payment Start Date	Estimated Annual Debt Service[1]
71911	Railside Street Sanitary Sewer Extension	$ 158,399.23	February 2002	$ 9,456.00
58066	Ollie Street and Overbrook Boulevard Storm Sewer	800,963.48	May 2002	47,449.44
25074	Water System Improvements No. 1	3,940,113.91	January 2003	216,217.80
71217	Streets Run Interceptor	*3,505,100.00	May 2003	105,965.61
12587	Water System Improvements No. 2	5,112,263.50	January 2004	296,981.16
12608	Water System Improvements No. 3	*4,821,500.00	July 2004	266,085.65
	TOTAL PENNVEST	$18,338,340.12		$942,155.66

* Loan amount at time of closing. Final loan amount to be determined by Pennvest.

RENEWAL AND REPLACEMENT FUND

Initial bond issues of the Authority created the “Renewal and Replacement Fund" to be held in trust by the Trustee to be used by the Authority for extraordinary maintenance and repair of the Water and Sewer Systems or to pay the cost of Capital Additions. These Trust Indentures provided that the Consulting Engineer shall annually establish the amount, if any, to be on deposit in this Fund.

The previous Trust Indenture provided that so long as the aggregate amount of funds on deposit in the Construction Fund(s) and the Renewal and Replacement Fund were not less than $7,000,000, the Authority was not required to make any deposits into the Renewal and Replacement Fund. It further required that if this aggregate amount was less than $7,000,000, the Authority shall transfer, on or before the first day of each month, a sum of $100,000 from the Revenue Fund to the Renewal and Replacement Fund until the aggregate amounts equal $7,000,000. In addition, if the aggregate amounts on deposit in these two funds were less than $5,000,000, the Authority shall, on each September 1, transfer to the Renewal and Replacement Fund all surplus moneys remaining in the Revenue Fund after all payments required to be made on such September 1 have been made until such time as the aggregate amounts on deposit in these funds are equal to not less than $5,000,000.

[1] PENNVEST loans are typically awarded with two interest rates: an initial rate for the first five years of debt payment and a second rate for the remaining fifteen years of payment. The Annual Debt Payment presented here is at the current interest rate.

Section 6.06 of the Trust Indenture dated October 15, 1993 eliminated the requirements of the Revenue and Replacement Fund unless determined necessary annually by the consulting engineer. Since the balance available in current Construction Funds exceeds $100,000,000 there is no need for the Authority to deposit any funds into the Renewal and Replacement Fund during the next fiscal year.

FINDINGS ON CURRENT CONDITIONS

The Pittsburgh Water and Sewer Authority (Authority) is beginning the twenty-fifth year of a Capital Improvements Program (CIP) that was recommended as a result of an "Evaluation of the Water and Sewer Systems of the City of Pittsburgh" conducted in 1983. This evaluation report indicated that the Water and Sewer Systems were in adequate operating condition, although both systems exhibited the need for certain improvements and replacements to ensure continued adequate service to the existing users and to meet foreseeable future demands.

As Consulting Engineer for the Authority, we find that both the Water and Sewer Systems are in adequate operating condition and are, in general, being adequately maintained. As discussed previously in this report, we recommend that the preventive maintenance program developed by the Authority be fully implemented to ensure full realization of the life of the improvements that have been part of the CIP.

An annual facilities inspection program was instituted several years ago as part of the annual report process. With the assistance of Authority staff, we have inspected treatment, pump station, and storage facilities within the operating Water and Sewer Systems. Facilities Inspection Reports are included in Exhibit “G” of this Report. These Inspection Reports provide valuable information that can be used to develop future capital programs for repair, maintenance, and replacement of facilities.

With implementation of these programs, and continuation of the CIP, the systems should be capable of continuing to provide uninterrupted service to the users and provide for future demands.

At the beginning of 2001, the Authority entered into a contract with U. S. Water, L.L.C. to provide professional consulting services in connection with the operations and management of the Authority. The main focus of U. S. Water’s services was the development of a five-year Business Plan to assess the overall operation of the Authority, make recommendations, and to help guide the Authority’s management staff. Under their leadership, a Five-Year Capital Expenditure Plan and a Capital Investment Program Policy and Procedures Manual were also developed and implemented by the Authority.

U. S. Water completed its on-site consultation in June 2004, leaving in its place a system to constantly monitor and improve upon the Authority’s operations.

An analysis of the fiscal year 2009 Budget and the projected operating results for 2008 along with the adopted Budget[2] for 2009 (with respect to the requirements of the Trust Indenture) follows.

It is the Consulting Engineer's opinion that the adopted 2009 Operating Budget as included in this report will provide sufficient funds for the proper operation and maintenance of both the water and sewer systems during the next fiscal year, and that the coverage requirement of the trust indenture will be met.

ESTIMATE ON REVENUES AND CURRENT EXPENSES

General

Section 7.11 of the Trust Indenture, dated as of October 15, 1993, provides that the Consulting Engineer shall include in his annual report:

> "His estimate of Receipts and Revenues and Current Expenses for the next Fiscal Year and his recommendation as to any necessary revision of water and sewer rates, rents or other charges."

Chester Engineers has worked with The Pittsburgh Water and Sewer Authority (Authority) staff in developing the 2009 Operating Budget for the Authority as contained herein. The Operating Budget was adopted at the Authority Board monthly meeting of December 12, 2008.

Estimated Receipts and Revenues

Determination of the Total Funds Available in 2009 for Operating Expenses and Debt Service Requirements are based on the following:

1. Revenue Fund Cash as of January 1, 2009.
2. Operating Revenues from water sales, collection of delinquent sewage treatment fees, and miscellaneous charges.
3. Interest Earnings on the following funds:
   - Construction Funds
   - Debt Service Funds
   - Debt Service Reserve Funds
   - Revenue Fund

[2] The Operating Budget for 2009 was adopted at the December 12, 2008 monthly meeting of the Board of Directors.

4. Transfer from the Capital Projects Fund to reimburse the Authority for labor and expenses of the Authority's engineering staff working on Capital Improvement Projects (CIP) during the year.
5. Transfer from the Capital Projects Fund to reimburse Authority operating funds for the funding of capital projects.

Table 10 presents the Actual 2005, 2006, 2007, Projected 2008, and Adopted 2009 Budget of Total Funds Available.

A rate increase was adopted by Resolution No. 14 on February 10, 2006. This rate increase was implemented in two steps. The first step of the increase was a 6.7 percent increase that became effective March 1, 2006. The second step was a 5.4 percent increase effective January 1, 2007. The 2007 rates were effect in 2008 and are still in effect. The charges for metered consumption are as noted below. No rate increase is expected for 2009.

METERED QUARTERLY WATER AND SEWER RATES

Meter Size (Inches)	Monthly Minimum Usage (1,000 gallons)	Minimum Monthly Charge January 1, 2008	Minimum Monthly Charge January 1, 2009
5/8 or 5/8 x3/4	1	$ 14.67	$ 14.67
3/4	2	25.59	25.59
1	5	49.91	49.91
1-1/4	7	77.66	77.66
1-1/2	10	97.97	97.97
2	17	152.68	152.68
3	40	328.83	328.83
4	70	584.90	584.90
6	175	1,411.06	1,411.06
8	325	2,435.11	2,435.11
10 or larger	548	4,179.33	4,179.33

	Rate per 1,000 Gallons January 1, 2008	Rate per 1,000 Gallons January 1, 2009
Residential	$ 7.50	$ 7.50
Commercial	7.19	7.19
Industrial	6.74	6.74
Health and Education	9.83	9.83
Wholesale or Resale:		
Daily Consumption:		
0 to 3,000,000 gallons	3.69	3.69
3,000,001 gallons and over	3.64	3.64

Table 10
Total Funds Available

	Actual 2005	Actual 2006	Actual 2007	Budget 2008	Unaudited 2008	Budget 2009
WATER COLLECTIONS	$ 81,600,000	$ 83,954,000	$ 87,140,000	$ 88,050,000	$ 86,627,328	$ 89,000,000
Customer Refunds	(1,412,390)	(1,412,390)	(2,002,776)	(1,000,000)	418,480	(507,000)
SEWAGE COLLECTIONS	33,836,000	35,116,648	37,728,455	48,700,000	37,069,759	46,400,000
Less Collection Agency Commission - 20%	(544,039)	(310,577)	(262,012)	(500,000)	208,083	(200,000)
TAP FEE COLLECTIONS	859,544	1,423,875	1,312,070	1,200,000	2,457,395	1,700,000
OTHER COLLECTIONS	538,993	538,993	1,366,523	758,000	1,137,312	1,300,000
INTEREST EARNINGS						
• Capitalized Interest Funds	39	28,941	-	-	60,900	4,103,937
• Capital Project Funds	323,290	1,846,118	1,500,809	735,000	2,063,586	200,000
• Debt Service Funds	195,363	707,160	727,592	345,500	709,931	720,000
• Debt Service Reserve Funds	379,565	275,101	201,332	-	21,384	-
• Revenue Fund	119,745	918,052	1,135,665	900,000	646,865	600,000
• Other Funds	106,480	405,755	441,087	-	-	-
• Interest in Trusteed Funds	2,000,000	-	-	-	-	-
PENNVEST PROJECTS	1,724,813	1,724,813	269,066	-		3,000,000
TRANSFER FROM CONSTRUCTION FUND						
Engineering Department Reimbursement	945,000	1,158,458	1,430,186	1,000,000	1,461,395	1,200,000
Reimbursement for Capital Projects	-		-	-		
TOTAL SOURCES OF FUNDS	$ 120,672,403	$ 126,374,947	$ 130,987,997	$ 140,188,500	$ 132,882,418	$ 147,516,937
REVENUE FUND CASH	$ 20,616,264	$ 26,235,144	$ 35,023,212	$ 35,149,982	38,313,377	$ 35,149,983
TOTAL AVAILABLE FUNDS	**$ 141,288,667**	**$ 152,610,091**	**$ 166,011,209**	**$ 175,338,482**	**$ 171,195,795**	**$ 182,666,920**

Current Expenses

Table 11 presents the Actual 2005, 2006, and 2007, Projected 2008, and Adopted 2009 Budget of Operating Expenses.

Of particular note on this table is line item "Sewage" for 2009. This reflects an expense of $3,950,000 per month for 12 months as noted in the 2009 Operating Budget. Prior to 2004, the Authority purchased delinquent collections from ALCOSAN for $4,000,000 annually. In 2004, the Authority began paying ALCOSAN current treatment charges thereby creating a sewage collection expense of $47,400,000. By doing so, the Authority is in a position to improve delinquent sewer collections and better plan for the future.

Rate Covenant Calculations

Table 12 presents the Actual 2005, 2006, and 2007, the projected 2008 and the budgeted 2009 Coverage Factors based upon Revenues and Earnings, Operating Expenses and Debt Service Requirements.

The Authority's Trust Indenture requires that water rates be established in order to provide a minimum Coverage Factor (ratio of net funds available for Debt Service to actual Debt Service Requirements) of 1.20.

As can be seen from Table 12, the projected Coverage Factor for 2008 is 1.90 and the 2009 Coverage Factor based on the adopted budget is 1.79. Based upon the above analysis, it is the Consulting Engineer's opinion that the existing water and sewer rates, together with available cash and interest earnings, will provide sufficient funds to cover operating expenses and to satisfy the Rate Covenant Test during 2009, as provided for in the Authority's Trust Indenture.

It is noted that since 1999, Operating Revenues (Water Sales and Miscellaneous Charges) plus recurring Interest Revenues (Interest Income from the Debt Service Funds and Debt Service Revenue Funds) have fallen from where they addressed approximately 105.9 percent of the Authority Total Expenses (Operating Expenses and Debt Service Requirements) in 1999 to 86.6 percent in 2003. Since 2004 this ratio is increasing. As a result of increased revenues, which offset the operating costs, 100 percent of the Operating Costs in 2009 should be covered by revenues.

Although Figure 2 shows the decline in this ratio from 1999 to 2001, the situation appears to have stabilized. Due to the 2006 and 2007 rate increases and increased revenues, this ratio is back to 100 percent.

Table 11
Expenses

	Actual 2005	Actual 2006	Actual 2007	Budget 2008	Unaudited 2008	Budget 2009
WATER EXPENSES						
Total Wages, Salaries and Expenses						
Administration	$ 7,773,533	$ 7,726,045	$ 8,870,493	$ 10,717,853	$ 8,933,445	$ 8,892,291
Operations	19,380,019	22,492,299	24,985,625	27,178,323	27,780,221	29,013,252
Engineering	634,762	1,002,817	1,152,314	1,624,777	1,210,019	1,378,045
Employee Benefits	2,188,678	2,222,847	2,332,963	2,773,000	2,607,091	3,315,000
Total Wages, Salaries and Expenses	29,976,992	33,444,008	37,341,395	42,293,953	40,530,776	42,598,588
CITY EXPENSES						
Water Indirect Costs	1,850,000	1,850,000	1,850,000	1,850,000	1,850,000	1,850,000
Sewer Direct Costs	2,300,000	2,300,000	2,300,000	2,300,000	3,385,000	2,300,000
Sewer Indirect Costs	3,000,000	3,000,000	5,500,000	5,500,000	4,415,000	4,500,000
TOTAL CITY EXPENSES	7,150,000	7,150,000	9,650,000	9,650,000	9,650,000	8,650,000
SUBSIDY NON-CITY RESIDENTS	1,157,413	809,258	670,291	750,000	1,070,172	1,300,000
DELINQUENT SEWAGE CHARGES	-	-	-	-	-	-
Sewage	33,836,020	35,116,648	37,728,455	48,700,000	37,069,759	47,400,000
TOTAL OPERATING EXPENSES	72,120,425	76,519,914	85,390,141	101,393,953	88,320,707	99,948,588
CAPITAL EXPENDITURES						
Capital Projects Fund	-	-	-	-	-	-
Self Insured Escrow	65,080	-	-	-	-	-
PENNVEST Projects	1,206,414	1,206,414	-	-	-	3,000,000
TOTAL CAPITAL EXPENDITURES	1,271,494	1,206,414	-	-	-	3,000,000
DEBT SERVICE EXPENSES						
Principal on Bonds	15,630,000	16,780,000	16,505,000	14,730,000	14,730,000	13,820,000
Interest on Bonds	23,782,105	25,278,307	25,071,361	22,954,776	27,782,660	29,567,136
Trustee Fees	93,260	89,620	96,695	136,000	162,444	270,943
PENNVEST Loan Payments	917,128	926,472	964,856	947,000	966,688	960,270
Reimbursements from Municipalities	-	(96,973)	(156,931)	(100,000)	43,861	(50,000)
TOTAL DEBT SERVICE EXPENSES	40,422,493	42,977,426	42,480,981	38,667,776	43,685,653	44,568,349
TOTAL EXPENSES	$ 113,814,412	$ 120,703,754	$ 127,871,122	$ 140,061,729	$ 132,006,360	$ 147,516,937

Table 12

Debt Service Coverage Factor

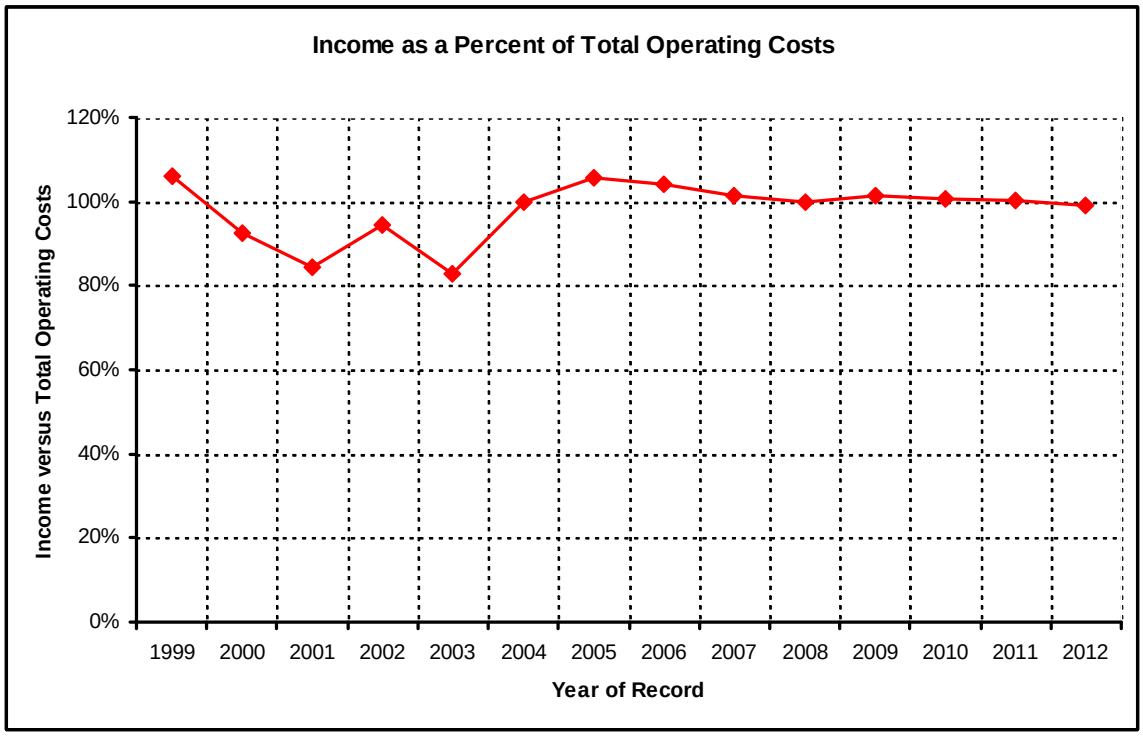
	Actual 2005	Actual 2006	Actual 2007	Budget 2008	Unaudited 2008	Budget 2009
Cash	$ 20,616,264	$ 26,235,144	$ 35,023,212	$ 35,149,982	$ 38,313,377	$ 35,149,983
Water Collections	80,187,610	82,541,610	85,137,224	87,050,000	87,045,808	88,493,000
Interest Earnings	3,124,482	4,181,127	4,006,485	1,980,500	3,502,666	5,623,937
Transfer - Engineering from CIP	945,000	1,158,458	1,430,186	1,000,000	1,461,395	1,200,000
Transfer - Reimbursement from CIP	-	-	-	-	-	-
PENNVEST Projects	1,724,813	1,724,813	269,066	-	-	3,000,000
Tap Fee Collections	859,544	1,423,875	1,312,070	1,200,000	2,457,395	1,700,000
Sewage Collections	33,291,961	34,806,071	37,466,443	48,200,000	37,277,842	46,200,000
Other Collections	538,993	538,993	1,366,523	758,000	1,137,312	1,300,000
TOTAL AVAILABLE FUNDS	$ 141,288,667	$ 152,610,091	$ 166,011,209	$ 175,338,482	$ 171,195,795	$ 182,666,920
OPERATING EXPENSES	72,120,425	76,519,914	85,390,141	101,393,953	88,320,707	99,948,588
CAPITAL PROJECTS	1,271,494	1,206,414	-	-	-	3,000,000
NET AVAILABLE FOR DEBT SERVICE	$ 67,896,748	$ 74,883,763	$ 80,621,068	$ 73,944,529	$ 82,875,087	$ 79,718,332
DEBT SERVICE REQUIREMENTS	40,422,493	42,977,426	42,480,981	38,667,776	43,685,653	44,568,349
COVERAGE FACTOR	1.68	1.74	1.90	1.91	1.90	1.79

Table 13
Total Income vs. Total Operating Costs

	Actual 2005	Actual 2006	Actual 2007	Unaudited 2008*	Projected 2009	Projected 2010	Projected 2011	Projected 2012
TOTAL COSTS								
• Operating Expenses	$ 73,391,919	$ 77,726,328	$ 85,390,141	$ 88,320,707	$ 92,736,743	$ 97,373,580	$ 102,242,259	$ 107,354,372
• Debt Service	40,422,493	42,977,426	42,480,981	43,685,653	40,397,188	40,400,438	40,403,388	40,403,388
Total Operating Costs	$ 113,814,412	$ 120,703,754	$ 127,871,122	$ 132,006,360	$ 133,133,931	$ 137,774,018	$ 142,645,647	$ 147,757,760
INCOME								
• Revenue	$ 117,008,928	$ 121,654,827	$ 125,614,989	$ 128,242,440	$ 132,089,713	$ 136,052,405	$ 140,133,977	$ 144,337,996
• Recurring Interest	3,124,482	4,181,127	4,006,485	3,502,666	3,047,319	2,651,168	2,651,168	2,306,516
Total Income	$ 120,133,410	$ 125,835,954	$ 129,621,474	$ 131,745,106	$ 135,137,032	$ 138,703,572	$ 142,785,144	$ 146,644,512
Total Income as a Percent of Total Operating Costs	105.6%	104.3%	101.4%	99.8%	101.5%	100.7%	100.1%	99.2%

* Based on unaudited expenditures

Figure 2
Income as a Percentage of Total Operating Costs



The Authority has been able to maintain the required Coverage Factor and satisfy the financial obligations as a result of the past buildup of cash reserves and the interest earnings on the Authority's Construction Funds. As Construction Funds are spent, interest income from these funds will be reduced.

EXHIBIT A
CAPITAL IMPROVEMENT PROGRAM BUDGET
2002 BOND ISSUE
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

DISTRIBUTION OF FUNDS	BUDGET
WATER SYSTEM	
Distribution System	$ 16,588,342.04
Pumping and Storage	3,847,617.37
Treatment Plant	2,214,177.27
Tools and Equipment	1,676,797.13
Miscellaneous	5,646,267.74
TOTAL WATER SYSTEM	$ 29,973,201.55
SEWER SYSTEM	23,899,307.41
CITY AND URA PROJECTS	19,248,405.24
ENGINEERING AND CONSTRUCTION MANAGEMENT	13,303,887.07
CONTINGENCIES	(0.00)
REVENUE FUND REIMBURSEMENT	5,173,000.00
TOTAL 2002 BOND ISSUE / C.I.P.	$ 91,597,801.27

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-1	1	---	EMERGENCY WATER LINE CONTRACTS	12-02	400,000.00				
				164-02	(60,000.00)				To Exh. 6A-1, Line 1A
				44-03	(250,000.00)				To Contingency; Exh 6E-1, Line 1
				147-03	(45,000.00)				To Contingency; Exh 6E-1, Line 1
				49-04	(45,000.00)	0.00	X		To Exh 6A-1 Line 3C
6A-1	1A	---	EMER. MCC UPGRADE AT BRUECKEN	164-02	60,000.00				From Exh. 6A-1, Line 1
			PUMP STATION	147-03	(12,033.36)	47,966.64	X		To Contingency; Exh 6E-1, Line 1
6A-1	2	---	VALVE REPLACEMENT CONTRACTS	12-02	400,000.00				
				164-02	(18,142.04)				To Exh. 6A-1, Line 2B
				125-03	(43,461.00)				To Exh. 6A-1, Line 2B
				136-03	(92,616.90)				To Exh. 6A-1, Line 2B
				147-03	(34,150.92)				To Exh. 6A-1, Line 2B
				97-05	(211,629.14)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-1	2A	03001	LARGE VALVE REPLACEMENT CONTRACT						
6A-1	2B	02025	SMALL VALVE REPLACEMENT CONTRACT	81-02	234,995.00				From Contingency: Exh. 6E-1, Line 1
				81-02	400,000.00				From Exh. 6A-1, Line 9
				164-02	18,142.04				From Exh. 6A-1, Line 2
				125-03	43,461.00				From Exh. 6A-1, Line 2
				136-03	92,616.90				From Exh. 6A-1, Line 2
				147-03	34,150.92				From Exh. 6A-1, Line 2
				28-04	43,675.74	867,041.60	X		From Contingency: Exh. 6E-1, Line 1
6A-1	2C	03401	PURCHASE OF BRICKS FOR GRANT ST. REPAIR	107-03	11,823.00	11,823.00	X		From Contingency: Exh. 6E-1, Line 1
6A-1	3	---	WATERLINE REPAIR AND REPLACEMENT CONTRACT	12-02	2,008,970.00				
				81-02	(297,632.73)				To Exh. 6A-1, Line 3A
				81-02	(1,000,000.00)				To Exh. 6A-1, Line 3B
				93-02	(51,184.77)				To Exh. 6A-1, Line 3A
				110-02	(176,708.00)				To Exh. 6A-1, Line 3A
				117-02	111,085.50				From Exh. 6A-1, Line 3B
				131-02	(187,012.00)				To Exh. 6A-1, Line 3A
				164-02	(146,099.60)				To Exh. 6A-1, Line 3A
				10-03	(181,619.91)				To Exh. 6A-1, Line 3A
				18-03	(47,659.47)				To Exh. 6A-1, Line 3A
				82-03	(32,138.78)				
				42-04	(0.24)				To Exh 6A-1 Line 3A
				67-05	59,275.58				From Exh 6A-1 Line 3C
				97-05	(59,275.58)	0.00	X		To Contingency; Exh 6E-1, Line 1

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-1	3A	01005	01 WATERLINE REPAIR & REPLACE	81-02	297,632.73				From Exh. 6A-1, Line 3
				93-02	51,184.77				From Exh. 6A-1, Line 3
				110-02	176,708.00				From Exh. 6A-1, Line 3
				131-02	187,012.00				From Exh. 6A-1, Line 3
				164-02	146,099.60				From Exh. 6A-1, Line 3
				10-03	181,619.91				From Exh. 6A-1, Line 3
				18-03	47,659.47				From Exh. 6A-1, Line 3
				82-03	32,138.78				From Exh. 6A-1, Line 3
				82-03	13,466.33				From Contingency; Exh 6E-1, Line 1
				42-04	0.24	1,133,521.83	X		From Exh 6A-1 Line 3
6A-1	3B	02002	02 WATERLINE REPAIR & REPLACE	81-02	1,000,000.00				
				117-02	(111,085.50)				To Exh. 6A-1, Line 3
				107-03	408,578.47				From Contingency; Exh 6E-1, Line 1
				125-03	261,124.27				From Contingency; Exh 6E-1, Line 1
				136-03	117,822.25				From Contingency; Exh 6E-1, Line 1
				147-03	8,249.78				From Contingency; Exh 6E-1, Line 1
				11-04	337,241.45				From Exh. 6C-1, Line 2
				103-04	(394,612.81)	1,627,317.91	X		To Contin Exh 6E-1 Line 1
6A-1	3C	03017	03 WATERLINE REPAIR & REPLACE	44-03	882,752.50				From Contingency; Exh 6E-1, Line 1
				49-04	45,000.00				From Exh 6A-1 Line 1
				49-04	190,001.18				From Contin Exh 6E-1 Line 1
				67-05	(59,275.58)	1,058,478.10	X		To Exh 6A-1 Line 3
6A-1	4	---	PURCHASE FIRE HYDRANTS	12-02	150,000.00				
				81-02	(56,570.00)				To Contingency: Exh. 6E-1, Line 1
				61-03	(39,747.00)				To Exh. 6A-1, Line 4A
				42-04	(39,467.00)				To Exh. 6A-1, Line 4A
				61-04	(14,216.00)	0.00	X		To contingency Exh 6E-1 Ln 1
6A-1	4A	01034	02 PURCHASE FIRE HYDRANTS	61-03	39,747.00				From Exh. 6A-1, Line 4
				42-04	39,467.00	79,214.00	X		From Exh. 6A-1 Line 4
6A-1	4B	I-A1.04009	PURCHASE FIRE HYDRANTS	129-04	40,000.00				From Exh 6E-1 Line 1
				14-05	21,500.00				From Exh 6E-1 Line 1
				50-06	11,000.00				From Exh 6E-1 Line 1
				84-06	(545.00)	71,955.00	X		To Contingency; Exh 6E-1, Line 1
6A-1	5	---	PURCHASE WATER METERS	12-02	900,000.00				
				44-03	(450,000.00)				To Contingency; Exh 6E-1, Line 1
				107-03	(300,000.00)				To Contingency; Exh 6E-1, Line 1
				05-05	(150,000.00)	0.00	X		
6A-1	5A	02015	2004 PURCHASE WATER METERS	05-05	150,000.00				From Exh 6A-1, Line 5
				110-07	(34,207.50)	115,792.50	X		To Contingency; Exh 6E-1, Line 1

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

WATER SYSTEM - PUMPING & STORAGE

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-2	1	03003	UPDATE SWITCHGEAR AT THE PUMP STATIONS	12-02	175,000.00				
				147-03	(175,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-2	2	02005	INSPECT ALL STORAGE TANKS	12-02	100,000.00				
				44-03	(100,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-2	3	03004	CONVERT CHLORINE FACILITIES TO HYPOCHLORITE	12-02	175,000.00				
				18-03	(55,803.00)				To Exh. 6A-2, Line 3A
				44-03	(100,000.00)				To Contingency; Exh 6E-1, Line 1
				147-03	(19,170.00)		X		To Contingency; Exh 6E-1, Line 1
				42-04	(27.00)	0.00			To Exh 6A-2 Line 3A
6A-2	3A	03004-02	PURCHASE PUMPS & OTHER EQUIPMENT	18-03	55,803.00				From Exh. 6A-2 Line 3
				42-04	27.00	55,830.00	X		From Exh. 6A-2 Line 3
6A-2	5A	98001-01	HIGHLAND NO. 1 SYSTEM	81-02	266,879.29				From Continuing Projects: Exh. 6E-1, Line 2
			REPAIRS & MODIFICATIONS - CONT. 1	82-03	63,661.27				From Contingency: Exh. 6E-1, Line 1
				147-03	93,691.47	424,232.03	X		From Contingency: Exh. 6E-1, Line 1
6A-2	5C	98001-02	HIGHLAND NO. 1 SYSTEM & FOUND.	81-02	230,958.74				From Continuing Projects: Exh. 6E-1, Line 2
		98001-09	REPAIRS & MODIFICATIONS - CONT. 2	164-02	4,162.97				From Contingency: Exh. 6E-1, Line 1
				44-03	(124,840.91)				To Contingency: Exh. 6E-1, Line 1
				67-05	(7,500.00)	102,780.80	X		To Contingency: Exh. 6E-1, Line 1
6A-2	5D	98001-03	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	133,100.78				From Continuing Projects: Exh. 6E-1, Line 2
			GENERAL CONSTRUCTION	117-02	9,117.19				From Contingency: Exh. 6E-1, Line 1
				44-03	(3,332.02)				To Contingency: Exh. 6E-1, Line 1
				82-03	4,862.63				From Contingency: Exh. 6E-1, Line 1
				147-03	(648.00)				To Contingency: Exh. 6E-1, Line 1
				84-06	(22,837.74)	120,262.84	X		
6A-2	5E	98001-04	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	188,350.95				From Continuing Projects: Exh. 6E-1, Line 2
			ELECTRICAL CONTRACT	93-02	24,164.06				From Contingency: Exh. 6E-1, Line 1
				148-02	68,222.21				From Contingency: Exh. 6E-1, Line 1
				63-06	80,000.00				From Contingency: Exh. 6E-1, Line 1
				98-07	15,091.97	375,829.19	X		From Contingency: Exh. 6E-1, Line 1
6A-2	5E-1	- - -	HIGHLAND NO. 1 - MEMBRANE FILTR.	25-03	10,667.20	10,667.20	X		From Contingency: Exh. 6E-1, Line 1
			LIGHT POLE RELOCATION						
6A-2	5F	98001-05	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	28,905.33				From Continuing Projects: Exh. 6E-1, Line 2
			HVAC CONTRACT	25-03	(2,630.75)	26,274.58	X		From Contingency: Exh. 6E-1, Line 1

WATER SYSTEM - PUMPING & STORAGE

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-2	5G	98001-06	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	12,137.49				From Continuing Projects: Exh. 6E-1, Line 2
			PLUMBING CONTRACT	25-03	36,524.25				From Contingency: Exh. 6E-1, Line 1
				107-03	(300.00)	48,361.74	X		To Contingency; Exh 6E-1, Line 1
6A-2	5H	98001-07	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	1,392,436.10				From Continuing Projects: Exh. 6E-1, Line 2
			ELEMENTS	131-02	(715,825.00)				From Contingency: Exh. 6E-1, Line 1
				17-08	(27,000.00)				To Contingency Exh 6E-1 Line 1
					(535,489.50)	114,121.60			2002 Bond Closed
6A-2	5I	98001-08	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	136,565.65				From Continuing Projects: Exh. 6E-1, Line 2
			HIGHLAND PARK SEWER	148-02	2,308.13				
				82-03	8,444.93	147,318.71	X		From Contingency: Exh. 6E-1, Line 1
6A-2	5O	98001-15	LANDSCAPING WORK	81-02	804,389.58				From Contingency: Exh. 6E-1, Line 1
				148-02	269,945.77				From Contingency: Exh. 6E-1, Line 1
				164-02	69,500.00				From Contingency: Exh. 6E-1, Line 1
				25-03	18,436.00				From Contingency: Exh. 6E-1, Line 1
				107-03	12,838.37				From Contingency: Exh. 6E-1, Line 1
				136-03	38,693.64				From Contingency: Exh. 6E-1, Line 1
				42-04	(21,207.03)	1,192,596.33	X		To Contingency Exh 6E-1 Line 1
6A-2	5P	98001-16	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	127,914.85				From Continuing Projects: Exh. 6E-1, Line 2
			FILTRATION EQUIPMENT INSTALLATION	93-02	15,838.53				From Contingency: Exh. 6E-1, Line 1
				148-02	35,187.61				From Contingency: Exh. 6E-1, Line 1
				25-03	22,600.51				From Contingency: Exh. 6E-1, Line 1
				82-03	45,741.59				From Contingency: Exh. 6E-1, Line 1
				147-03	1,848.25				From Contingency: Exh. 6E-1, Line 1
				129-04	1,965.04				From Contingency: Exh. 6E-1, Line 1
				6-06	7,350.00				From Contingency: Exh. 6E-1, Line 1
					(1,808.74)	256,637.64	X		2002 Bond Closed
6A-2	5Q	98001-17	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	2,822.98	2,822.98	X		
			ASSEMBLE STRUCTURAL STEEL						From Continuing Projects: Exh. 6E-1, Line 2
6A-2	5R	98001-18	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	10,101.03	10,101.03	X		
			CONSTRUCT MASONRY WALLS						From Continuing Projects: Exh. 6E-1, Line 2
6A-2	5S	98001-19	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	5,782.61	5,782.61	X		
			CONSTRUCT ROOF						From Continuing Projects: Exh. 6E-1, Line 2
6A-2	5T	98001-20	HIGHLAND NO. 1 - MEMBRANE FILTR.	81-02	4,167.29	4,167.29	X		
			STAINLESS STEEL PIPE						From Continuing Projects: Exh. 6E-1, Line 2
6A-2	5U	---	LIGHT POLE RELOCATION (DQE)	10-03	4,517.20	4,517.20	X		
									From Contingency: Exh. 6E-1, Line 1
6A-2	5V	98001-21	HIGHLAND NO. 1 - MEMBRANE FILTR.						
			CHLORINE FACILITIES						

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-1	5B	03010	PURCHASE WATER METERS						
6A-1	6	02004	HIGHLAND #2 TO HIGHLAND #1 EMERGENCY FEED	12-02	750,000.00				
				107-03	(750,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-1	7	---	SMALL FIRE PROTECTION SYSTEM UPGRADES	12-02	1,559,340.00				
				81-02	(710,796.53)				To Exh. 6A-1, Line 7A
				93-02	(5,500.00)				To Exh. 6A-1, Line 7A
				110-02	(8,609.95)				To Exh. 6A-1, Line 7A
				117-02	(761,385.00)				To Exh. 6A-1, Line 7A & Line 7B
				131-02	(73,028.52)				To Exh. 6A-1, Line 7A
				90-04	(20.00)	0.00	X		To Exh 6A-1 Ln 7B
6A-1	7A	00015	FIRE PROTECTION SYS. UPGRADES	81-02	710,796.53				From Exh. 6A-1, Line 7
				93-02	5,500.00				From Exh. 6A-1, Line 7
				110-02	8,609.95				From Exh. 6A-1, Line 7
				117-02	132,050.00				From Exh. 6A-1, Line 7
				131-02	190,718.19				From Exh. 6A-1, Line 7 and Exh. 6E-1, Line 1
				148-02	51,549.65	1,099,224.32	X		From Contingency: Exh. 6E-1, Line 1
6A-1	7B	02003	'02 SMALL FIRE PROTECTION SYSTEM UPGRADES	117-02	629,335.00				From Exh. 6A-1, Line 7
				82-03	14,857.64				From Contingency: Exh. 6E-1, Line 1
				107-03	14,286.48				From Contingency: Exh. 6E-1, Line 1
				28-04	27,934.49				From Contingency: Exh. 6E-1, Line 1
				90-04	20.00	686,433.61	X		From Exh. 6A-1, Line 7
6A-1	7C	03016	'03 SMALL FIRE PROTECTION SYSTEM UPGRADES	44-03	797,096.00				From Contingency: Exh. 6E-1, Line 1
				90-04	32,365.00				From Contingency: Exh. 6E-1, Line 1
				103-04	7,334.81				From Contingency: Exh. 6E-1, Line 1
				85-05	1,784.85	838,580.66	X		From Contingency: Exh. 6E-1, Line 1
6A-1	8	---	OAKLAND WATER SYSTEM IMPROVEMENTS	12-02	500,000.00				
				107-03	(200,000.00)				To Exh. 6A-1, Line 8A
				107-03	(300,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-1	8A	03023	SCHENLEY PLAZA WATER AND SEWER IMPROVE.	107-03	200,000.00				From Exh. 6A-1, Line 8
				147-03	(200,000.00)				To Contingency; Exh 6E-1, Line 1
				11-04	335,000.00				From Exh 6C-1, Line 3
				27-05	(267,726.97)	67,273.03	X		To Exh 6B-1 Line 1C
6A-1	9	---	LOWER WEST END WATER SYSTEM RECONSTR.	12-02	400,000.00				
				81-02	(400,000.00)				To Exh. 6A-1, Line 2B
				44-03	1,400,000.00				From Contingency: Exh. 6E-1, Line 1
				49-04	(1,400,000.00)	0.00			To Contin Exh 6E-1 Line 1
6A-1	10	98027-02	LINCOLN P.S. DISCHARGE LINE	81-02	32,240.99				From Continuing Projects: Exh. 6E-1, Line 2
				131-02	1,000.00	33,240.99	X		

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-1	11A	98006	FOX CHAPEL - PUMPS	81-02	3,701.38				From Continuing Projects: Exh. 6E-1, Line 2
				110-02	950.00	4,651.38	X		From Contingency: Exh. 6E-1, Line 1
6A-1	11B	98005	FOX CHAPEL - ELEC. EQUP	81-02	2,993.20	2,993.20	X		From Continuing Projects: Exh. 6E-1, Line 2
6A-1	11C	98009	FOX CHAPEL - MECHANICAL	81-02	11,292.66				From Continuing Projects: Exh. 6E-1, Line 2
				118-02	(5,792.66)	5,500.00	X		To Contingency: Exh 6E-1 Line 1
6A-1	11D	98010	FOX CHAPEL - ELECTRICAL	81-02	16,921.95				From Continuing Projects: Exh. 6E-1, Line 2
				93-02	2,996.53				From Contingency: Exh. 6E-1, Line 1
				110-02	200.00		X		From Contingency: Exh. 6E-1, Line 1
				42-04	(0.50)	20,117.98			To Contingency: Exh 6E-1 Line 1
6A-1	11F		FOX CHAPEL - LOUIS GESMOND	134-02	4,600.00	4,600.00	X		From Contingency: Exh. 6E-1, Line 1
6A-1	11E	98008	FOX CHAPEL - WATER LINE	81-02	35,116.93				From Continuing Projects: Exh. 6E-1, Line 2
				131-02	15,503.18	50,620.11	X		
6A-1	12	98023	AUTOMATED METER READING (AMR) PROGRAM	81-02	1,500,000.00				From Exh. 6D-1, Line 2
				81-02	1,700,000.00				From Exh. 6D-1, Line 3
				81-02	5,433,498.32				From Contingency: Exh. 6E-1, Line 1
				84-06	7,047.98	8,640,546.30	X		From Contingency: Exh. 6E-1, Line 1
6A-1	13	03002	SLIPLINE 60-INCH FROM WTP TO MONTROSE				X		
6A-1	14	02032	PUMP STATION EMERGENCY BYPASS FACILITIES				X		
6A-1	15	03024	AIR/VACUUM VALVES @ 60" N. SIDE WATERLINE	107-03	50,000.00				From Contingency: Exh. 6E-1, Line 1
				147-03	(50,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
6A-1	16	03024	WATER DIST. FLUSHING PROJECT - PHASE I				X		
6A-1	17	03027	LINER FOR 12" HERRON HILL TANK FEED MAIN				X		
6A-1	18		BOUNDARY STREET 42" WATER SLIP LINING	31-04	-				
				42-04	125,000.00				From Exh 6E-1 Line 1
				14-05	(3,550.12)	121,449.88	X		To Contingency; Exh 6E-1, Line 1
6A-1	19		WATER SYSTEM IMPROVEMENT PROJECT						
			PHASE III REIMBURSEMENT	97-04	265,000.00				From Exh 6E-1 Line 1
				127-05	(265,000.00)	0.00	X		To Contingency; Exh 6E-1, Line 1
				TOTAL		16,588,342.04			

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-3	6	02007	REHABILITATION OF CLEARWELL	12-02	200,000.00				
				107-03	(200,000.00)	0.00	X		
6A-3	7	02008	REHABILITATION OF CLARIFIER	12-02	100,000.00				
				49-04	29,515.10				From Contingency Exh 6E-1 Line 1
				67-05	(200.56)	129,314.54	X		To Contingency: Exh. 6E-1, Line 1
6A-3	8	99025	CONE VALVE #3 REPLACEMENT	12-02	141,750.00				
				44-03	(322.45)	141,427.55	X		To Contingency: Exh. 6E-1, Line 1
6A-3	9	02009	SCADA UPGRADE	12-02	100,000.00				
				147-03	(100,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6A-3	10A	99004-G	CHEM. FACILITIES UPGRADE - GEN.	81-02	253,624.10				From Contingency: Exh. 6E-1, Line 1
				110-02	80,581.50				From Contingency: Exh. 6E-1, Line 1
				148-02	39,703.14				From Contingency: Exh. 6E-1, Line 1
				18-03	10,868.35				From Contingency: Exh. 6E-1, Line 1
				36-03	10,888.67				From Contingency: Exh. 6E-1, Line 1
				44-03	53,380.66				From Contingency: Exh. 6E-1, Line 1
				82-03	53,803.69				From Contingency: Exh. 6E-1, Line 1
				61-04	(45,274.16)				To Contingency Exh 6E-1 Line 1
				129-04	8,306.00				From Contingency: Exh. 6E-1, Line 1
				67-05	63.37				From Contingency: Exh. 6E-1, Line 1
				127-05	(151.46)				To Contingency Exh 6E-1 Line 1
				6-26	42,526.62				From Contingency: Exh. 6E-1, Line 1
				50-06	1,226.04	509,546.52	X		From Contingency: Exh. 6E-1, Line 1
6A-3	10B	99004-P	CHEM. FACILITIES UPGRADE - PLUMB.	81-02	8,775.19				From Continuing Projects: Exh. 6E-1, Line 2
				164-02	6,183.25	14,958.44	X		From Contingency: Exh. 6E-1, Line 1
6A-3	10C	99004-H	CHEM. FACILITIES UPGRADE - HVAC	81-02	70,756.73				From Continuing Projects: Exh. 6E-1, Line 2
				110-02	(33,106.92)				To Contingency: Exh. 6E-1, Line 1
				117-02	4,513.46				From Contingency: Exh. 6E-1, Line 1
				82-03	3,546.00				From Contingency: Exh. 6E-1, Line 1
				90-04	1,716.00	47,425.27	X		From Contingency: Exh. 6E-1, Line 1
6A-3	10D	01015	CHEM. FACILITIES UPGRADE - ELEC.	81-02	120,081.48				From Contingency: Exh. 6E-1, Line 1
				93-02	(36,220.65)				To Contingency: Exh. 6E-1, Line 1
				110-02	30,660.29				From Contingency: Exh. 6E-1, Line 1
				131-02	1,575.28				From Contingency: Exh. 6E-1, Line 1
				18-03	14,036.28				From Contingency: Exh. 6E-1, Line 1
				44-03	11,487.61				From Contingency: Exh. 6E-1, Line 1
				05-04	11,671.08				From Contingency: Exh. 6E-1, Line 1
				129-04	3,131.12	156,422.49	X		From Contingency: Exh. 6E-1, Line 1

WATER SYSTEM - PUMPING & STORAGE

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-2	6	92018	MILLVALE PUMP STA.	81-02	750.00				
				84-06	(750.00)	0.00	X		From Continuing Projects: Exh. 6E-1, Line 2
6A-2	7	02031	LANPHER RESERVOIR SECURITY LIGHT REPAIR	18-03	18,320.00				To Contingency: Exh. 6E-1, Line 1
				82-03	(2,660.80)	15,659.20	X		From Contingency: Exh. 6E-1, Line 1
									To Contingency: Exh. 6E-1, Line 2
6A-2	8A	03018-01 & 92024-01	HOWARD ST. P.S. - GENERAL	44-03	170,000.00				
				125-03	128,000.00				From Contingency: Exh. 6E-1, Line 1
				125-03	294,000.00				From Exh. 6A-2, Line 8E
				42-04	24,023.00				From Contingency: Exh. 6E-1, Line 1
				61-04	21,243.00				From Exh. 6E-1 Line 1
				129-04	97,921.03				From Contingency: Exh. 6E-1, Line 1
				27-05	13,317.90				From Contingency: Exh. 6E-1, Line 1
				6-06	5,419.26				From Contingency: Exh. 6E-1, Line 1
					(13,894.30)	740,029.89	X		2002 Bond Closed
6A-2	8B	03018-02	HOWARD ST. P.S. - HEATING	44-03	44,000.00				From Contingency: Exh. 6E-1, Line 1
				107-03	7,900.00				From Contingency: Exh. 6E-1, Line 1
				103-04	1,858.00	53,758.00	X		From Contingency: Exh. 6E-1, Line 1
									From Contingency: Exh. 6E-1, Line 1
6A-2	8C	03018-03	HOWARD ST. P.S. - PLUMBING	44-03	23,000.00				
				125-03	21,800.00				From Contingency: Exh. 6E-1, Line 1
				42-04	9,877.82	54,677.82	X		From Contingency: Exh. 6E-1, Line 1
									From Contingency: Exh. 6E-1, Line 1
6A-2	8D	03018-04	HOWARD ST. P.S. - ELECTRICAL WORK	44-03	35,000.00				
				125-03	34,800.00				From Contingency: Exh. 6E-1, Line 1
				61-04	9,155.00				From Contingency: Exh. 6E-1, Line 1
				90-04	2,233.69	81,188.69	X		From Contingency: Exh. 6E-1, Line 1
									From Contingency: Exh. 6E-1, Line 1
6A-2	8E	92024-02	HOWARD ST. P.S. - SITE WORK	44-03	128,000.00				
				125-03	(128,000.00)	0.00	X		From Contingency: Exh. 6E-1, Line 1
									To Exh. 6A-2, Line 8A
				TOTAL		3,847,617.37			

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-3	11A	94010-E	PILOT PLANT - ELEC.	81-02	4,521.09	4,521.09	X		From Continuing Projects: Exh. 6E-1, Line 2
6A-3	11B	94010	PILOT PLANT	81-02	6,051.00				From Continuing Projects: Exh. 6E-1, Line 2
				84-06	(6,051.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6A-3	11C	94010-G	PILOT PLANT - GEN	81-02	29,430.01				From Continuing Projects: Exh. 6E-1, Line 2
				25-03	26,412.00				From Contingency: Exh. 6E-1, Line 1
				136-03	(30.00)				To Contingency: Exh. 6E-1, Line 1
				42-04	(0.01)	55,812.00	X		To Contingency: Exh. 6E-1, Line 1
6A-3	12A	01009-01	ROSS P.S. BOILER REPLACEMENT HEATING CONTRACT	81-02	87,338.76				From Continuing Projects: Exh. 6E-1, Line 2
				110-02	5,154.21				
				164-02	1,134.14	93,627.11	X		From Contingency: Exh. 6E-1, Line 1
6A-3	12B	01009-02	ROSS P.S. BOILER REPLACEMENT PLUMBING CONTRACT	81-02	8,252.44				From Continuing Projects: Exh. 6E-1, Line 2
				25-03	2,841.57				From Contingency: Exh. 6E-1, Line 1
				125-03	421.00	11,515.01	X		From Contingency: Exh. 6E-1, Line 1
6A-3	12C	01009-03	ROSS P.S. BOILER REPLACEMENT ELECTRICAL CONTRACT	81-02	21,482.40				From Continuing Projects: Exh. 6E-1, Line 2
				93-02	5,825.00				From Contingency: Exh. 6E-1, Line 1
				110-02	881.00				From Contingency: Exh. 6E-1, Line 1
				131-02	13,615.00				From Contingency: Exh. 6E-1, Line 1
				25-03	1,147.12				From Contingency: Exh. 6E-1, Line 1
				103-04	151,875.00				From Contingency: Exh. 6E-1, Line 1
				67-05	3,188.23	198,013.75	X		From Contingency: Exh. 6E-1, Line 1
6A-3	13	02030	SEDIMENTATION FENCING AND AREA PAVING						
6A-3	14	05002	LIME MACHINE REPLACEMENT	84-06	188,518.00	188,518.00		A	From Contingency: Exh. 6E-1, Line 1
				TOTAL		2,214,177.27			

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-3	1	01031	FILTER BACKWASH SLUDGE HANDLING	12-02	1,050,000.00				
				49-04	(1,050,000.00)	0.00	X		To Exh 6E-1 Line 1
6A-3	2	03005	UPGRADE SWITCHGEAR AT WTP FACILITIES	12-02	250,000.00				
				147-03	(250,000.00)	0.00	X		To Exhibit 6D-1, Line 2C
6A-3	3	03006	REHABILITATION OF LAB	12-02	175,000.00				
				44-03	50,000.00				From Contingency: Exh. 6E-1, Line 1
				107-03	(54,885.31)				To Exhibit 6A-3, Line 3B
				125-03	(44,218.00)				To Exhibit 6A-3, Line 3C
				42-04	2,404.80				From Exh 6A-3 Line 3C
				5-05	(9,840.00)				To Exhibit 6A-Line 3D
				44-05	(120,000.00)				To Exhibit 6A Line 3E
				67-05	1,538.51	0.00	X		From Contingency: Exh. 6E-1, Line 1
6A-3	3A	03022	LABORATORY EQUIPMENT	44-03	200,000.00				From Contingency: Exh. 6E-1, Line 1
				97-05	(200,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6A-3	3B	03025	RAPID PCR SYSTEM - (IDAHO TECHOLOGY, INC.)	107-03	54,885.31	54,885.31	X		From Exhibit 6A-3, Line 3
6A-3	3C	03022	FLAME/FURNACE ABSORPTION SPECTROMETER	125-03	44,218.00				
				42-04	(2,404.80)				To Exh 6A-3 Line 3
				67-05	2,055.20	43,868.40	X		From Contingency: Exh. 6E-1, Line 1
6A-3	3D	R-A3.04007	WTP OPERATIONS CENTER WINDOWS	5-05	9,840.00	9,840.00	X		From Exhibit 6A-3 Line 3
6A-3	3E	R-F1.05010	LABORATORY INFO SYSTEM (LIMS)	44-05	120,000.00				From Exhibit 6A-3 Line 3
				84-06	(45,305.57)	74,694.43	X		To Contingency: Exh. 6E-1, Line 1
6A-3	4	01036	REPAIR FILTER BUILDING ROOF	12-02	200,000.00				
				81-02	275,035.00				From Contingency: Exh. 6E-1, Line 1
				117-02	6,153.78				From Contingency: Exh. 6E-1, Line 1
				10-03	(1,401.42)	479,787.36	X		To Contingency: Exh. 6E-1, Line 1
6A-3	5	02006	REHABILITATION OF INLET FACILITIES & SCREENS	12-02	200,000.00				
				44-03	(100,000.00)				To Contingency: Exh. 6E-1, Line 1
				147-03	(100,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1

WATER SYSTEM - MISCELLANEOUS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-5	7	5850-01	I.T. SYSTEMS PHASE I - COMPUTER EQUIPMENT	131-02	100,000.00				
				25-03	(79,000.00)				To Exh. 6A-5, Line 6
				107-03	(807.84)				to Exh 6A-5 Line 5
				136-03	3,027.68	23,219.84	X		From Contingency: Exh. 6E-1, Line 1
6A-5	8	02033	HR/PAYROLL/TIME AND TAX FILING SERVICES	164-02	40,000.00				
				129-04	(5,263.41)	34,736.59	X		To Exh 6E-1 Line 1
6A-5	9	- - -	2002 PURCHASE OF CITY ASPHALT	10-03	130,766.29	130,766.29	X		From Contingency: Exh. 6E-1, Line 1
6A-5	10	- - -	I.T. SYSTEMS PHASE II -	107-03	790,000.00				From Exh. 6A-5, Line 1
			INTELLIGENCE/ea Consulting	17-08	(65,510.23)	724,489.77	X		To Exh 6E-1 Line 1
6A-5	11	- - -	I.T. SYSTEMS PHASE II -	107-03	613,000.00				From Exh. 6A-5, Line 1
			UNITED WATER CONSULTING SERVICE	107-03	109,000.00				
				61-04	45,000.00				From Contingency Exh 6E-1 Line 1
				73-04	63,000.00	830,000.00	X		From Contingency Exh 6E-1 Line 1
6A-5	12	- - -	I.T. SYSTEMS PHASE II -	107-03	66,000.00				From Exh. 6A-5, Line 1
			MICRONAGE	107-03	494,000.00				
				42-04	268,000.00				From Exh 6E-1 Line 1
				61-04	19,000.00				From Exh 6E-1 Line 1
				73-04	21,000.00				From Exh 6E-1 Line 1
				129-04	2,500.00	870,500.00	X		From Exh 6E-1 Line 1
6A-5	13	- - -	2003 PURCHASE OF CITY ASPHALT	136-03	23,839.10				From Contingency: Exh. 6E-1, Line 1
				42-04	32,751.21	56,590.31	X		From Contingency: Exh. 6E-1, Line 1
				TOTAL		5,646,267.74			

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

WATER SYSTEM - TOOLS & EQUIPMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-4	1	- - -	MISCELLANEOUS TOOLS, EQUIPMENT & VEHICLES	12-02	1,400,000.00				
				131-02	(192,150.00)				To Exh. 6A-4, Line 2
				164-02	(458,821.18)				To Exh. 6A-4, Lines 4 & 5
				18-03	(0.10)				To Exh. 6A-4, Line 5
				44-03	(400,000.00)				To Contingency: Exh. 6E-1, Line 1
				61-03	(144,995.00)				To Exh. 6A-4, Line 6
				61-03	(204,033.72)	0.00	X		To Exh. 6A-4, Line 7
6A-4	2	- - -	PURCHASE VACTOR TRUCK	131-02	192,150.00	192,150.00	X		From Exh. 6A-4, Line 1
6A-4	3	- - -	PURCHASE AND INSTALL TRUCK CRANE	131-02	52,288.60	52,288.60	X		From Exh. 6A-4, Line 1
6A-4	4	- - -	FIVE DUMP TRUCKS (5)	164-02	378,923.90	378,923.90	X		From Exh. 6A-4, Line 1
6A-4	5	- - -	BACKHOE	164-02	79,897.28				From Exh. 6A-4, Line 1
				18-03	0.10	79,897.38	X		From Exh. 6A-4, Line 1
6A-4	6	03801	PURCHASE SMALL VACTOR TRUCK	61-03	144,995.00	144,995.00	X		From Exh. 6A-4, Line 1
6A-4	7	03801	PURCHASE TV TRUCK	61-03	204,033.72				From Exh. 6A-4, Line 1
				61-03	22,701.28	226,735.00	X		From Contingency: Exh. 6E-1, Line 1
6A-4	8	06012	ARTICULATED CRANE MODEL F270A.22	84-06	195,439.00	195,439.00	X		From Contingency: Exh. 6E-1, Line 1
6A-4	9	06013	ARTICULATED CRANE MODEL F45A.22	84-06	92,857.00	92,857.00	X		From Contingency: Exh. 6E-1, Line 1
6A-4	10	06014	PURCHASE VACTOR TRUCK	84-06	276,701.43	276,701.43	X		From Contingency: Exh. 6E-1, Line 1
6A-4	11	ǂ-E1.06027-1	PARTS TO MODIFY VACTOR TRUCK	133-06	36,809.82	36,809.82	X		From Contingency: Exh. 6E-1, Line 1
				TOTAL		1,676,797.13			

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	1	- - -	SEWER IMPROVEMENT CONTRACTS	12-02	1,514,000.00				
				81-02	(509,984.62)				To Exh. 6B-1, Line 1A
				164-02	(763,727.50)				To Exh. 6B-1, Line 1B
				10-03	(240,287.88)	0.00	X		
6B-1	1A	00019	01 SEWER IMPROVEMENT CONTRACT	81-02	509,984.62				From Exh. 6B-1, Line 1
				64-07	(45,615.32)	464,369.30	X		To Contingency: Exh. 6E-1, Line 1
6B-1	1B	02001	02 SEWER IMPROVEMENT CONTRACT	164-02	763,727.50				From Exh. 6B-1, Line 1
				61-03	350,000.00				From Exh. 6B-1, Line 9 (for Buncher project)
				82-03	18,880.00				From Contingency: Exh. 6E-1, Line 1
				107-03	217,508.63				From Contingency: Exh. 6E-1, Line 1
				136-03	(152,165.52)				To Contingency: Exh. 6E-1, Line 1
				05-04	6,914.00				From Contingency: Exh. 6E-1, Line 1
				11-04	21,858.55				From Exh. 6C-1, Line 2
				11-04	73,399.96				From Exh. 6C-1, Line 3
				67-05	(75,139.14)	1,224,983.98	X		To Exh 6B-1 Line 1C
6B-1	1C	I-B1.03014	04 SEWER IMPROVEMENT CONTRACT	90-04	400,000.00				From Exh 6E-1 Line 1
				27-05	267,726.97				From Exh 6A-1 Line 1C
				67-05	75,139.14				From Exh 6A-1 Line 1B
				67-05	205,064.61				From Exh 6E-1 Line 1
				85-05	50,000.00				From Exh 6B-1 Line 3
				85-05	67,180.06				From Contingency: Exh. 6E-1, Line 1
				127-05	93,211.43				From Contingency: Exh. 6E-1, Line 1
				50-06	3,034.35	1,161,356.56	X		From Contingency: Exh. 6E-1, Line 1
6B-1	1D	00005ESOC	EMERGENCY SEWER OPS CONTRACT	10-03	240,287.88				From Exh. 6B-1, Line 1
				10-03	108,445.46				From Contingency: Exh. 6E-1, Line 1
				18-03	1,000.00	349,733.34	X		From Emerg Contracts: Exh. 6B-1, Line 3

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

WATER SYSTEM - MISCELLANEOUS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6A-5	1	01035	GIS IMPLEMENTATION AND ADMINISTRATION	12-02	2,000,000.00				
				131-02	(470,000.00)				To Exh. 6A-5, Line 5
				25-03	(127,000.00)				To Exh. 6A-5, Line 6
				107-03	(790,000.00)				
				107-03	(613,000.00)	0.00	X		
6A-5	2	02016	RECORDS MANAGEMENT SOFTWARE/PROGRAMS	12-02	250,000.00				
				164-02	(40,000.00)				
				10-03	(210,000.00)	0.00	X		To Exh. 6A-5, Line 6
6A-5	3	03011	COMPUTERIZED MAINTENANCE MGMT. SYSTEM	12-02	175,000.00				
				107-03	(109,000.00)				
				107-03	(66,000.00)	0.00	X		
6A-5	4	97009	CADD - THRU 1997 (SET)	81-02	1,044.33				From Continuing Projects: Exh. 6E-1, Line 2
				129-04	(344.33)	700.00	X		To Contingency Exh 6E-1 Line 1
6A-5	5	- - -	I.T. SYSTEMS PHASE I -	131-02	1,000,000.00				From Exh 6D-1, Line 2
			INTELLIGENCE/ea Consulting	131-02	500,000.00				From Exh. 6B-1, Line 3
				131-02	470,000.00				From Exh. 6A-5, Line 1
				25-03	(225,000.00)				To Exh. 6A-5, Line 6
				107-03	807.84				From Exh 6A-5 Line 7
				107-03	12,812.10				From Exh 6A-5 line 6
				61-04	1,850.00	1,760,469.94	X		From Exh 6E-1 Ln 1
6A-5	6	- - -	I.T. SYSTEMS PHASE I -	131-02	500,000.00				
			US WATER CONSULTING SERVICE	10-03	210,000.00				From Exh. 6A-5, Line 2
				10-03	7,000.00				From Contingency: Exh. 6E-1, Line 1
				25-03	225,000.00				From Exh. 6A-5, Line 5
				25-03	79,000.00				From Exh. 6A-5, Line 7
				25-03	127,000.00				From Exh. 6A-5, Line 1
				107-03	(12,812.10)				to exh 6A-5 line 5
				107-03	(187.90)				exh 6E-1 line 1
				42-04	79,795.00	1,214,795.00	X		From Exh 6E-1 Line 1

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	5	- - -	SEWER CLEANING & TV INSPECTION	12-02	1,320,000.00				
				81-02	(634,995.00)				To Exh. 6B-1, Line 5A
				131-02	457,527.68				From Exh. 6B-1, Line 5 / To Exh. 6B-1, Line 5D
				164-02	(124,750.00)				To Exh. 6B-1, Line 5B
				44-03	(700,000.00)				To Contingency: Exh. 6E-1, Line 1
				136-03	(12,875.23)				To Exh. 6B-1, Line 5B
				136-03	(112,125.00)				To Exh. 6B-1, Line 5C
				90-04	(11,225.20)				To Exh. 6B-1 Line 5C
				90-04	(104,425.00)				To Exh 6B-1 Line 5E
				129-04	(3,415.00)				To Exh 6B-1 Line 5E
				14-05	(6,614.00)				To Exh 6B-1 Line 5E
				44-05	(67,103.25)	0.00	X		To Exh 6B-1 Line 5F
6B-1	5A	02024	02 SEWER CLEANING & TV INSPECTION	81-02	634,995.00				From Exh. 6B-1, Line 5
				131-02	(587,984.40)				To Exh. 6B-1, Line 5
				148-02	100.00	47,110.60	X		From Contingency: Exh. 6E-1, Line 1
6B-1	5B	02012	03 SEWER CLEANING & TV INSPECTION	164-02	124,750.00				From Exh. 6B-1, Line 5
				136-03	12,875.23	137,625.23	X		From Exh. 6B-1, Line 5
6B-1	5C	03008	03 SEWER CLEANING & TV INSPECTION	136-03	112,125.00				From Exh. 6B-1, Line 5
				90-04	11,225.20	123,350.20	X		From Exh. 6B-1, Line 5
6B-1	5D	- - -	SEWER CLEANING & TV ASSISTANCE	131-02	130,456.72	130,456.72	X		From Exh. 6B-1, Line 5
6B-1	5E	I-B2.04003	04 SEWER CLEANING & TV INSPECTION	90-04	104,425.00				From Exh 6B-1 Line 5
				129-04	3,415.00				From Exh 6B-1 Line 5
				14-05	6,614.00				From Exh 6B-1 Line 5
				6-06	10,029.00				From Contingency: Exh. 6E-1, Line 1
				112-06	1,977.23	126,460.23	X		
6B-1	5F	I-B2.04009	SEWER JETTING & VIDEO INSPECTION	44-05	67,103.25				From Exh 6B-1 Line 5
				67-05	451,906.75				From Contingency: Exh. 6E-1, Line 1
				17-08	(107,591.08)	411,418.92	X		To Contingency: Exh. 6E-1, Line 1
6B-1	6	01026	PNC PARK 120" SEWER REHAB.	12-02	654,000.00				
				81-02	(589,621.78)				To Contingency: Exh. 6E-1, Line 1
				93-02	961.50				From Contingency: Exh. 6E-1, Line 1
				110-02	110,592.95	175,932.67	X		From Contingency: Exh. 6E-1, Line 1
6B-1	7	02013-02	SEWAGE PUMP STATION MODIFICATIONS	12-02	1,750,000.00				
				164-02	(850,000.00)				To Contingency: Exh. 6E-1, Line 1
				44-03	(600,000.00)				To Contingency: Exh. 6E-1, Line 1
				49-04	(300,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6B-1	7A	02013-02	RODGERS-MOHRBACH ROAD P.S.						
6B-1	7B	02013-03	LINCOLN PLACE P.S.						
6B-1	7C	02013-05	ELIMINATE BROWNS HILL ROAD P.S.						

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	2	- - -	MANHOLE/CATCH BASIN CONTRACTS	12-02	2,250,000.00				
				81-02	(182,804.03)				To Exh. 6B-1, Line 2A
				110-02	(178,360.12)				To Exh. 6B-1, Line 2A
				117-02	(24,629.10)				To Exh. 6B-1, Line 2A
				131-02	(45,778.26)				To Exh. 6B-1, Line 2A
				148-02	(18,276.75)				To Exh. 6B-1, Line 2A
				164-02	(969,948.28)				To Exh. 6B-1, Line 2B
				18-03	(38,688.93)				To Exh. 6B-1, Line 2A
				61-03	(41,508.82)				To Exh. 6B-1, Line 2A
				125-03	(126,578.00)				To Exh. 6B-1, Line 2B
				42-04	12,906.16				From Exh 6B-1 Line 2A
				61-04	(636,333.87)				To 6B-1 Ln 2E
				129-04	100,578.37				From Exh 6B-1 Line 2E
				44-05	(46,665.71)				To Exh. 6B-1, Line 2B
				97-05	(53,912.66)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6B-1	2A	00018	2001 MANHOLE/CATCH BASIN CONTRACT	81-02	182,804.03				From Exh. 6B-1. Line 2
				110-02	178,360.12				From Exh. 6B-1. Line 2
				117-02	24,629.10				From Exh. 6B-1. Line 2
				131-02	45,778.26				From Exh. 6B-1. Line 2
				148-02	18,276.75				From Exh. 6B-1. Line 2
				164-02	39,383.28				From Exh. 6B-1. Line 2
				18-03	38,688.93				From Exh. 6B-1. Line 2
				61-03	41,508.82				From Exh. 6B-1. Line 2
				82-03	(4,334.83)				To Contingency: Exh. 6E-1, Line 1
				42-04	(12,906.16)	552,188.30	X		To Exh 6B-1 Line 2
6B-1	2B	02010	02 MANHOLE/CATCH BASIN CONTRACT	164-02	930,565.00				From Exh. 6B-1. Line 2
				129-04	8,883.00				From Exh. 6E-1 Line 1
				44-05	46,665.71	986,113.71	X		From Exh. 6B-1. Line 2
6B-1	2C	03015	03 MANHOLE/CATCH BASIN CONTRACT						
6B-1	2D	02012CBER	CATCH BASIN EMERGENCY REPAIR AND REPLACE	125-03	126,578.26	126,578.26	X		From Exh. 6B-1. Line 2
6B-1	2E	I-B1.04003	04 MANHOLE/CATCH BASIN CONTRACT	61-04	636,333.87				From Exh 6B-1 Ln 2
				129-04	(100,578.37)				To Exh 6B-1 Line 2
				23-06	27,939.11	563,694.61	X		From Contingency: Exh. 6E-1, Line 1
6B-1	3	- - -	EMERGENCY CONTRACTS	12-02	500,000.00				
				18-03	(1,000.00)				To Exh. 6B-1, Line 1D
				44-03	(400,000.00)				To Contingency: Exh. 6E-1, Line 1
				147-03	(49,000.00)				To Contingency: Exh. 6E-1, Line 1
				85-05	(50,000.00)	-	X		To Exh 6B-1 Line 1C

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	8	---	CSO STUDY, ENGINEERING AND FLOW MONITORING	12-02	4,800,000.00				
				10-03	(2,400,000.00)				
				10-03	(2,400,000.00)	0.00	X		
6B-1	8A	01013-01	CSO STUDY, ENGINEERING AND FLOW MONITORING	10-03	2,400,000.00				
				49-04	2,000,000.00				From Exh 6B-1 Line 9A
				49-04	1,535,407.40				From Exh 6B-1 Line 9A
				118-04	(1,500,000.00)				To Exh 6B-1 Ln 8B
				129-04	11,310.13				From Exh 6E-1 Line 1
				14-05	216,953.64				From Exh 6E-1 Line 1
				85-05	152,631.11				From Exh 6E-1 Line 1
				97-05	8,936.16	4,825,238.44	X		From Exh 6E-1 Line 1
6B-1	8B	01013-02	CSO STUDY, ENGINEERING AND FLOW MONITORING	10-03	2,400,000.00				
				118-04	1,500,000.00				From Exh 6B-1 Ln 8A
				129-04	359,565.59				From Exh 6E-1 Line 1
				5-05	32,302.00				From Exh 6E-1 Line 1
				14-05	196,287.04				From Exh 6E-1 Line 1
				44-05	24,511.17				From Exh 6E-1 Line 1
				67-05	72,274.67				From Exh 6E-1 Line 1
				127-05	131,519.01				From Exh 6E-1 Line 1
				6-06	31,265.51	4,747,724.99	X		From Exh 6E-1 Line 1
6B-1	9	---	ELMINATION OF SMALL CSOs	12-02	4,500,000.00				
				131-02	(500,000.00)				
				61-03	(350,000.00)				From Exh 6E-1 Line 1
				147-03	(114,592.60)				To Exh. 6B-1, Line 18
				49-04	(2,000,000.00)				To Exh 6B-1 Line 8A
				49-04	(1,535,407.40)	0.00	X		To Exh 6B-1 Line 8A
6B-1	9A	01008-01	ELMINATION OF SMALL CSOs				X		
6B-1	9B	01008-02	ELMINATION OF SMALL CSOs				X		
6B-1	9C	01008-03	ELMINATION OF SMALL CSOs				X		
6B-1	9D	01008-04	ELMINATION OF SMALL CSOs				X		
6B-1	9E	01008-05	ELMINATION OF SMALL CSOs				X		
6B-1	10	01033	FRANKSTOWN AVENUE SEWER SEPARATION	12-02	500,000.00				
				44-03	(500,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6B-1	11	01028	JACK'S RUN SEWER SEPARATION	12-02	2,000,000.00				
				05-05	(1,800,000.00)				To Contingency: Exh. 6E-1, Line 1
				127-05	(180,000.00)				To Contingency: Exh. 6E-1, Line 1
				84-06	(8,253.43)				To Contingency: Exh. 6E-1, Line 1
				17-08	(9,456.56)	2,290.01	X		To Contingency: Exh. 6E-1, Line 1

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	4	- - -	SEWER LINING CONTRACTS	12-02	2,350,000.00				
				81-02	(48,734.47)				To Exh. 6B-1, Line 4A
				81-02	(582,150.00)				To Exh. 6B-1, Line 4B
				110-02	48,062.30				From Exh. 6B-1, Line 4A
				164-02	(603,186.90)				To Exh. 6B-1, Line 4C
				164-02	(594,120.00)				To Exh. 6B-1, Line 4D
				164-02	(5,505.00)				To Exh. 6B-1, Line 4B
				44-03	720.00				From Exh. 6B-1, Line 4B
				82-03	(105,668.01)				To Exh. 6B-1, Line 4C
				129-04	(36,451.15)				To Exh. 6B-1 Line 4E
				67-05	(27,075.10)				To Exh 6B-1 Line 4E
				67-05	67,981.55				From Exh. 6B-1, Line 4F
				67-05	(387,545.50)				To Exh 6B-1 Line 4G
				97-05	(76,327.72)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6B-1	4A	00013	2001 SEWER LINING CONTRACT	81-02	48,734.47				From Exh. 6B-1, Line 4
				110-02	(48,062.30)	672.17	X		To Exh. 6B-1, Line 4
6B-1	4B	01030	2002 SEWER LINING CONTRACT	81-02	582,150.00				From Exh. 6B-1, Line 4
				164-02	5,505.00				From Exh. 6B-1, Line 4
				44-03	(720.00)				From Exh. 6B-1, Line 4
				64-07	(129,460.41)	457,474.59	X		To Contingency: Exh. 6E-1, Line 1
6B-1	4C	02019	2002 SUPPLEMENTAL SEWER LINING CONTRACT	164-02	603,186.90				From Exh. 6B-1, Line 4
					105,668.01				From Exh. 6B-1, Line 4
				64-07	(79,193.05)	629,661.86	X		To Contingency: Exh. 6E-1, Line 1
6B-1	4D	02011	2003 SEWER LINING CONTRACT	164-02	594,120.00				From Exh. 6B-1, Line 4
				107-03	(594,120.00)	0.00	X		To Exh. 6B-1, Line 4E, Exh. 6B-1, Line 4F
6B-1	4E	02052	2003 SUPPLEMENTAL SEWER LINING CONTRACT	107-03	300,000.00				From Exh. 6B-1, Line 4D
				136-03	(1,066.00)				To Contingency: Exh. 6E-1, Line 1
				129-04	36,451.15				From Exh 6B-1 Line 4
				67-05	27,075.10	362,460.25	X		From Exh 6B-1 Line 4
6B-1	4F	03007	2003 SEWER LINING CONTRACT - REBID	107-03	294,120.00				From Exh. 6B-1, Line 4D
				107-03	455,880.00				From Contingency: Exh. 6E-1, Line 1
				136-03	(62,080.00)				To Contingency: Exh. 6E-1, Line 1
				11-04	100,000.00				From Exh. 6C-1, Line 2
				67-05	(67,981.55)	719,938.45	X		To Exh 6B-1 Line 4
6B-1	4G	I-B2.04005	SEWER LINING CONTRACT	67-05	387,545.50				From Exh. 6B-1, Line 4
				127-05	4,930.00				From Contingency: Exh. 6E-1, Line 1
				23-06	47,216.25				From Contingency: Exh. 6E-1, Line 1
				133-06	(101,739.74)	337,952.01	X		To Contingency: Exh. 6E-1, Line 1

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
			CITY OF PITTSBURGH						
6C-1	1	---	FORBES AVENUE/MARKET STREET RECONSTRUCTIC	12-02	1,350,000.00				
				107-03	(466,477.93)				To Exh. 6C-1, Line 8
				107-03	(613,000.00)				To Exh. 6C-1, Line 17-22
				107-03	(270,522.07)	0.00	X		To Exh. 6C-1, Line 8
6C-1	2	---	NEIGHBORHOOD STREETS	12-02	675,000.00				
				93-02	(15,900.00)				To Exh. 6C-1, Line 35
				11-04	(200,000.00)				To Exh. 6B-1, Line 13B
				11-04	(100,000.00)				To Exh. 6B-1, Line 4F
				11-04	(337,241.45)				To Exh. 6A-1, Line 3B
				11-04	(21,858.55)	0.00	X		To Exh. 6B-1, Line 1B
6C-1	3	---	COMMERCIAL STREET	12-02	600,000.00				
				107-03	(1,791.05)				To Exh. 6C-1, Line 7
				11-04	(73,399.96)				To Exh. 6B-1, Line 1B
				11-04	(335,000.00)				To Exh. 6A-1, Line 8A
				15-04	136,479.64				From Exh. 6C-1, Line 29
				15-04	14,068.95				From Exh. 6C-1, Line 33
				15-04	29,751.39				From Exh. 6C-1, Line 34
				42-04	181,354.35				From Exh 6C-1 Line 30
				42-04	46,475.63		X		From Exh 6E-1 Line 1
				118-04	270.00	598,208.95			
6C-1	4	---	CRANE AVENUE SIDEWALK PROJECT	12-02	50,000.00				
				107-03	(50,000.00)	0.00	X		To Exh. 6C-1, Line 7
6C-1	5	---	BEECHWOOD/MONITOR INT. IMPROVEMENTS	12-02	8,000.00				
				107-03	(8,000.00)	0.00	X		To Exh. 6C-1, Line 7
6C-1	6	---	BROOKLINE BOULEVARD	12-02	120,000.00				
				107-03	(120,000.00)	0.00	X		To Exh. 6C-1, Line 7
6C-1	6A	- - -	COLLEGE DEVELOPMENT	21-04					
			SUBTOTAL		598,208.95				

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
			URBAN REDEVELOPMENT AUTHORITY (URA)						
6C-1	7	---	S.S. INDUSTRIAL DEVELOPMENT	12-02	3,350,000.00				
				81-02	(674,211.76)				To Exh 6C-1, Line 16
				81-02	(654,562.99)				To Miscellaneous City/URA Projects
				81-02	(938,528.96)				To Contingency: Exh. 6E-1, Line 1
				110-02	900,000.00				From Contingency: Exh. 6E-1, Line 1
				61-03	900,000.00				From Exh. 6C-1, Line 9
				61-03	956,000.00				From Exh. 6C-1, Line 10
				61-03	1,000,000.00				From Exh. 6C-1, Line 14
				107-03	1,523,639.40				From Exh. 6C-1, Line 9
				107-03	1,791.05				From Exh. 6C-1, Line 3
				107-03	50,000.00				From Exh. 6C-1, Line 4
				107-03	8,000.00				From Exh. 6C-1, Line 5
				107-03	120,000.00				From Exh. 6C-1, Line 6
				107-03	166,270.19				From Miscellaneous URA Closed Projects
				6-06	(450,000.00)				To Contingency: Exh. 6E-1, Line 1
				23-06	(200,000.00)				To Contingency: Exh. 6E-1, Line 1
				35-06	(160,000.00)				To Contingency: Exh. 6E-1, Line 1
				50-06	(10,000.00)				To Contingency: Exh. 6E-1, Line 1
				63-06	(120,000.00)				To Contingency: Exh. 6E-1, Line 1
				98-06	(50,000.00)				To Contingency: Exh. 6E-1, Line 1
				112-06	(25,000.00)				To 2005 Construction Management
				29-07	(11,745.53)				To 6D-1, Line 3A Misc. Eng. Serv.
				46-07	(1,344.54)				To 6D-1, Line 5 Fox Chapel P.S.
				64-07	1,344.54				From Contingency: Exh. 6E-1, Line 1
				82-07	(200,000.00)				To Contingency: Exh. 6E-1, Line 1
				98-07	(410,000.00)				To Contingency: Exh. 6E-1, Line 1
				118-07	(211,633.28)				To Exh 6C-1, Line 16 SS Riverfront
				17-08	(136,469.91)	4,723,548.21	X		To Contingency: Exh. 6E-1, Line 1
6C-1	8	---	NINE MILE RUN REDEVELOPMENT	12-02	3,400,000.00				
				81-02	(659,352.86)				To Contingency: Exh. 6E-1, Line 1
				107-03	270,522.07				From Exh. 6C-1, Line 1
				64-07	100,000.00				From Contingency: Exh. 6E-1, Line 1
				82-07	300,000.00				From Contingency: Exh. 6E-1, Line 1
				98-07	400,000.00				From Contingency: Exh. 6E-1, Line 1
				17-08	(12,194.76)		X		To Contingency: Exh. 6E-1, Line 1
				50-08	1,307.25	3,800,281.70			
6C-1	9	---	ALLEQUIPPA TERRACE	12-02	3,900,000.00				
				61-03	(900,000.00)				To Exh. 6C-1, Line 7
				107-03	(1,523,639.40)				To Exh. 6C-1, Line 7
				17-08	(171,369.34)	1,304,991.26	X		To Contingency: Exh. 6E-1, Line 1
6C-1	10	---	BEDFORD DWELLINGS	12-02	3,696,000.00				
				61-03	(956,000.00)				To Exh. 6C-2 , Line 7
				17-08	543,482.40	3,283,482.40	X		From Contingency: Exh. 6E-1, Line 1

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	12	01017	LOWER NINE MILE RUN	12-02	3,305,247.00				
				147-03	(627,952.00)				To Contingency: Exh. 6E-1, Line 1
				85-05	(177,200.93)	2,500,094.07	X		
6B-1	13	---	SHOTCRETE REHABILITATION CONTRACT	12-02	1,404,300.00				
				117-02	(787,780.00)				To Exh. 6B-1, Line 13A
				107-03	(205,475.32)				To Exh. 6B-1, Line 13A
				125-03	(54,382.10)				To Exh. 6B-1, Line 13A
				125-03	(356,662.58)	0.00	X		To Exh. 6B-1, Line 13B
6B-1	13A	01025	SHOTCRETE REHABILITATION CONTRACT	117-02	787,780.00				From Exh. 6B-1, Line 13
				107-03	205,475.32				From Exh. 6B-1, Line 13
				125-03	54,382.10				From Exh. 6B-1, Line 13
				136-03	19,195.60				From Contingency: Exh. 6E-1, Line 1
				147-03	47,728.83				From Contingency: Exh. 6E-1, Line 1
				28-04	1,980.00	1,116,541.85	X		From Contingency: Exh. 6E-1, Line 1
6B-1	13B	03012	SHOTCRETE REHABILITATION CONTRACT	125-03	356,662.58				From Exh. 6B-1, Line 13
				125-03	465,662.42				From Contingency: Exh. 6E-1, Line 1
				11-04	200,000.00				From Exh. 6C-1, Line 2
				28-04	71,500.00				From Contingency: Exh. 6E-1, Line 1
				50-06	(144,521.14)	949,303.86	X		To Contingency: Exh. 6E-1, Line 1
6B-1	14	---	MH/CB FRAMES, COVERS AND RISERS	12-02	150,000.00				
				81-02	(12,121.00)				To Exh. 6B-1, Line 14A
				93-02	(4,956.00)				To Exh. 6B-1, Line 14A
				131-02	(4,565.00)				To Exh. 6B-1, Line 14A
				18-03	(72,600.00)				To Exh. 6B-1, Line 14B
				107-03	(55,758.00)	0.00	X		To Exh. 6B-1, Line 14C
6B-1	14A	112-00	2002 MH/CB FRAMES, COVERS AND RISERS	81-02	12,121.00				From Exh. 6B-1, Line 14
				93-02	4,956.00				From Exh. 6B-1, Line 14
				131-02	4,565.00				From Exh. 6B-1, Line 14
				25-03	(1,940.00)	19,702.00	X		
6B-1	14B	---	2003 MH/CB FRAMES, COVERS AND RISERS	18-03	72,600.00	72,600.00	X		From Exh. 6B-1, Line 14
6B-1	14C	---	2003 MH/CB FRAMES, COVERS AND RISERS	107-03	55,758.00				From Exh. 6B-1, Line 14
				107-03	4,672.00	60,430.00	X		From Contingency: Exh. 6E-1, Line 1
6B-1	14D	I-E1.02018	2004 MH/CB FRAMES, COVERS AND RISERS	129-04	31,338.50				From Contingency: Exh. 6E-1, Line 1
				67-05	2,490.00	33,828.50	X		From Contingency: Exh. 6E-1, Line 1
6B-1	14E	I-E1.02018	2005 STREET REPAVING SEWER RISERS & LIDS	67-05	207,198.25	207,198.25	X		From Contingency: Exh. 6E-1, Line 1
6B-1	15	86025B	DAWN AVENUE AREA SEWER	81-02	36,910.39				From Contingency: Exh. 6E-1, Line 1
				25-03	3,300.00				From Contingency: Exh. 6E-1, Line 1
				64-07	(500.00)	39,710.39	X		To Contingency: Exh. 6E-1, Line 1

SEWER SYSTEM

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6B-1	16	01004	CEDRIC AVENUE DIVERSION	81-02	14,152.45	14,152.45	X		From Continuing Projects: Exh. 6E-1, Line 2
6B-1	17	01007	UPPER 9-MILE RUN SEWER LINING	81-02	108,802.42				From Contingency: Exh. 6E-1, Line 1
				131-02	(80,921.35)	27,881.07	X		To Contingency; Exh. 6E-1, Line 1
6B-1	18	02012CBER	CEDRICTON ST. CATCH BASIN & STORM SEWER	147-03	114,592.60	114,592.60	X		From Exh. 6B-1, Line 9 (for Cedricton St.)
6B-1	19		RAILSIDE/OLLIE/OVERBROOK PWSA REVENUE FUND REIMBURSEMENT	118-04		45,986.97	X		From Exh 6E-1 Ln 1
6B-1	20		NICASSIO SETTLEMENT REIMBURSEMENT	110-07	32,500.00	32,500.00	X		
				TOTAL		23,899,307.41			

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
			NORTH SHORE RIVERFRONT PARK - S&EA						
6C-1	23	---	RIVERFRONT PARK WATERLINES	12-02	1,200,000.00				
				81-02	(851,366.87)		X		To Contingency: Exh. 6E-1, Line 1
6C-1	24	---	STORM SEWER OUTFALLS	12-02	150,000.00				
				81-02	(150,000.00)		X		To Contingency: Exh. 6E-1, Line 1
6C-1	25	---	SANITARY CONNECTION TO PARK FACILITIES	12-02	75,000.00				
				81-02	(75,000.00)		X		To Contingency: Exh. 6E-1, Line 1
6C-1	26	---	DESIGN SERVICES	12-02	427,500.00		X		
6C-1	23-26	---	N. SHORE RIVERFRONT PARK / VARIOUS - S&EA	107-03	(193,633.13)				To Exh. 6C-1, Line 17-22
				50-06	80,000.00				From Exh. 6E-1 Line 1
				17-08	21,897.99		X		From Exh. 6E-1 Line 1
			SUBTOTAL		684,397.99	684,397.99			
			PRIOR PROJECTS						
6C-1	27	---	NEW PENNLEY PLACE (BROAD ST.)	81-02	116,562.78				From Exh. 6C-1, Line 7
				107-03	(116,562.78)	0.00	X		To Exh. 6C-1, Line 7
6C-1	28	94407	FT. DUQUESNE BOULEVARD	81-02	126,638.47		X		From Exh. 6C-1, Line 7
				49-04	(126,124.85)	513.62			To Exh 6E-1 Line 1
6C-1	29	86401	WOOD STREET	81-02	136,479.64				From Exh. 6C-1, Line 7
				15-04	(136,479.64)	0.00	X		To Exh. 6C-1, Line 3
6C-1	30	85206	PANTHER HOLLOW BRIDGE	81-02	181,354.35				From Exh. 6C-1, Line 7
				42-04	(181,354.35)	0.00	X		To Exh 6C-1 Line 3
6C-1	31	---	WARRIOR HILL/OAKBROOK CIRC.-URA	81-02	40,995.30				From Exh. 6C-1, Line 7
				107-03	(40,995.30)	0.00	X		To Exh. 6C-1, Line 7
6C-1	32	---	FRANKSTOWN COURT	81-02	8,712.11				From Exh. 6C-1, Line 7
				107-03	(8,712.11)	0.00	X		To Exh. 6C-1, Line 7
6C-1	33	---	SMALLMAN - SIDEWALK	81-02	14,068.95				From Exh. 6C-1, Line 7
				15-04	(14,068.95)	0.00	X		To Exh. 6-C1, Line 3
6C-1	34	92411	COLEMAN STREET	81-02	50,000.00				From Exh. 6C-1, Line 7
				15-04	(29,751.39)	0.00	X		To Exh. 6C-1, Line 3

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6C-1	11	---	NEW DEVELOPMENT INITIATIVES	12-02	250,000.00				
				61-03	(250,000.00)	0.00	X		To Exh. 6C-1, Line 16
6C-1	12	---	EAST LIBERTY DEVELOPMENT	12-02	200,000.00				
6C-1	13	---	KEYSTONE OPPORTUNITY ZONES	12-02	200,000.00				
				36-03	(155,000.00)				
				61-03	(45,000.00)	0.00	X		To Exh. 6C-1, Line 16
6C-1	13A	---	SILVER LAKE COMMONS	36-03	155,000.00	155,000.00	X		
6C-1	14	---	GARFIELD (HOPE 6)	12-02	1,200,000.00				
				61-03	(1,000,000.00)				To Exh. 6C-1, Line 7
				84-06	(200,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6C-1	15	---	STRIP DISTRICT / LAWRENCEVILLE	12-02	200,000.00				
				90-04	(200,000.00)	0.00	X		To Exh. 6E-1 Line 1
6C-1	16	---	SOUTH SIDE RIVERFRONT HOUSING	12-02	900,000.00				
				81-02	674,211.76				From Exh. 6C-1, Line 7
				110-02	(900,000.00)				
				61-03	250,000.00				From Exh. 6C-1, Line 11
				61-03	200,000.00				From Exh. 6C-1, Line 12
				61-03	45,000.00				From Exh. 6C-1, Line 13
				118-07	211,633.28	1,380,845.04	X		From Exh. 6C-1, Line 7
			SUBTOTAL		14,848,148.61				
			CONVENTION CENTER - S&EA						
6C-1	17	---	10th STREET - 12-INCH WATER LINE	12-02	258,000.00		X		
6C-1	18	---	RIVERFRONT PARK WATER LINES	12-02	30,000.00		X		
6C-1	19	---	DUQUESNE BOULEVARD 12-INCH SEWER	12-02	135,000.00		X		
6C-1	20	---	STORM SEWER OUTFALLS	12-02	300,000.00				
				81-02	(300,000.00)		X		To Contingency: Exh. 6E-1, Line 1
6C-1	21	---	SEPARATE COMBINED SEWERS	12-02	1,622,000.00				
				81-02	(817,684.22)		X		To Contingency: Exh. 6E-1, Line 1
6C-1	22	---	DESIGN SERVICES	12-02	703,500.00		X		
6C-1	17-22	---	CONVENTION CENTER / VARIOUS - S&EA	107-03	193,633.13		X		From Exh. 6C-1, Line 23-26
				107-03	613,000.00				From Exh. 6C-1, Line 1
				129-04	100,999.58				From Exh. 6E-1 Line 1
					(3,690.35)		X		2002 Bond Closed
			SUBTOTAL		2,834,758.14	2,834,758.14			

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6C-1	35	01280-4	BESSIE STREET WALL REPLACEMENT	93-02	15,900.00	15,900.00	X		From Exh. 6C-1, Line 2
6C-1	36	00004	SEAGATE / BUNCHER	107-03	466,477.93	466,477.93	X		From Exh. 6C-1, Line 1
			SUBTOTAL		503,140.16				
				TOTAL		19,248,405.24			

CITY & URA PROJECTS

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

ENGINEERING & CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6D-1	1	---	ENGINEERING DEPARTMENT PROJECTS (REIMB.)	12-02	2,210,000.00				
				93-02	(3,282.50)				To Exh. 6D-1, Line 13
				148-02	(13,225.40)				
				10-03	(723,054.00)				To Exh. 6D-1, Line 1A
				18-03	(4,842.10)				To Exh. 6D-1, Line 2B
				25-03	(250,000.00)				To Exh. 6D-1, Line 2B
				25-03	(1,878.69)				To Exh. 6D-1, Line 2B
				61-03	(7,769.31)				To Exh. 6D-1, Line 2B
				82-03	(4,004.42)				To Exh. 6D-1, Line 2B
				107-03	(8,702.37)				To Exh. 6D-1, Line 2B
				136-03	(2,421.86)				To Exh. 6D-1, Line 2B
				42-04	(1,185,600.00)				To Exh 6E-1 Line 1
				05-05	(5,219.35)	0.00	X		To Exh 6D-1 Line 1C
6D-1	1A	---	2002 ENGINEERING DEPARTMENT REIMBURSEMENT	10-03	723,054.00	723,054.00	X		From Exh. 6D-1, Line 1
	1B		2003 ENGINEERING DEPARTMENT REIMBURSEMENT	05-04	1,185,600.00	1,185,600.00	X		From Exh. 6E-1, Line 1
	1C		2004 ENG DEPT REIMBURSEMENT	05-04	5,219.35				From Exh 6D-1, Line 1
				05-04	1,016,080.65	1,021,300.00	X		From Exh. 6E-1, Line 1
6D-1	2	---	CONSTRUCTION MANAGEMENT	12-02	6,500,000.00				
				81-02	(2,000,000.00)				
				81-02	(1,500,000.00)				To Exh. 6A-1, Line 12
				93-02	(28,720.00)				To Exh. 6D-1, Line 2B
				131-02	(1,000,000.00)				To Exh 6A-5, Line 5
				18-03	(177,328.49)				To Exh. 6D-1, Line 2A
				25-03	(216,206.18)				To Exh. 6D-1, Line 2A
				25-03	(1,577,745.33)	0.00	X		To Exh. 6D-1, Line 2C
6D-1	2A	---	2002 CONSTRUCTION MGMT.	81-02	2,000,000.00				
				18-03	177,328.49				From Exh. 6D-1, Line 2
				25-03	216,206.18	2,393,534.67	X		From Exh. 6D-1, Line 2

ENGINEERING & CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6D-1	2B	---	CE SERVICES / SEWER FLOW MONITORING	93-02	28,720.00				From Exh. 6D-1, Line 2
				10-03	820.25				From Exh. 6D-1, Line 1
				18-03	4,842.10				From Exh. 6D-1, Line 1
				25-03	1,878.69				From Exh. 6D-1, Line 1
				61-03	7,769.31				From Exh. 6D-1, Line 1
				82-03	4,004.42				From Exh. 6D-1, Line 1
				107-03	8,702.37				From Exh. 6D-1, Line 2
				136-03	2,421.86				From Exh. 6D-1, Line 2
				49-04	280.00	59,439.00	X		From 6E-1 Line 1
6D-1	2C	---	2003 CONSTRUCTION MGMT.	25-03	1,577,745.33				From Exh. 6D-1, Line 2
				147-03	250,000.00				From Exh. 6A-3, Line 2
				42-04	105,749.48	1,933,494.81	X		From Exh 6E-1 Line 1
6D-1	2D	---	2003 CONSULTING ENG. ADD'L SERVICES	25-03	250,000.00				
				05-04	100,000.00				From Exh. 6E-1, Line 1
				42-04	250,000.00				From Exh 6E-1 Line 1
				61-04	(86,815.75)				To Exh 6D-1 Ln 2F
				118-04	(160,078.27)	353,105.98	X		To Exh 6D-1 Line 2F
6D-1	2E	---	2004 CONSTRUCTION MGMT.	49-04	1,000,000.00				From Exh 6E-1 Line 1
				129-04	300,000.00				From Exh 6D-1 Line 10
				44-05	(47,069.24)	1,252,930.76	X		To Exh 6D-1 Line 2G
6D-1	2F	---	2004 CONSULTING ENG. ADD'L SERVICES	61-04	86,815.75				From Exh 6D-1 ln 2D
				90-04	100,000.00				From Exh 6E-1 Line 1
				118-04	160,078.27				From Exh 6D-1 Ln 2D
				85-05	87,942.46				From Exh 6D-1 Line 3
				97-05	30,856.96				From Exh 6D-1 Line 3
				97-05	13,886.39				From Exh 6E-1 Line 1
				127-05	345,000.00				From Exh 6E-1 Line 1
				6-06	80,894.08				From Exh 6E-1 Line 1
				12-06	25,000.00				From Exh 6E-1 Line 1
				23-06	60,000.00				From Exh 6E-1 Line 1
				35-06	32,000.00				From Exh 6E-1 Line 1
				84-06	30,000.00				From Exh 6E-1 Line 1
				04-07	(2,047.91)	1,050,426.00	X		From Exh 6E-1 Line 1

ENGINEERING & CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6D-1	2G	---	2005 CONSTRUCTION MGMT	44-05	47,069.24				From Exh 6D-1 Line 2E
				44-05	200,000.00				From Exh 6E-1 Line 1
				67-05	250,000.00				From Exh 6E-1 Line 1
				97-05	63,232.69				From Exh 6E-1 Line 1
				127-05	400,000.00				From Exh 6E-1 Line 1
				6-06	269,764.40				From Exh 6E-1 Line 1
				23-06	10,000.00				From Exh 6E-1 Line 1
				35-06	130,000.00				From Exh 6E-1 Line 1
				50-06	60,000.00				From Exh 6E-1 Line 1
				63-06	40,000.00				From Exh 6E-1 Line 1
				84-06	100,000.00				From Exh 6E-1 Line 1
				98-06	100,000.00				From Exh 6E-1 Line 1
				112-06	25,000.00				From Exh 6E-1 Line 1
				133-06	67,000.00				From Exh 6E-1 Line 1
				29-07	(26,262.45)	1,735,803.88	X		To Exh 6D-1, Line 2H
6D-1	2H	---	2007-2008 CONSTRUCTION MGMT	29-07	26,262.45				From Exh 6D-1 Line 2G
				64-07	10,000.00				From Exh 6E-1 Line 1
				98-07	10,000.00				From Exh 6E-1 Line 1
				17-08	2,112.59				
				50-08	5,000.00				From Exh 6E-1 Line 1
					(1,063.34)	52,311.70	X		2002 Bond Closed
6D-1	3	---	CONSULTANT DESIGN SERVICES	12-02	3,750,000.00				
				81-02	(668,392.31)				To Various Projects
				81-02	(1,700,000.00)				To Exh. 6A-1, Line 12
				110-02	23,268.64				From Exh. 6D-1, Line 13
				131-02	(500,000.00)				To Exh. 6A-5, Line 5
				164-02	(75,000.00)				To Exh. 6D-1, Line 4
				164-02	(171,700.00)				To Exh. 6D-1, Line 3-Various Projects
				10-03	(25,820.25)				To Exh. 6D-1, Line 3Q & 2B
				61-03	(230.00)				To Exh. 6D-1, Line 4
				107-03	(300,000.00)				To Exh. 6D-1, Line 4
				05-04	(7,500.00)				To Exh. 6D-1, Line 16
				42-04	4.82				From Exh. 6D-1, Line 9
				118-04	(27,500.00)				To Exh 6D-1 Ln 16
				14-05	(16,228.33)				To Exh 6D-1 Ln 3A
				27-05	(36,735.59)				To Exh 6D-1 Ln 3A
				67-05	(44,501.29)				To Exh 6D-1 Ln 3A
				67-05	53,620.90				From Exh 6E-1 Line 6
				67-05	(6,000.00)				To Exh 6D-1 Line 16
				85-05	(97,016.38)				To Exh 6D-1 Ln 3A
				85-05	(87,942.46)				To Exh 6D-1 Ln 2F
				85-05	(4,386.53)				To Exh 6D-1 Line 4
				85-05	(7,500.00)				To Exh 6D-1 Line 18
				97-05	(19,584.26)				To Exh 6D-1 Ln 3A
				97-05	(30,856.96)	0.00	X		To Exh 6D-1 Ln 2F

ENGINEERING & CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6D-1	3A	---	MISCELLANEOUS ENGINEERING SERVICES	164-02	64,500.00				From Consultant Design Services
				164-02	22,000.00				From Consultant Design Services
				164-02	7,000.00				From Consultant Design Services
				164-02	27,100.00				From Consultant Design Services
				164-02	13,000.00				From Consultant Design Services
				164-02	38,100.00				From Consultant Design Services
				10-03	25,000.00				From Consultant Design Services
				107-03	300,000.00				From Consultant Design Services
				42-04	353,300.00				From Exh 6E-1 Line 1
				90-04	85,020.41				From Exh 6E-1 Line 1
				05-05	30,345.42				From Exh 6E-1 Line 1
				14-05	16,228.33				From Exh 6D-1 Line 3
				27-05	36,735.59				From Exh 6D-1 Line 3
				67-05	44,501.29				From Exh 6D-1 Line 3
				85-05	97,016.38				From Exh 6D-1 Line 3
				97-05	19,584.26				From Exh 6D-1 Line 3
				6-06	19,956.14				From Exh 6E-1 Line 1
				23-06	57,352.05				From Exh 6E-1 Line 1
				29-07	11,745.53	1,268,485.40	X		From Exh 6C-1 Line 7
6D-1	4	97026	HIGHLAND #1 - COVER	81-02	4,299.05				From Consultant Design Services
				164-02	75,000.00				From Consultant Design Services
				61-03	230.00				From Consultant Design Services
				85-05	4,386.53				From Exh 6D-1 Line 3
				84-06	(10,775.81)	73,139.77	X		To Contingency: Exh. 6E-1, Line 1
6D-1	5	---	FOX CHAPEL P.S.	81-02	22,519.02				From Consultant Design Services
				97-05	(2,472.72)				To Contingency: Exh. 6E-1, Line 1
				46-07	1,344.54	21,390.84	X		From S.S. Industrial Development
6D-1	6	---	D.E.C. REIMB.	81-02	54,358.54				From Consultant Design Services
				67-05	(53,620.90)	737.64	X		To Exh 6E-1 Line 3
6D-1	7	97012	WTP CHEMICALS	81-02	107,919.39				From Consultant Design Services
				84-06	(57,865.90)	50,053.49	X		To Contingency: Exh. 6E-1, Line 1
6D-1	8	97014	LINCOLN PUMP STATIONS LINES	81-02	1,576.60				From Consultant Design Services
				97-05	(1,576.60)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6D-1	9	99006	NINE MILE RUN - ENG.	81-02	77,719.71				From Consultant Design Services
				110-02	(23,268.64)				To Consultant Design Services
				42-04	(4.82)	54,446.25	X		To Consultant Design Services
6D-1	10	02006-01	HIGHLAND NO. 1 - LINER STUDY AND DESIGN	12-02	150,000.00				From Consultant Design Services
				81-02	150,000.00				
				129-04	(300,000.00)	0.00	X		To Exh 6D-1 Line 2E

CONTINGENCIES

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
				27-05	(13,317.90)				To Exh 6A-2 Line 8A
				44-05	(224,511.17)				To/From Various Projects
				67-05	(1,200,748.03)				To/From Various Projects
				85-05	(29,325.20)				To/From Various Projects
				97-05	535,782.95				To/From Various Projects
				127-05	(433,505.92)				To/From Various Projects
				6-06	(124,421.27)				To/From Various Projects
				12-06	(25,000.00)				To Exh. 6D-1 Line 2F
				23-06	(2,507.41)				To/From Various Projects
				35-06	(2,000.00)				To/From Various Projects
				50-06	(739.25)				To/From Various Projects
				63-06	0.00				To/From Various Projects
				CORRECTION	(0.26)				To/From Various Projects
				84-06	46,868.20				To/From Various Projects
				98-06	(50,000.00)				To/From Various Projects
				112-08	(1,977.23)				To/From Various Projects
				133-06	(2,070.08)				To/From Various Projects
				04-07	2,047.91				To/From Various Projects
				64-07	143,424.24				To/From Various Projects
				82-07	(100,000.00)				To/From Various Projects
				98-07	(15,091.97)				To/From Various Projects
				110-07	1,707.50				To/From Various Projects
				118-07	26,104.55				From Various Projects
				17-08	(37,901.10)				To/From Various Projects
				50-08	(6,307.25)				To/From Various Projects
					(12,861.48)	(0.00)	X		2002 Bond Closed
6E-1	2	- - -	CONTINUING PROJECTS	12-02	7,126,793.00				
				81-02	(2,894,944.60)				To Miscellaneous On-going Projects.
				81-02	941,151.60				
				81-02	(5,173,000.00)	0.00	X		To Exh. 6E-1, Line 3
6E-1	3	- - -	PWSA REVENUE FUND REIMBURSEMENT	81-02	5,173,000.00	5,173,000.00	X		From Exh. 6E-1, Line 2
6E-1	4	- - -	THE PITTSBURGH PARKS CONSERVANCY REIMBURSEMENT FOR HIGHLAND MFP PROJECT	DEPOSIT	24,470.10				Check Received from P.P.C.
				DEPOSIT	22,357.82				Check Received from P.P.C.
				DEPOSIT	12,741.88				Check Received from P.P.C.
				DEPOSIT	45,019.59				Check Received from P.P.C.
				DEPOSIT	59,297.97				Check Received from P.P.C.
				136-03	(163,887.36)				To Contingency: Exh. 6E-1, Line 1
				DEPOSIT	3,344.64				Check Received from P.P.C.
				49-04	(3,344.64)	0.00	X		To Contingency: Exh. 6E-1, Line 1

CONTINGENCIES

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6E-1	5	- - -	BOROUGH OF ASPINWALL REIMBURSEMENT FOR INSTALLATION OF FIRE HYDRANTS	DEPOSIT	38,961.00				
				136-03	(38,961.00)				To Contingency: Exh. 6E-1, Line 1
				49-04	38,961.00				From Conting. Exh 6E-1 Line 1
				49-04	(38,961.00)				Correct CIP amend 4 on Res 136-03
				DEPOSIT	45,348.98				Check received from Aspinwall Borough
				49-04	(45,348.98)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6E-1	6	- - -	PITTSBURGH BOARD OF EDUCATION REIMBURSEMENT FOR SEWER WORK	DEPOSIT	48,573.59				
				136-03	(48,573.59)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6E-1	7	- - -	CITY OF PITTSBURGH REFUSE RELATED IT SYSTEMS PHASE II WORK	DEPOSIT	235,000.00				Check received from City of Pgh
				49-04	(235,000.00)				To Contingency: Exh. 6E-1, Line 1
				DEPOSIT	215,000.00				Check received from City of Pgh
				90-04	(215,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6E-1	8		ATS-CHESTER REIMBURSEMENT FOR DUPLICATE PAYMENT	DEPOSIT	19,626.17				Checks received from ATSC
				90-04	(19,626.17)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6E-1	9		STONER MODEL REIMBURSEMENT FROM OPERATIONS	DEPOSIT	12,669.00				Checks received from PWSA
				90-04	(12,669.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6E-1	10		REIMBURSEMENTS FOR MCNEILLEY ROAD TRUNK SEWER						
6E-1	10A		- BOROUGH OF DORMONT	DEPOSIT	133,675.10				Check received from Dormont
6E-1	10B		- MOUNT LEBANON TOWNSHIP	DEPOSIT	32,561.52				Check received from Mt. Lebanon
				103-04	(166,236.62)				To Contingency Exh 6E-1 Line 1
6E-1	10C		- BALDWIN TOWNSHIP	84-06	24,000.00				
					(24,000.00)	0.00	X		To Contingency Exh 6E-1 Line 1
6E-1	11		TRANSFER FROM 1995 EQUIPMENT FUND	DEPOSIT	151,875.00				Check received from JPMorgan
				129-04	(151,875.00)	0.00	X		To Contingency Exh 6E-1 Line 1
6E-1	13		HERRON AVE SEWER REIMBURSEMENT	DEPOSIT	11,675.34				Check received from Commonwealth of PA
				85-05	(11,675.34)	0.00	X		To Contingency Exh 6E-1 Line 1

ENGINEERING & CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6D-1	11	02013-01	SEWAGE PUMP STATION MODIFICATION DESIGN	81-02	250,000.00				From Consultant Design Services
				44-03	(250,000.00)	0.00	X		To Contingency: Exh. 6E-1, Line 1
6D-1	12A	01019-01	PV - SWISSHELM PARK				X		
6D-1	12B	01020-01	PV - GARFIELD				X		
6D-1	12C	01027-01	PV - BLOOMFIELD				X		
6D-1	13	- - -	OCCUPANCY FEES, PERMITS, FEES, ETC.	93-02	3,282.50				From Exh. 6D-1, Line 1
				148-02	13,225.40				From Exh. 6D-1, Line 1
				18-03	563.17				
				49-04	545.60				From Exh 6E-1 Line 1
				73-04	3,553.96				From Exh 6E-1 Line 1
				90-04	325.00				From Exh 6E-1 Line 1
				127-05	500.00	21,995.63	X		From Exh 6E-1 Line 1
6D-1	14	- - -	LEGAL SERVICES FOR BOND ISSUE	131-02	1,449.54	1,449.54	X		
6D-1	15	- - -	VARIOUS WATER LINE DESIGN (HOWLEY, HARKER, PIUS, ETC.)	131-02	10,330.60	10,330.60	X		
6D-1	16	04001	BACKUP POWER STUDY FOR VAR FACILTIES	05-04	7,500.00				From Exh. 6D, Line 3
				118-04	27,500.00				From Exh. 6D, Line 3
				67-05	6,000.00				From Exh. 6D, Line 3
				118-07	(20,311.89)	20,688.11	X		To Contingency: Exh. 6E-1, Line 1
6D-1	17		ADVANTICA	67-05	12,669.00	12,669.00	X		From Exh 6E-1 Line 1
6D-1	18		SCHENLEY PLAZA DESIGN	85-05	7,500.00	7,500.00	X		From Exh 6D-1 Line 3
				TOTAL		13,303,887.07			

THE PITTSBURGH WATER AND SEWER AUTHORITY

SERIES 2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

CONTINGENCIES

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6E-1	1	- - -	CONTINGENCY	12-02	5,000,000.00				
				81-02	(1,833,837.97)				To Various Projects
				81-02	4,438,124.69				From Exh. 6C-1
				81-02	(5,433,498.32)				To Exh 6A-1, Line 12
				81-02	(941,151.60)				To/From Various Projects
				93-02	(13,564.97)				To/From Various Projects
				110-02	(195,913.03)				To/From Various Projects
				117-02	(19,784.43)				To/From Various Projects
				131-02	483,294.48				To/From Various Projects
				148-02	(467,016.51)				To/From Various Projects
				164-02	769,019.64				To/From Various Projects
				10-03	(249,327.53)				To/From Various Projects
				18-03	(43,787.80)				To/From Various Projects
				25-03	(117,357.90)				To/From Various Projects
				36-03	(10,888.67)				To/From Various Projects
				44-03	183,778.61				To/From Various Projects
				61-03	(22,701.28)				To/From Various Projects
				82-03	(220,268.45)				To/From Various Projects
				107-03	(126,999.05)				To/From Various Projects
				125-03	(1,077,807.69)				To/From Various Projects
				136-03	251,421.95				From Exh. 6E-1, Lines 4, 5 and 6
				136-03	12,763.25				To/From Various Projects
				147-03	1,227,285.03				To/From Various Projects
				05-04	(11,671.08)				To Exh. 6A-3, Line 10D
				05-04	(6,914.00)				To Exh. 6B-1, Line 1B
				05-04	(1,185,600.00)				To Exh. 6D-1, Line 1B
				05-04	(100,000.00)				To Exh. 6D-1, Line 2D
				28-04	(145,090.23)				To Various projects
				42-04	(88,164.60)				To/From Various Projects
				49-04	1,900,515.59				To/From Various Projects
				61-04	(36,757.84)				To/From Various Projects
				73-04	(87,553.96)				To Various Projects
				90-04	(174,364.93)				To/From Various Projects
				97-04	(265,000.00)				To Exh 6A-1 Line 19
				103-04	399,781.62				To/From Various Projects
				118-04	(46,256.97)				To Exh 6B-1 Ln 19 and Exh 6C-1 Ln 3
				129-04	(508,437.25)				To/From Various Projects
				05-05	721,271.93				To/From Various Projects
				14-05	(431,190.56)				To/From Various Projects

CONTINGENCIES

EXH. NO.	LINE	PWSA NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	CLOSED OR COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
6E-1	14		JACKS RUN SEWER REHAB REIMBURSEMENTS	DEPOSIT 85-05	3,394.55 (3,394.55)				Check received from 3RWWDP To Contingency Exh 6E-1 Line 1
				DEPOSIT	7,318.65 (7,318.65)				Check received from 3RWWDP To Contingency Exh 6E-1 Line 1
				DEPOSIT 12-06	160,026.59 (160,026.59)				Check received from 3RWWDP To Contingency Exh 6E-1 Line 1
				DEPOSIT 84-06	485,297.66 (485,297.66)				Check received from 3RWWDP Reduce Payment for Exh 6B-1 , Line 11
				DEPOSIT	78,234.55 (78,234.55)				Check received from 3RWWDP Reduce Payment for Exh 6B-1 , Line 11
				DEPOSIT 27-07	24,817.37 (24,817.37)	0.00	X		Check received from 3RWWDP Reduce Payment for Exh 6B-1 , Line 11
6E-1	15		REIMBURSEMENT FROM M. FACCHIANO PWSA PROJECT #00018	DEPOSIT 97-05	9,325.12 (9,325.12)	0.00	X		Check received from M Facchiano
6E-1	16		REIMBURSEMENT FROM UNITED ENVIRONMENTAL PWSA PROJECT R-A2.98001-22	DEPOSIT	56,099.99 (56,099.99)			X	To Contingency Exh 6E-1 Line 1
6E-1	17		JACKS RUN SEWER REHAB REIMBURSEMENTS	DEPOSIT	40,403.07 (40,403.07)	0.00	X		Check received from 3RWWDP To Contingency Exh 6E-1 Line 1
6E-1	18		TRANSFER FROM 1995 EQUIPMENT FUND	DEPOSIT 84-06	561,047.16 (561,047.16)	0.00	X		To Contingency Exh 6E-1 Line 1
				TOTAL		5,173,000.00			

EXHIBIT B
CAPITAL IMPROVEMENT PROGRAM BUDGET
2005 BOND ISSUE
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM - 2005 BOND ISSUE
BUDGET AS OF DECEMBER 31, 2008

		2005 Bond Issue
WATER SYSTEM		
A1 Water - Distribution System	$	5,138,312.28
A2 Water - Pumping & Storage		1,119,819.90
A3 Water - Treatment Plant		3,738,292.12
TOTAL WATER SYSTEM	**$**	**9,996,424.30**
SEWER SYSTEM		
B1 Sewer - Sanitary Sewer	$	892,888.62
B2 Sewer - Combined Sewer		26,326,089.10
B4 Sewer - Pump Station		541,623.83
B5 Sewer - CSO		-
TOTAL SEWER SYSTEM	**$**	**27,760,601.55**
C1 CITY/URA/SEA/PORT AUTHORITY	**$**	**3,186,745.53**
D1 ENGINEERING	**$**	**8,988,233.13**
E1 TOOLS AND EQUIPMENT	**$**	**1,009,191.13**
F1 IT/GIS	**$**	**221,596.88**
Z1 CONTINGENCY	**$**	**343,862.47**
TOTAL	**$**	**51,506,654.99**

A1 WATER DISTRIBUTION SYSTEM — BUDGET AS OF DECEMBER 31, 2008

2005 BOND ISSUE

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A1.02027-21-2005 AUTOMATED METER READING (AMR) PROGRAM	15,000.00	0.00	0.00	225,180.84	240,180.84	240,180.84
** WBS R-A1.05015 Upper Oakland Water System Upgrade	1,148,988.00	8,000.00	0.00	183,993.21	1,340,981.21	0.00
* WBS R-A1.05015-12 Upper Oakland Water - CM	79,167.00	0.00	0.00	16,069.00	95,236.00	0.00
* WBS R-A1.05015-12-2005 Upper Oakland Water - CM	79,167.00	0.00	0.00	16,069.00	95,236.00	95,236.00
* WBS R-A1.05015-21-2005 Upper Oakland Water - Const.	0.00	0.00	0.00	0.00	0.00	0.00
* WBS R-A1.05015-22 Upper Oakland Water - Const. - 2005Bd	1,069,821.00	8,000.00	0.00	167,924.21	1,245,745.21	0.00
* WBS R-A1.05015-22-2005 Upper Oakland Water - Const. - 2005Bond	1,069,821.00	8,000.00	0.00	167,924.21	1,245,745.21	1,245,745.21
** WBS R-A1.05027 Valve & Hydrant Replacement Contract	552,000.00	0.00	0.00	560,909.51	1,112,909.51	0.00
* WBS R-A1.05027-11 Design	15,000.00	0.00	0.00	0.00	15,000.00	0.00
* WBS R-A1.05027-11-2005 Design	15,000.00	0.00	0.00	0.00	15,000.00	15,000.00
* WBS R-A1.05027-12 Construction Management	37,000.00	0.00	0.00	45,400.02	82,400.02	2,060.54
* WBS R-A1.05027-12-2005 Construction Management	37,000.00	0.00	0.00	43,339.48	80,339.48	80,339.48
* WBS R-A1.05027-21 Construction	500,000.00	0.00	0.00	515,509.49	1,015,509.49	0.00
* WBS R-A1.05027-21-2005 Construction	500,000.00	0.00	0.00	515,509.49	1,015,509.49	1,015,509.49
** WBS R-A1.06010 Greentree Road Waterline	590,000.00	0.00	0.00	8,960.55-	581,039.45	0.00
* WBS R-A1.06010-11 Greentree - Design & Survey	40,000.00	0.00	0.00	13,198.78-	26,801.22	0.00
* WBS R-A1.06010-11-2005 Greentree - Design & Survey	40,000.00	0.00	0.00	13,198.78-	26,801.22	26,801.22
* WBS R-A1.06010-12 Greentree - CM	50,000.00	0.00	0.00	28,509.99-	21,490.01	0.00
* WBS R-A1.06010-12-2005 Greentree - CM	50,000.00	0.00	0.00	28,509.99-	21,490.01	21,490.01
* WBS R-A1.06010-21 Greentree - Construction	500,000.00	0.00	0.00	32,748.22	532,748.22	0.00
* WBS R-A1.06010-21-2005 Greentree - Construction	500,000.00	0.00	0.00	32,748.22	532,748.22	532,748.22
** WBS R-A1.06025 Fluoride Sampling - Engineering	0.00	0.00	0.00	20,182.30	20,182.30	0.00
* WBS R-A1.06025-11 Fluoride Sampling - Engineering	0.00	0.00	0.00	20,182.30	20,182.30	0.00
* WBS R-A1.06025-11-2005 Fluoride Sampling - Engineering	0.00	0.00	0.00	20,182.30	20,182.30	20,182.30
** WBS R-A1.06028 2006 Purchase Fire Hydrants	0.00	0.00	0.00	37,068.00	37,068.00	0.00
* WBS R-A1.06028-21 2006 Purchase Fire Hydrants	0.00	0.00	0.00	37,068.00	37,068.00	0.00
* WBS R-A1.06028-21-2005 2006 Purchase Fire Hydrants	0.00	0.00	0.00	37,068.00	37,068.00	37,068.00
** WBS R-A1.07002 Waterline Reconstruction	0.00	0.00	0.00	1,084,202.00	1,084,202.00	0.00
* WBS R-A1.07002-11 Baileform St Survey	0.00	0.00	0.00	15,887.81	15,887.81	0.00
* WBS R-A1.07002-11-2005 Baileform St Survey	0.00	0.00	0.00	15,887.81	15,887.81	15,887.81
* WBS R-A1.07002-12 Baileform St - CM	0.00	0.00	0.00	73,608.24	73,608.24	0.00
* WBS R-A1.07002-12-2005 Baileform St - CM	0.00	0.00	0.00	73,608.24	73,608.24	73,608.24
* WBS R-A1.07002-21 Waterline Reconstruction	0.00	0.00	0.00	994,705.95	994,705.95	0.00
* WBS R-A1.07002-21-2005 Waterline Reconstruction	0.00	0.00	0.00	994,705.95	994,705.95	994,705.95
** WBS R-A1.07010 Waterline Relay Various Locations	0.00	0.00	0.00	139,556.68	139,556.68	0.00
* WBS R-A1.07010-01 Lincoln St Survey	0.00	0.00	0.00	24,702.18	24,702.18	0.00
* WBS R-A1.07010-01-2005 Lincoln St Survey	0.00	0.00	0.00	24,702.18	24,702.18	24,702.18
* WBS R-A1.07010-02 Lothrop St Survey	0.00	0.00	0.00	21,911.44	21,911.44	0.00
* WBS R-A1.07010-02-2005 Lothrop St Survey	0.00	0.00	0.00	21,911.44	21,911.44	21,911.44
* WBS R-A1.07010-03 Racoon Way Survey	0.00	0.00	0.00	23,078.39	23,078.39	0.00
* WBS R-A1.07010-03-2005 Racoon Way Survey	0.00	0.00	0.00	23,078.39	23,078.39	23,078.39
* WBS R-A1.07010-04 Langley St Survey	0.00	0.00	0.00	16,154.05	16,154.05	0.00
* WBS R-A1.07010-04-2005 Langley St Survey	0.00	0.00	0.00	16,154.05	16,154.05	16,154.05
* WBS R-A1.07010-05 Bowns Valek St Survey	0.00	0.00	0.00	21,312.26	21,312.26	0.00
* WBS R-A1.07010-05-2005 Bowns Valek St Survey	0.00	0.00	0.00	21,312.26	21,312.26	21,312.26
* WBS R-A1.07010-06 Baker St Survey	0.00	0.00	0.00	32,398.36	32,398.36	0.00
* WBS R-A1.07010-06-2005 Baker St Survey	0.00	0.00	0.00	32,398.36	32,398.36	32,398.36
** WBS R-A1.07014 Purchase Fire Hydrants	0.00	0.00	0.00	100,000.00	100,000.00	0.00
* WBS R-A1.07014-21 Purchase Fire Hydrants	0.00	0.00	0.00	100,000.00	100,000.00	0.00
* WBS R-A1.07014-21-2005 Purchase Fire Hydrants	0.00	0.00	0.00	100,000.00	100,000.00	100,000.00
** WBS R-A1.07022 4th Avenue 12" Waterline Relay	0.00	0.00	0.00	209,158.85	209,158.85	0.00
* WBS R-A1.07022-21 4th Avenue 12" Waterline Relay	0.00	0.00	0.00	209,158.85	209,158.85	209,158.85
* WBS R-A1.07022-21-2005 4th Avenue 12" Waterline Relay	0.00	0.00	0.00	209,158.85	209,158.85	0.00
** WBS R-A1.08045 Walnut St Waterline Relay	0.00	0.00	0.00	273,033.44	273,033.44	0.00
* WBS R-A1.08045-21 Walnut St Waterline Relay - Constructio	0.00	0.00	0.00	273,033.44	273,033.44	0.00
* WBS R-A1.08045-21-2005 Walnut St Waterline Relay - Constructio	0.00	0.00	0.00	273,033.44	273,033.44	273,033.44
Result	2,305,988.00	8,000.00	0.00	2,824,324.28	5,138,312.28	3,716,991.59

2005 BOND ISSUE — B1 SEWER - SANITARY SEWER — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-B1.06002	COA Sanitary Sewer Inspection	620,000.00	0.00	0.00	272,888.62	892,888.62	0.00
* WBS R-B1.06002-11	COA San Insp - CM	100,000.00	0.00	0.00	167,192.27	267,192.27	0.00
WBS R-B1.06002-11-2005	COA San Insp - CM	100,000.00	0.00	0.00	167,192.27	267,192.27	267,192.27
* WBS R-B1.06002-21	COA San Insp - Const	520,000.00	0.00	0.00	101,750.35	621,750.35	0.00
WBS R-B1.06002-21-2005	COA San Insp - Const	520,000.00	0.00	0.00	101,750.35	621,750.35	621,750.35
* WBS R-B1.06002-12	COA San Insp - Engineering	0.00	0.00	0.00	3,946.00	3,946.00	0.00
WBS R-B1.06002-12-2005	COA San Insp - Engineering	0.00	0.00	0.00	3,946.00	3,946.00	3,946.00
Result		620,000.00	0.00	0.00	272,888.62	892,888.62	892,888.62

2005 BOND ISSUE — A2 WATER - PUMPING AND STORAGE — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A2.05025	Mission Street Boiler Replacement	562,000.00	0.00	0.00	146,803.41-	415,196.59	0.00
* WBS R-A2.05025-11	Mission St Boiler - Eng	25,000.00	0.00	0.00	20,096.20-	4,903.80	0.00
WBS R-A2.05025-11-2005	Mission St Boiler - Eng	25,000.00	0.00	0.00	20,096.20-	4,903.80	4,903.80
* WBS R-A2.05025-12	Mission St Boiler - CM	37,000.00	0.00	0.00	0.00	37,000.00	0.00
WBS R-A2.05025-12-2005	Mission St Boiler - CM	37,000.00	0.00	0.00	0.00	37,000.00	37,000.00
* WBS R-A2.05025-21	Mission St Boiler	500,000.00	0.00	0.00	126,707.21-	373,292.79	0.00
WBS R-A2.05025-21-2005	Mission St Boiler - Const	500,000.00	0.00	0.00	126,707.21-	373,292.79	373,292.79
** WBS R-A2.06006	Saline Pump Station Valve Replacement	100,000.00	0.00	0.00	25,158.00-	74,842.00	0.00
* WBS R-A2.06006-21	Saline Pump Station Valve Replacement	100,000.00	0.00	0.00	25,158.00-	74,842.00	0.00
WBS R-A2.06006-21-2005	Saline Pump Station Valve Replacement	100,000.00	0.00	0.00	25,158.00-	74,842.00	74,842.00
** WBS R-A2.06024	Water Tank Inspection	0.00	0.00	0.00	199,689.08	199,689.08	0.00
* WBS R-A2.06024-11	Spring Hill Water Tank Inspection	0.00	0.00	0.00	19,162.15	19,162.15	0.00
WBS R-A2.06024-11-2005	Spring Hill Water Tank Inspection	0.00	0.00	0.00	19,162.15	19,162.15	19,162.15
* WBS R-A2.06024-12	Allentown Water Tank Inspection	0.00	0.00	0.00	23,219.62	23,219.62	0.00
WBS R-A2.06024-12-2005	Allentown Water Tank Inspection	0.00	0.00	0.00	23,219.62	23,219.62	23,219.62
* WBS R-A2.06024-13	Brashear Tank Inspection	0.00	0.00	0.00	44,646.13	44,646.13	0.00
WBS R-A2.06024-13-2005	Brashear Tank Inspection	0.00	0.00	0.00	44,646.13	44,646.13	44,646.13
* WBS R-A2.06024-14	Bedford Tank Inspection	0.00	0.00	0.00	12,661.18	12,661.18	0.00
WBS R-A2.06024-14-2005	Bedford Tank Inspection	0.00	0.00	0.00	12,661.18	12,661.18	12,661.18
* WBS R-A2.06024-15	Garfield Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	0.00
WBS R-A2.06024-15-2005	Garfield Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	25,000.00
* WBS R-A2.06024-16	Herron Hill Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	0.00
WBS R-A2.06024-16-2005	Herron Hill Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	25,000.00
* WBS R-A2.06024-17	Lincoln Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	0.00
WBS R-A2.06024-17-2005	Lincoln Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	25,000.00
* WBS R-A2.06024-18	Squirrel Hill Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	0.00
WBS R-A2.06024-18-2005	Squirrel Hill Tank Inspection	0.00	0.00	0.00	25,000.00	25,000.00	25,000.00
** WBS R-A2.07003	Breucken P.S. Refurbish Motor #2	0.00	0.00	0.00	187,830.00	187,830.00	0.00
* WBS R-A2.07003-21	Breucken P.S. Refurbish Motor #2	0.00	0.00	0.00	187,830.00	187,830.00	0.00
WBS R-A2.07003-21-2005	Breucken P.S. Refurbish Motor #2	0.00	0.00	0.00	187,830.00	187,830.00	187,830.00
** WBS R-A2.07008	Repair to Bruecken Motor No. 5	0.00	0.00	0.00	98,480.00	98,480.00	0.00
* WBS R-A2.07008-12	Repair to Bruecken Motor No. 5 - CM	0.00	0.00	0.00	7,500.00	7,500.00	0.00
WBS R-A2.07008-12-2005	Repair to Bruecken Motor No. 5 - CM	0.00	0.00	0.00	7,500.00	7,500.00	7,500.00
* WBS R-A2.07008-21	Repair to Bruecken Motor No. 5	0.00	0.00	0.00	90,980.00	90,980.00	0.00
WBS R-A2.07008-21-2005	Repair to Bruecken Motor No. 5	0.00	0.00	0.00	90,980.00	90,980.00	90,980.00
** WBS R-A2.07016	Lincoln Pump Station Valve Replacement	0.00	0.00	0.00	50,000.00	50,000.00	0.00
* WBS R-A2.07016-21	Lincoln Pump Station Valve -Constructio	0.00	0.00	0.00	50,000.00	50,000.00	0.00
WBS R-A2.07016-21-2005	Lincoln Pump Station Valve -Constructio	0.00	0.00	0.00	50,000.00	50,000.00	50,000.00
** WBS R-A2.07019-11	Switchgear Upgrade - Design	0.00	0.00	0.00	26,282.23	26,282.23	0.00
* WBS R-A2.07019-11-2005	Switchgear Upgrade - Design	0.00	0.00	0.00	26,282.23	26,282.23	26,282.23
** WBS R-A2.08013	Lincoln Pump #2 Replacement	0.00	0.00	0.00	7,500.00	7,500.00	0.00
* WBS R-A2.08013-11	Design - Internal	0.00	0.00	0.00	7,500.00	7,500.00	0.00
WBS R-A2.08013-11-2005	Lincoln Pump #2 Replacement	0.00	0.00	0.00	7,500.00	7,500.00	7,500.00
** WBS R-A2.08014	Howard Pump #6 & 7 Replacement	0.00	0.00	0.00	60,000.00	60,000.00	0.00
* WBS R-A2.08014-11	Howard Pumps #6 & 7 Replacement - Desig	0.00	0.00	0.00	60,000.00	60,000.00	0.00
WBS R-A2.08014-11-2005	Howard Pumps #6 & 7 Replacement - Desig	0.00	0.00	0.00	60,000.00	60,000.00	60,000.00
Result		662,000.00	0.00	0.00	457,819.90	1,119,819.90	1,119,819.90

2005 BOND ISSUE — B2 SEWER - COMBINED SEWER — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS I-B2.04004	Sewer Rehabilitation Gunite Contract	1,074,000.00	0.00	0.00	483,584.62	1,557,584.62	0.00
* WBS I-B2.04004-2005	Sewer Rehab Gunite Contract - Const	1,074,000.00	0.00	0.00	483,584.62	1,557,584.62	0.00
WBS I-B2.04004-2005-21	Sewer Rehab Gunite Contract - Const	1,000,000.00	0.00	0.00	445,880.49	1,445,880.49	1,445,880.49
WBS I-B2.04004-2005-12	Sewer Rehab Gunite Contract - CM	74,000.00	0.00	0.00	37,704.13	111,704.13	111,704.13
** WBS I-B2.05014	Sewer Improvement Contract	1,366,690.21	0.00	0.00	76,654.77	1,443,344.98	0.00
* WBS I-B2.05014-2005-11	Construction Management	100,000.00	0.00	0.00	90,053.12	190,053.12	190,053.12
* WBS I-B2.05014-2005-21	Construction	1,266,690.21	0.00	0.00	13,398.35-	1,253,291.86	1,216,690.21
WBS I-B2.05014-2005-22	Construction	0.00	0.00	0.00	36,601.65	36,601.65	36,601.65
** WBS I-B2.05017	MH CB & Sewer Line Point Repair Contrac	949,395.00	14,569.85	0.00	194,962.06	1,158,926.91	0.00
* WBS I-B2.05017-2005	MH CB & Sewer Line Point Repair Contrac	949,395.00	14,569.85	0.00	194,962.06	1,158,926.91	0.00
WBS I-B2.05017-2005-11	Construction Management	125,000.00	0.00	0.00	87,172.25	212,172.25	212,172.25
WBS I-B2.05017-2005-12	MH CB & SL Point Repair - Design	10,000.00	0.00	0.00	9,302.14-	697.86	697.86
WBS I-B2.05017-2005-21	Construction	814,395.00	14,569.85	0.00	104,778.58	933,743.43	933,743.43
WBS I-B2.05017-2005-13	South Neville St CSX Flag Person	0.00	0.00	0.00	12,313.37	12,313.37	12,313.37
** WBS I-B2.06008	MH, CB & Sewer Point Repair	850,000.00	0.00	0.00	674,902.96	1,524,902.96	0.00
* WBS I-B2.06008-2005	MH, CB & Sewer Point Repair	850,000.00	0.00	0.00	674,902.96	1,524,902.96	0.00
WBS I-B2.06008-2005-11	MH, CB & Sewer Point Repair-Design	5,000.00	0.00	0.00	5,000.00-	0.00	0.00
WBS I-B2.06008-2005-12	MH, CB & Sewer Point Repair-CM	75,000.00	0.00	0.00	188,683.00	263,683.00	263,683.00
WBS I-B2.06008-2005-21	MH, CB & Sewer Point Repair-Constructio	770,000.00	0.00	0.00	491,219.96	1,261,219.96	1,261,219.96
** WBS R-B2.05016	Sewer Cleaning, TVing, & MH Inspection	764,606.65	0.00	0.00	90,260.42	854,867.07	0.00
* WBS R-B2.05016-13	Sewer Cleaning TVing & MH Inspection-CM	97,500.00	0.00	0.00	74,009.19	171,509.19	0.00
WBS R-B2.05016-13-2005	Sewer Cleaning TVing & MH Inspection-CM	97,500.00	0.00	0.00	74,009.19	171,509.19	171,509.19
* WBS R-B2.05016-21	Sewer Cleaning TVing & MH Inspection-CO	667,106.65	0.00	0.00	16,251.23	683,357.88	0.00
WBS R-B2.05016-21-2005	Sewer Cleaning TVing & MH Inspection-CO	667,106.65	0.00	0.00	16,251.23	683,357.88	683,357.88
** WBS R-B2.05018	SHERADEN PARK PROJECT	1,000,000.00	0.00	0.00	48,956.00-	951,044.00	0.00
* WBS R-B2.05018-11	SHERADEN PARK COE / BAKER	0.00	0.00	0.00	7,461.37	7,461.37	0.00
WBS R-B2.05018-11-2005	SHERADEN PARK COE / BAKER	0.00	0.00	0.00	7,461.37	7,461.37	7,461.37
* WBS R-B2.05018-12	SHERADEN PARK PWSA MISC COSTS	140,800.00	0.00	0.00	68,956.00-	71,844.00	0.00
WBS R-B2.05018-12-2005	SHERADEN PARK PWSA MISC COSTS	140,800.00	0.00	0.00	68,956.00-	71,844.00	71,844.00
* WBS R-B2.05018-21	SHERADEN PARK CONSTRUCTION	800,000.00	0.00	0.00	32,461.37-	767,538.63	0.00
WBS R-B2.05018-21-2005	SHERADEN PARK CONSTRUCTION	800,000.00	0.00	0.00	32,461.37-	767,538.63	767,538.63
* WBS R-B2.05018-13	SHERADEN PARK - CM	59,200.00	0.00	0.00	45,000.00	104,200.00	0.00
WBS R-B2.05018-13-2005	SHERADEN PARK - CM	59,200.00	0.00	0.00	45,000.00	104,200.00	104,200.00
** WBS R-B2.05019	CSO Project - Region One (M & E)	3,309,454.56	0.00	0.00	0.00	3,309,454.56	0.00
* WBS R-B2.05019-11	CSO Project - Region One (M & E)	3,309,454.56	0.00	0.00	0.00	3,309,454.56	0.00
WBS R-B2.05019-11-2005	CSO Project - Region One - 2005	3,309,454.56	0.00	0.00	0.00	3,309,454.56	3,309,454.56
** WBS R-B2.05020	CSO Project - Region Two (Baker)	3,135,550.01	0.00	0.00	0.00	3,135,550.01	0.00
* WBS R-B2.05020-11	CSO Project - Region Two (Baker)	3,135,550.01	0.00	0.00	0.00	3,135,550.01	0.00
WBS R-B2.05020-11-2005	CSO Project - Region Two (Baker)	3,135,550.01	0.00	0.00	0.00	3,135,550.01	3,135,550.01
** WBS R-B2.05021	Sew Imp Proj Var Loc	605,739.00	0.00	0.00	81,477.20	687,216.20	0.00
* WBS R-B2.05021-11	SI Var Loc - Eng	25,000.00	0.00	0.00	21,694.50-	3,305.50	0.00
WBS R-B2.05021-11-2005	SI Var Loc - Eng	25,000.00	0.00	0.00	21,694.50-	3,305.50	3,305.50
* WBS R-B2.05021-12	SI Var Loc - CM	40,014.00	0.00	0.00	9,088.22	49,102.22	0.00
WBS R-B2.05021-12-2005	SI Var Loc - CM	40,014.00	0.00	0.00	9,088.22	49,102.22	49,102.22
* WBS R-B2.05021-21	SI Var Loc - Const	540,725.00	0.00	0.00	94,083.48	634,808.48	0.00
WBS R-B2.05021-21-2005	SI Var Loc - Const	540,725.00	0.00	0.00	94,083.48	634,808.48	634,808.48
** WBS R-B2.05022	Sewer Lining Contract	1,074,000.00	0.00	0.00	512,077.94-	561,922.06	0.00
* WBS R-B2.05022-13	Sewer Lining Contract - CM	74,000.00	0.00	0.00	7,937.56-	66,062.44	0.00
WBS R-B2.05022-13-2005	Sewer Lining Contract - CM	74,000.00	0.00	0.00	7,937.56-	66,062.44	66,062.44
* WBS R-B2.05022-21	Sewer Lining Contract - Construction	1,000,000.00	0.00	0.00	504,140.38-	495,859.62	0.00
WBS R-B2.05022-21-2005	Sewer Lining Contract - Construction	1,000,000.00	0.00	0.00	504,140.38-	495,859.62	495,859.62
** WBS R-B2.05023	Jack's Run - Belguim St Sewer	2,255,400.00	88,721.39	0.00	864,161.50-	1,479,959.89	0.00
* WBS R-B2.05023-11	Jack's Run - Design	0.00	0.00	0.00	15,838.50	15,838.50	0.00
WBS R-B2.05023-11-2005	Jack's Run - Design	0.00	0.00	0.00	15,838.50	15,838.50	15,838.50
* WBS R-B2.05023-12	Jck Run Belguim - CM	155,400.00	0.00	0.00	100,000.00-	55,400.00	0.00
WBS R-B2.05023-12-2005	Jck Run Belguim - CM	155,400.00	0.00	0.00	100,000.00-	55,400.00	55,400.00
* WBS R-B2.05023-13	Winhurst Street - CM	0.00	0.00	0.00	45,000.00	45,000.00	0.00
WBS R-B2.05023-13-2005	Winhurst Street - CM	0.00	0.00	0.00	45,000.00	45,000.00	45,000.00

2005 BOND ISSUE — A3 WATER - TREATMENT PLANT — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A3.05005	Clearwell Improvements	3,764,670.00	0.00	0.00	3,422,170.00-	342,500.00	0.00
* WBS R-A3.05005-12	Clearwell Design - Contract #1	300,000.00	0.00	0.00	0.00	300,000.00	0.00
WBS R-A3.05005-12-2005	Clearwell Imp Des - Cont #1	150,000.00	0.00	0.00	0.00	150,000.00	150,000.00
WBS R-A3.05005-13-2005	Clearwell Imp Des - Cont #2	150,000.00	0.00	0.00	0.00	150,000.00	150,000.00
* WBS R-A3.05005-11	Clearwell Imp - Eng	22,500.00	0.00	0.00	20,000.00	42,500.00	0.00
WBS R-A3.05005-11-2005	Clearwell Imp - Eng	22,500.00	0.00	0.00	20,000.00	42,500.00	42,500.00
* WBS R-A3.05005-14	Clearwell Imp - CM	237,170.00	0.00	0.00	237,170.00-	0.00	0.00
WBS R-A3.05005-14-2005	Clearwell Imp - CM	237,170.00	0.00	0.00	237,170.00-	0.00	0.00
* WBS R-A3.05005-21	Clearwell Construction - Contract #1	3,205,000.00	0.00	0.00	3,205,000.00-	0.00	0.00
WBS R-A3.05005-21-2005	Clearwell Imp Const.	3,205,000.00	0.00	0.00	3,205,000.00-	0.00	0.00
** WBS R-A3.05006-01	FILTER BACKWASH HANDLING - STUDY	0.00	0.00	0.00	419,554.69	419,554.69	0.00
* WBS R-A3.05006-01-2005	FILTER BACKWASH HANDLING - STUDY	0.00	0.00	0.00	419,554.69	419,554.69	419,554.69
** WBS R-A3.05006-11	FILTER BACKWASH HANDLING DESIGN	0.00	0.00	0.00	530,445.31	530,445.31	0.00
* WBS R-A3.05006-11-2005	FILTER BACKWASH HANDLING DESIGN	0.00	0.00	0.00	530,445.31	530,445.31	530,445.31
** WBS R-A3.05006-13	Filter Backwash - Standby Power Design	0.00	0.00	0.00	520,000.00	520,000.00	0.00
* WBS R-A3.05006-13-2005	Filter Backwash - Standby Power Design	0.00	0.00	0.00	520,000.00	520,000.00	520,000.00
** WBS R-A3.05006-14	Filter Backwash / Clarification I&D	0.00	0.00	0.00	738,000.00	738,000.00	0.00
* WBS R-A3.05006-14-2005	Filter Backwash / Clarification I&D	0.00	0.00	0.00	738,000.00	738,000.00	738,000.00
** WBS R-A3.05026	Chlorine Booster Stations	186,100.00	0.00	0.00	2,810.54	188,910.54	0.00
* WBS R-A3.05026-11	Chlorine Booster - Eng	15,000.00	0.00	0.00	53,600.00	68,600.00	0.00
WBS R-A3.05026-11-2005	Chlorine Booster - Eng	15,000.00	0.00	0.00	53,600.00	68,600.00	68,600.00
* WBS R-A3.05026-12	Chlorine Booster Stations - CM	11,100.00	0.00	0.00	11,100.00-	0.00	0.00
WBS R-A3.05026-12-2005	Chlorine Booster Stations - CM	11,100.00	0.00	0.00	11,100.00-	0.00	0.00
* WBS R-A3.05026-21	Chlorine Booster Stations - Const	150,000.00	0.00	0.00	44,326.00-	105,674.00	0.00
WBS R-A3.05026-21-2005	Chlorine Booster Stations - Const	150,000.00	0.00	0.00	44,326.00-	105,674.00	105,674.00
* WBS R-A3.05026-22	Lincoln Tank Site Survey	10,000.00	0.00	0.00	4,636.54	14,636.54	0.00
WBS R-A3.05026-22-2005	Lincoln Tank Site Survey	10,000.00	0.00	0.00	4,636.54	14,636.54	14,636.54
** WBS R-A3.06007-11	SCADA - Prelim Design	18,000.00	0.00	0.00	0.00	18,000.00	0.00
* WBS R-A3.06007-11-2005	SCADA - Prelim Design	18,000.00	0.00	0.00	0.00	18,000.00	18,000.00
** WBS R-A3.06007-12	SCADA - Design	226,523.00	0.00	0.00	50,117.00-	176,406.00	0.00
* WBS R-A3.06007-12-2005	SCADA - Design	226,523.00	0.00	0.00	50,117.00-	176,406.00	176,406.00
** WBS R-A3.06007-13-2005	SCADA - CM	167,627.00	0.00	0.00	167,627.00-	0.00	0.00
** WBS R-A3.06007-21-2005	SCADA - Const	2,265,230.00	0.00	0.00	2,265,230.00-	0.00	0.00
** WBS R-A3.06019	WTP Lab Rehab	0.00	0.00	0.00	530,000.00	530,000.00	0.00
* WBS R-A3.06019-11	WTP Lab Rehab - Design	0.00	0.00	0.00	30,000.00	30,000.00	0.00
WBS R-A3.06019-11-2005	WTP Lab Rehab - Design	0.00	0.00	0.00	30,000.00	30,000.00	30,000.00
* WBS R-A3.06019-12	WTP Lab Rehab - CM	0.00	0.00	0.00	50,000.00	50,000.00	0.00
WBS R-A3.06019-12-2005	WTP Lab Rehab - CM	0.00	0.00	0.00	50,000.00	50,000.00	50,000.00
* WBS R-A3.06019-21	WTP Lab Rehab - Construction	0.00	0.00	0.00	450,000.00	450,000.00	0.00
WBS R-A3.06019-21-2005	WTP Lab Rehab - Construction	0.00	0.00	0.00	450,000.00	450,000.00	450,000.00
** WBS R-A3.06032-11-2005	WTP Traveling Screen - Engineering	0.00	0.00	0.00	77,475.58	77,475.58	77,475.58
** WBS R-A3.06032-12-2005	WTP Traveling Screen - CM	0.00	0.00	0.00	0.00	0.00	0.00
** WBS R-A3.06032-21-2005	WTP Traveling Screen - General	0.00	0.00	0.00	0.00	0.00	0.00
** WBS R-A3.07007	Rapid Mix	0.00	0.00	0.00	197,000.00	197,000.00	0.00
* WBS R-A3.07007-21	Rapid Mix	0.00	0.00	0.00	197,000.00	197,000.00	0.00
WBS R-A3.07007-21-2005	Rapid Mix	0.00	0.00	0.00	197,000.00	197,000.00	197,000.00
Result		6,628,150.00	0.00	0.00	2,889,857.88-	3,738,292.12	3,549,381.58

2005 BOND ISSUE — C1 CITY / URA / SEA / PORT AUTHORITY — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-C1.06501	URA - Liberty Park	2,300,000.00	0.00	0.00	1,160,000.00-	1,140,000.00	0.00
* WBS R-C1.06501-12	URA - Liberty Park - Consultant Design	180,000.00	0.00	0.00	60,000.00-	120,000.00	0.00
WBS R-C1.06501-12-2005	URA - Liberty Park - Consultant Design	180,000.00	0.00	0.00	60,000.00-	120,000.00	120,000.00
* WBS R-C1.06501-21	URA - Liberty Park - Construction	1,850,000.00	0.00	0.00	900,000.00-	950,000.00	0.00
WBS R-C1.06501-21-2005	URA - Liberty Park - Construction	1,850,000.00	0.00	0.00	900,000.00-	950,000.00	950,000.00
* WBS R-C1.06501-13	URA - Liberty Park - CM	270,000.00	0.00	0.00	200,000.00-	70,000.00	0.00
WBS R-C1.06501-13-2005	URA - Liberty Park - CM	270,000.00	0.00	0.00	200,000.00-	70,000.00	70,000.00
** WBS R-C1.07502	Federal Hill Housing	0.00	0.00	0.00	400,000.00	400,000.00	0.00
* WBS R-C1.07502-21	Federal Hill Housing	0.00	0.00	0.00	400,000.00	400,000.00	0.00
WBS R-C1.07502-21-2005	Federal Hill Housing	0.00	0.00	0.00	400,000.00	400,000.00	400,000.00
** WBS R-C1.07503	Homewood-Susquehanna Street	0.00	0.00	0.00	200,000.00	200,000.00	0.00
* WBS R-C1.07503-21	Homewood-Susquehanna Street	0.00	0.00	0.00	200,000.00	200,000.00	0.00
WBS R-C1.07503-21-2005	Homewood-Susquehanna Street	0.00	0.00	0.00	200,000.00	200,000.00	200,000.00
** WBS R-C1.91501-21-2005	NINE MILE RUN REDEVELOPMENT	0.00	0.00	0.00	10,000.00	10,000.00	10,000.00
** WBS R-C1.95501-22-2005	BEDFORD DWELLINGS	0.00	0.00	0.00	700,000.00	700,000.00	700,000.00
** WBS R-C1.98501-21-2005	S.S. INDUSTRIAL DEVELOPMENT	940,000.00	0.00	0.00	203,254.47-	736,745.53	736,745.53
Result		3,240,000.00	0.00	0.00	53,254.47-	3,186,745.53	3,186,745.53

2005 BOND ISSUE — B2 SEWER - COMBINED SEWER — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
* WBS R-B2.05023-21	Jck Run Belguim - Const	2,100,000.00	0.00	0.00	1,425,000.00-	675,000.00	0.00
WBS R-B2.05023-21-2005	Jck Run Belguim - Const	2,100,000.00	0.00	0.00	1,425,000.00-	675,000.00	675,000.00
* WBS R-B2.05023-22	Winhurst Street - Const	0.00	0.00	0.00	600,000.00	600,000.00	0.00
WBS R-B2.05023-22-2005	Winhurst Street - Const	0.00	0.00	0.00	600,000.00	600,000.00	600,000.00
* WBS R-B2.05023-24	Jacks Run Ross TWP Release of Retainage	0.00	88,721.39	0.00	0.00	88,721.39	0.00
WBS R-B2.05023-24-2005	Jacks Run Ross TWP Release of Retainage	0.00	88,721.39	0.00	0.00	88,721.39	88,721.39
** WBS R-B2.05024	12th St Storm Sewer	577,000.00	0.00	0.00	569,717.28-	7,282.72	0.00
* WBS R-B2.05024-11	12th St Sewer - Eng	40,000.00	0.00	0.00	32,717.28-	7,282.72	0.00
WBS R-B2.05024-11-2005	12th St Sewer - Eng	40,000.00	0.00	0.00	32,717.28-	7,282.72	7,282.72
* WBS R-B2.05024-12	12th St Sewer - CM	37,000.00	0.00	0.00	37,000.00-	0.00	0.00
WBS R-B2.05024-12-2005	12th St Sewer - CM	37,000.00	0.00	0.00	37,000.00-	0.00	0.00
* WBS R-B2.05024-21	12th St Sewer - Const	500,000.00	0.00	0.00	500,000.00-	0.00	0.00
WBS R-B2.05024-21-2005	12th St Sewer - Const	500,000.00	0.00	0.00	500,000.00-	0.00	0.00
** WBS R-B2.06001	COA Compliance Program Management	4,900,000.00	0.00	0.00	550,000.00-	5,450,000.00	0.00
* WBS R-B2.06001-11	COA PM Contract 1	2,600,000.00	0.00	0.00	310,000.00	2,910,000.00	0.00
WBS R-B2.06001-11-2005	COA PM Contract 1	2,600,000.00	0.00	0.00	310,000.00	2,910,000.00	2,910,000.00
* WBS R-B2.06001-12	COA PM Contract 2	2,300,000.00	0.00	0.00	240,000.00	2,540,000.00	0.00
WBS R-B2.06001-12-2005	COA PM Contract 2	2,300,000.00	0.00	0.00	240,000.00	2,540,000.00	2,540,000.00
** WBS R-B2.06009	Flow Monitoring	40,000.00	0.00	0.00	102,381.38	142,381.38	0.00
* WBS R-B2.06009-11	Calera Street - Flow Monitoring	0.00	0.00	0.00	7,920.41	7,920.41	0.00
WBS R-B2.06009-11-2005	Calera Street - Flow Monitoring	0.00	0.00	0.00	7,920.41	7,920.41	7,920.41
* WBS R-B2.06009-12	Brighton Road - Flow Monitoring	40,000.00	0.00	0.00	16,972.79-	23,027.21	0.00
WBS R-B2.06009-12-2005	Brighton Road - Flow Monitoring	40,000.00	0.00	0.00	16,972.79-	23,027.21	23,027.21
* WBS R-B2.06009-13	Fox Chapel Interceptor - Flow Monitorin	0.00	0.00	0.00	25,838.55	25,838.55	0.00
WBS R-B2.06009-13-2005	Fox Chapel Interceptor - Flow Monitorin	0.00	0.00	0.00	25,838.55	25,838.55	25,838.55
* WBS R-B2.06009-14	Negley Run - Flow Monitoring	0.00	0.00	0.00	69,235.72	69,235.72	0.00
WBS R-B2.06009-14-2005	Negley Run - Flow Monitoring	0.00	0.00	0.00	69,235.72	69,235.72	69,235.72
* WBS R-B2.06009-15	Berkshire Ave - Flow Monitoring	0.00	0.00	0.00	16,359.49	16,359.49	0.00
WBS R-B2.06009-15-2005	Berkshire Ave - Flow Monitoring	0.00	0.00	0.00	16,359.49	16,359.49	16,359.49
** WBS R-B2.06018	Sewer Lining Contract	750,000.00	0.00	0.00	2,500.00	752,500.00	0.00
* WBS R-B2.06018-21	Sewer Lining Contract - Construction	675,000.00	0.00	0.00	0.00	675,000.00	0.00
WBS R-B2.06018-21-2005	Sewer Lining Contract - Construction	675,000.00	0.00	0.00	0.00	675,000.00	675,000.00
* WBS R-B2.06018-12	Sewer Lining Contract - CM	75,000.00	0.00	0.00	2,500.00	77,500.00	0.00
WBS R-B2.06018-12-2005	Sewer Lining Contract - CM	75,000.00	0.00	0.00	2,500.00	77,500.00	77,500.00
** WBS R-B2.06020	Sewer Gunite Contract	1,000,000.00	0.00	0.00	107,595.72	1,107,595.72	0.00
* WBS R-B2.06020-12	Sewer Gunite Contract - CM	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-B2.06020-12-2005	Sewer Gunite Contract - CM	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
* WBS R-B2.06020-11	Sewer Gunite Contract - Design	0.00	0.00	0.00	12,994.72	12,994.72	0.00
WBS R-B2.06020-11-2005	Sewer Gunite Contract - Design	0.00	0.00	0.00	12,994.72	12,994.72	12,994.72
* WBS R-B2.06020-21	Sewer Gunite Contract - Construction	900,000.00	0.00	0.00	94,601.00	994,601.00	0.00
WBS R-B2.06020-21-2005	Sewer Gunite Contract - Construction	900,000.00	0.00	0.00	94,601.00	994,601.00	994,601.00
** WBS R-B2.06021	COA Critical Sewer Inspection	600,000.00	0.00	0.00	20,045.23	620,045.23	0.00
* WBS R-B2.06021-12	COA Critical Sewer Inspection - CM	100,000.00	0.00	0.00	90,622.26	190,622.26	0.00
WBS R-B2.06021-12-2005	COA Critical Sewer Inspection - CM	100,000.00	0.00	0.00	90,622.26	190,622.26	190,622.26
* WBS R-B2.06021-11	COA Critical Sewer Inspection - Design	0.00	0.00	0.00	5,077.73	5,077.73	0.00
WBS R-B2.06021-11-2005	COA Critical Sewer Inspection - Design	0.00	0.00	0.00	5,077.73	5,077.73	5,077.73
* WBS R-B2.06021-21	COA Critical Sewer Inspection - Const	500,000.00	0.00	0.00	75,654.76-	424,345.24	0.00
WBS R-B2.06021-21-2005	COA Critical Sewer Inspection - Const	500,000.00	0.00	0.00	75,654.76-	424,345.24	424,345.24
** WBS R-B2.07013	COA Sewer Inspection	0.00	0.00	0.00	1,175,000.00	1,175,000.00	0.00
* WBS R-B2.07013-12	COA Sewer Inspection - CM	0.00	0.00	0.00	225,000.00	225,000.00	0.00
WBS R-B2.07013-12-2005	COA Sewer Inspection - CM	0.00	0.00	0.00	225,000.00	225,000.00	225,000.00
* WBS R-B2.07013-21	COA Sewer Inspection - Construction	0.00	0.00	0.00	950,000.00	950,000.00	0.00
WBS R-B2.07013-21-2005	COA Sewer Inspection - Construction	0.00	0.00	0.00	950,000.00	950,000.00	950,000.00
** WBS R-B2.07021	Becks Run Sewer Replacement @ PAW Plant	0.00	0.00	0.00	406,510.79	406,510.79	0.00
* WBS R-B2.07021-21	Becks Run Sewer Replacement @ PAW Plant	0.00	0.00	0.00	406,510.79	406,510.79	0.00
WBS R-B2.07021-21-2005	Becks Run Sewer Replacement @ PAW Plant	0.00	0.00	0.00	406,510.79	406,510.79	406,510.79
Result		24,251,835.43	103,291.24	0.00	1,970,962.43	26,326,089.10	25,196,062.07

2005 BOND ISSUE — D1 ENGINEERING — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS I-D1.05029-2005	Survey's - 2005	50,000.00	0.00	0.00	185,000.00	235,000.00	235,000.00
** WBS I-D1.05031-2005	C.M. for Private Development - 2005	26,905.25	102,768.40	0.00	412,208.42	541,882.07	541,882.07
** WBS I-D1.06016-2005	Misc Engineering Services	2,000,000.00	0.00	0.00	2,000,000.00-	0.00	0.00
** WBS R-D1.05009	Water Audit Services	311,667.26	0.00	0.00	0.00	311,667.26	0.00
* WBS R-D1.05009-11	Water Audit Services	311,667.26	0.00	0.00	0.00	311,667.26	0.00
WBS R-D1.05009-11-2005	Water Audit Services	311,667.26	0.00	0.00	0.00	311,667.26	311,667.26
** WBS R-D1.05028	Temporary Project Engineering Services	640,000.00	0.00	0.00	1,912,012.64	2,552,012.64	0.00
* WBS R-D1.05028-12	Temporary Staffing - ATSCE	420,000.00	0.00	0.00	843,369.11	1,263,369.11	0.00
WBS R-D1.05028-12-2005	Temporary Staffing - ATSCE	420,000.00	0.00	0.00	843,369.11	1,263,369.11	1,263,369.11
* WBS R-D1.05028-13	Temporary Staffing - Kimball	90,000.00	0.00	0.00	535,392.17	625,392.17	0.00
WBS R-D1.05028-13-2005	Temporary Staffing - Kimball	90,000.00	0.00	0.00	535,392.17	625,392.17	625,392.17
* WBS R-D1.05028-14	Temporary Staffing - URS	130,000.00	0.00	0.00	533,251.36	663,251.36	0.00
WBS R-D1.05028-14-2005	Temporary Staffing - URS	130,000.00	0.00	0.00	533,251.36	663,251.36	663,251.36
** WBS R-D1.05030	Developer Reviews	125,000.00	0.00	0.00	209,313.53	334,313.53	0.00
* WBS R-D1.05030-12	ATSCE Developer Reviews	125,000.00	0.00	0.00	209,313.53	334,313.53	0.00
WBS R-D1.05030-12-2005	ATSCE Developer Reviews - 2005	125,000.00	0.00	0.00	209,313.53	334,313.53	334,313.53
** WBS R-D1.05032	Miscellaneous Design Services - ATSCE	133,000.00	0.00	0.00	123,532.59	256,532.59	0.00
* WBS R-D1.05032-12	Miscellaneous Design Services	48,000.00	0.00	0.00	40,000.00	88,000.00	0.00
WBS R-D1.05032-12-2005	Miscellaneous Design Services	48,000.00	0.00	0.00	40,000.00	88,000.00	88,000.00
* WBS R-D1.05032-13	2005 Bond - SAP Testing & Project Setup	30,000.00	0.00	0.00	311.93	30,311.93	0.00
WBS R-D1.05032-13-2005	2005 Bond - SAP Testing & Project Setup	30,000.00	0.00	0.00	311.93	30,311.93	30,311.93
* WBS R-D1.05032-14	Meetings	30,000.00	0.00	0.00	21,349.62	51,349.62	0.00
WBS R-D1.05032-14-2005	Meetings	30,000.00	0.00	0.00	21,349.62	51,349.62	51,349.62
* WBS R-D1.05032-16	Preparation of Monthly Reports	25,000.00	0.00	0.00	41,871.04	66,871.04	0.00
WBS R-D1.05032-16-2005	Preparation of Monthly Reports	25,000.00	0.00	0.00	41,871.04	66,871.04	66,871.04
* WBS R-D1.05032-17	Revisions to Procedure Manual	0.00	0.00	0.00	20,000.00	20,000.00	0.00
WBS R-D1.05032-17-2005	Revisions to Procedure Manual	0.00	0.00	0.00	20,000.00	20,000.00	20,000.00
** WBS R-D1.05034	2005 Engineering Dept Reimbursement	943,605.00	0.00	0.00	0.00	943,605.00	0.00
* WBS R-D1.05034-12	2005 Engineering Dept Reimbursement	943,605.00	0.00	0.00	0.00	943,605.00	0.00
WBS R-D1.05034-12-2005	05 Engineering Dept Reimbursement - 200	943,605.00	0.00	0.00	0.00	943,605.00	943,605.00
** WBS R-D1.06003	Additional CM Services - ATSCE	100,000.00	0.00	0.00	7,716.83-	92,283.17	0.00
* WBS R-D1.06003-11	Meetings	25,000.00	0.00	0.00	987.55-	24,012.45	0.00
WBS R-D1.06003-11-2005	Meetings	25,000.00	0.00	0.00	987.55-	24,012.45	24,012.45
* WBS R-D1.06003-12	SAP Preparation	25,000.00	0.00	0.00	10,506.11	35,506.11	0.00
WBS R-D1.06003-12-2005	SAP Preparation	25,000.00	0.00	0.00	10,506.11	35,506.11	35,506.11
* WBS R-D1.06003-13	Miscellaneous Design	25,000.00	0.00	0.00	233.41	25,233.41	0.00
WBS R-D1.06003-13-2005	Miscellaneous Design	25,000.00	0.00	0.00	233.41	25,233.41	25,233.41
* WBS R-D1.06003-14	Program Management	25,000.00	0.00	0.00	17,468.80-	7,531.20	0.00
WBS R-D1.06003-14-2005	Program Management	25,000.00	0.00	0.00	17,468.80-	7,531.20	7,531.20
** WBS R-D1.06004	Water Model Update & Calibration	180,000.00	0.00	0.00	40,000.00	220,000.00	0.00
* WBS R-D1.06004-11	Water Model	180,000.00	0.00	0.00	40,000.00	220,000.00	0.00
WBS R-D1.06004-11-2005	Water Model	180,000.00	0.00	0.00	40,000.00	220,000.00	220,000.00
** WBS R-D1.06011	CM for URA Projects - ATSCE	60,000.00	0.00	0.00	240,875.02	300,875.02	0.00
* WBS R-D1.06011-11	LTV South Side Works	10,000.00	0.00	0.00	695.78-	9,304.22	0.00
WBS R-D1.06011-11-2005	LTV South Side Works	10,000.00	0.00	0.00	695.78-	9,304.22	9,304.22
* WBS R-D1.06011-12	Nine Mile Run	20,000.00	0.00	0.00	100,750.36	120,750.36	0.00
WBS R-D1.06011-12-2005	Nine Mile Run	20,000.00	0.00	0.00	100,750.36	120,750.36	120,750.36
* WBS R-D1.06011-13	South Side Riverfront Housing	10,000.00	0.00	0.00	38,398.31	48,398.31	0.00
WBS R-D1.06011-13-2005	South Side Riverfront Housing	10,000.00	0.00	0.00	38,398.31	48,398.31	48,398.31
* WBS R-D1.06011-14	Bedford Dwellings	10,000.00	0.00	0.00	70,366.72	80,366.72	0.00
WBS R-D1.06011-14-2005	Bedford Dwellings	10,000.00	0.00	0.00	70,366.72	80,366.72	80,366.72
* WBS R-D1.06011-15	Allequippa Terrace	10,000.00	0.00	0.00	5,884.39-	4,115.61	0.00
WBS R-D1.06011-15-2005	Allequippa Terrace	10,000.00	0.00	0.00	5,884.39-	4,115.61	4,115.61
* WBS R-D1.06011-16	Liberty Park	0.00	0.00	0.00	36,446.74	36,446.74	0.00
WBS R-D1.06011-16-2005	Liberty Park	0.00	0.00	0.00	36,446.74	36,446.74	36,446.74
* WBS R-D1.06011-17	URA Hot Metal Bridge Utility Relocation	0.00	0.00	0.00	1,493.06	1,493.06	0.00
WBS R-D1.06011-17-2005	URA Hot Metal Bridge Utility Relocation	0.00	0.00	0.00	1,493.06	1,493.06	1,493.06
** WBS R-D1.06031	Engineering Dept Reimbursement	0.00	0.00	0.00	2,588,644.00	2,588,644.00	0.00

2005 BOND ISSUE — B4 SEWER - PUMP STATION — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
* WBS R-B4.05001-13	SPS Design - Sewage Pump Stations	368,975.32	0.00	0.00	74,890.00	443,865.32	0.00
WBS R-B4.05001-13-2005	SPS Design - Sewage Pump Station - 2005	368,975.32	0.00	0.00	74,890.00	443,865.32	443,865.32
* WBS R-B4.05001-14	SPS Imp - CM	140,600.00	0.00	0.00	140,600.00-	0.00	0.00
WBS R-B4.05001-14-2005	SPS Imp - CM	140,600.00	0.00	0.00	140,600.00-	0.00	0.00
* WBS R-B4.05001-21	SPS Imp Const - Contract #1	854,700.00	0.00	0.00	854,700.00-	0.00	0.00
WBS R-B4.05001-21-2005	SPS Imp Const - Contract #1	854,700.00	0.00	0.00	854,700.00-	0.00	0.00
* WBS R-B4.05001-22	SPS Imp Gen Const	850,000.00	0.00	0.00	850,000.00-	0.00	0.00
WBS R-B4.05001-22-2005	SPS Imp Gen Const	850,000.00	0.00	0.00	850,000.00-	0.00	0.00
* WBS R-B4.05001-23	SPS Imp Elec Const	200,000.00	0.00	0.00	200,000.00-	0.00	0.00
WBS R-B4.05001-23-2005	SPS Imp Elec Const	200,000.00	0.00	0.00	200,000.00-	0.00	0.00
* WBS R-B4.05001-24	Rodgers & Mohrbach - Flow Monitoring	60,000.00	0.00	0.00	56,809.08-	3,190.92	0.00
WBS R-B4.05001-24-2005	Rodgers & Mohrbach - Flow Monitoring	60,000.00	0.00	0.00	56,809.08-	3,190.92	3,190.92
* WBS R-B4.05001-15	Browns Hill Pump Station Survey	0.00	0.00	0.00	7,062.92	7,062.92	0.00
WBS R-B4.05001-15-2005	Browns Hill Pump Station Survey	0.00	0.00	0.00	7,062.92	7,062.92	7,062.92
* WBS R-B4.05001-25	Pump Station Force Main Construction	0.00	0.00	0.00	0.00	0.00	0.00
WBS R-B4.05001-25-2005	Pump Station Force Main Construction	0.00	0.00	0.00	0.00	0.00	0.00
* WBS R-B4.05001-16	Pump Station Force Main Survey	0.00	0.00	0.00	87,504.67	87,504.67	0.00
WBS R-B4.05001-16-2005	Pump Station Force Main Survey	0.00	0.00	0.00	87,504.67	87,504.67	87,504.67
Result		2,474,275.32	0.00	0.00	1,932,651.49-	541,623.83	541,623.83

2005 BOND ISSUE — F1 IT / GIS — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-F1.05010	Laboratory Information Management Syste	0.00	0.00	0.00	3,300.00	3,300.00	0.00
* WBS R-F1.05010-21	Installation	0.00	0.00	0.00	3,300.00	3,300.00	0.00
WBS R-F1.05010-21-2005	Installation - 2005	0.00	0.00	0.00	3,300.00	3,300.00	3,300.00
** WBS R-F1.06005	SAP Software Support	70,000.00	0.00	0.00	70,000.00-	0.00	0.00
* WBS R-F1.06005-21	SAP Software Support	70,000.00	0.00	0.00	70,000.00-	0.00	0.00
WBS R-F1.06005-21-2005	SAP Software Support	70,000.00	0.00	0.00	70,000.00-	0.00	0.00
** WBS R-F1.06014	GIS Water Plat Conversion	80,000.00	0.00	0.00	4,634.12-	75,365.88	0.00
* WBS R-F1.06014-21	GIS Water Plat Conversion	80,000.00	0.00	0.00	4,634.12-	75,365.88	0.00
WBS R-F1.06014-21-2005	GIS Water Plat Conversion	80,000.00	0.00	0.00	4,634.12-	75,365.88	75,365.88
** WBS R-F1.07020	PWSA Hydrant GPS Survey	0.00	0.00	0.00	139,631.00	139,631.00	0.00
* WBS R-F1.07020-11	PWSA Hydrant GPS Survey	0.00	0.00	0.00	139,631.00	139,631.00	0.00
WBS R-F1.07020-11-2005	PWSA Hydrant GPS Survey	0.00	0.00	0.00	139,631.00	139,631.00	139,631.00
** WBS R-F1.08030	LIMS System	0.00	0.00	0.00	3,300.00	3,300.00	0.00
* WBS R-F1.08030-21	LIMS System	0.00	0.00	0.00	3,300.00	3,300.00	0.00
WBS R-F1.08030-21-2005	LIMS System	0.00	0.00	0.00	3,300.00	3,300.00	3,300.00
Result		150,000.00	0.00	0.00	71,596.88	221,596.88	221,596.88

2005 BOND ISSUE — D1 ENGINEERING — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
* WBS R-D1.06031-21	2006 Engineering Dept Reimbursement	0.00	0.00	0.00	1,158,458.00	1,158,458.00	0.00
WBS R-D1.06031-21-2005	2006 Engineering Dept Reimbursement	0.00	0.00	0.00	1,158,458.00	1,158,458.00	1,158,458.00
* WBS R-D1.06031-22	2007 Engineering Dept Reimbursement	0.00	0.00	0.00	1,430,186.00	1,430,186.00	0.00
WBS R-D1.06031-22-2005	2007 Engineering Dept Reimbursement	0.00	0.00	0.00	1,430,186.00	1,430,186.00	1,430,186.00
** WBS R-D1.07011	Office Relocation Architectural Service	0.00	0.00	0.00	581,417.85	581,417.85	0.00
* WBS R-D1.07011-11	Office Relocation Architectural Service	0.00	0.00	0.00	131,417.85	131,417.85	0.00
WBS R-D1.07011-11-2005	Office Relocation Architectural Service	0.00	0.00	0.00	131,417.85	131,417.85	131,417.85
* WBS R-D1.07011-21	New Building Improvements	0.00	0.00	0.00	450,000.00	450,000.00	0.00
WBS R-D1.07011-21-2005	New Building Improvements	0.00	0.00	0.00	450,000.00	450,000.00	450,000.00
** WBS R-D1.08028	ArcGIS Server Implementation	0.00	0.00	0.00	30,000.00	30,000.00	0.00
* WBS R-D1.08028-12	ArcGIS Server Implementation	0.00	0.00	0.00	30,000.00	30,000.00	0.00
WBS R-D1.08028-12-2005	ArcGIS Server Implementation	0.00	0.00	0.00	30,000.00	30,000.00	30,000.00
Result		4,570,177.51	102,768.40	0.00	4,315,287.22	8,988,233.13	8,988,233.13

2005 BOND ISSUE — Z1 CONTINGENCY — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS I-Z1.50000-2005	CONTINGENCY BOND 2005	5,000,000.00	1,343,558.34	0.00	5,999,695.87-	343,862.47	343,862.47
Result		5,000,000.00	1,343,558.34	0.00	5,999,695.87-	343,862.47	343,862.47

2005 BOND ISSUE — E1 TOOLS AND EQUIPMENT — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-E1.06017	2006 Street Repaving Sewer Risers & Lid	96,610.75	0.00	0.00	0.00	96,610.75	0.00
* WBS R-E1.06017-21	2006 Street Repaving Sewer Risers & Lid	96,610.75	0.00	0.00	0.00	96,610.75	0.00
WBS R-E1.06017-21-2005	2006 Street Repaving Sewer Risers & Lid	96,610.75	0.00	0.00	0.00	96,610.75	96,610.75
** WBS R-E1.07005	Purchase Water Meters	0.00	0.00	0.00	91,712.50	91,712.50	0.00
* WBS R-E1.07005-21	Purchase Water Meters	0.00	0.00	0.00	91,712.50	91,712.50	0.00
WBS R-E1.07005-21-2005	Purchase Water Meters	0.00	0.00	0.00	91,712.50	91,712.50	91,712.50
** WBS R-E1.07015	2007 Street Repaving Sewer Riser & Lids	0.00	0.00	0.00	139,586.00	139,586.00	0.00
* WBS R-E1.07015-21	2007 Street Repaving Sewer Riser & Lids	0.00	0.00	0.00	139,586.00	139,586.00	0.00
WBS R-E1.07015-21-2005	2007 Street Repaving Sewer Riser & Lids	0.00	0.00	0.00	139,586.00	139,586.00	139,586.00
** WBS R-E1.08005	Purchase Small Meters	0.00	0.00	0.00	681,281.88	681,281.88	0.00
* WBS R-E1.08005-11	Purchase Small Meters	0.00	0.00	0.00	4,072.88	4,072.88	0.00
WBS R-E1.08005-11-2005	Purchase Small Meters	0.00	0.00	0.00	4,072.88	4,072.88	4,072.88
* WBS R-E1.08005-21	Purchase Small Meters	0.00	0.00	0.00	677,209.00	677,209.00	0.00
WBS R-E1.08005-21-2005	Purchase Small Meters	0.00	0.00	0.00	677,209.00	677,209.00	677,209.00
Result		96,610.75	0.00	0.00	912,580.38	1,009,191.13	1,009,191.13

EXHIBIT C
CAPITAL IMPROVEMENT PROGRAM BUDGET
2007 DEPOSITORY AGREEMENT FUND BUDGET
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM
2007 DEPOSITORY AGREEMENT FUND
BUDGET AS OF DECEMBER 31, 2008

		2007 Depository Agreement Fund
WATER SYSTEM		
A1 Water - Distribution System	$	2,203,500.00
A2 Water - Pumping & Storage		20,000.00
A3 Water - Treatment Plant		2,550,000.00
TOTAL WATER SYSTEM	**$**	**4,773,500.00**
SEWER SYSTEM		
B1 Sewer - Sanitary Sewer	$	-
B2 Sewer - Combined Sewer		1,000,000.00
B4 Sewer - Pump Station		-
B5 Sewer - CSO		-
TOTAL SEWER SYSTEM	**$**	**1,000,000.00**
C1 CITY/URA/SEA/PORT AUTHORITY	**$**	**-**
D1 ENGINEERING	**$**	**-**
E1 TOOLS AND EQUIPMENT	**$**	**450,000.00**
F1 IT/GIS	**$**	**-**
Z1 CONTINGENCY	**$**	**95,514.16**
TOTAL	**$**	**6,319,014.16**

2007 DEPOSITORY AGREEMENT FUND — A1 WATER - DISTRIBUTION SYSTEM — BUDGET AS OF DECEMBER 31, 2008

	Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
**	WBS R-A1 07009 Water Valve & Fire Hydrant Contract	0.00	0.00	0.00	1,128,500.00	1,128,500.00	0.00
*	WBS R-A1 07009-11 Water Valve & Fire Hydrant - Design	0.00	0.00	0.00	3,500.00	3,500.00	0.00
*	WBS R-A1 07009-11-2007 Water Valve & Fire Hydrant - Design	0.00	0.00	0.00	3,500.00	3,500.00	3,500.00
*	WBS R-A1 07009-12 Water Valve & Fire Hydrant - CM	0.00	0.00	0.00	125,000.00	125,000.00	0.00
*	WBS R-A1 07009-12-2007 Water Valve & Fire Hydrant - CM	0.00	0.00	0.00	125,000.00	125,000.00	125,000.00
*	WBS R-A1 07009-21 Water Valve & Fire Hydrant - CONST	0.00	0.00	0.00	1,000,000.00	1,000,000.00	0.00
*	WBS R-A1 07009-21-2007 Water Valve & Fire Hydrant - CONST	0.00	0.00	0.00	1,000,000.00	1,000,000.00	1,000,000.00
**	WBS R-A1 08016 Fifth Ave Waterline Relay	0.00	0.00	0.00	275,000.00	275,000.00	0.00
*	WBS R-A1 08016-12 Fifth Ave Waterline Relay - CM	0.00	0.00	0.00	55,000.00	55,000.00	0.00
*	WBS R-A1 08016-12-2007 Fifth Ave Waterline Relay - CM	0.00	0.00	0.00	55,000.00	55,000.00	55,000.00
*	WBS R-A1 08016-21 Fifth Ave Waterline Relay - Constructig	0.00	0.00	0.00	220,000.00	220,000.00	0.00
*	WBS R-A1 08016-21-2007 Fifth Ave Waterline Relay - Constructig	0.00	0.00	0.00	220,000.00	220,000.00	220,000.00
**	WBS R-A1 08039 Ft Duquesne Blvd Waterline Replacement	0.00	0.00	0.00	800,000.00	800,000.00	0.00
*	WBS R-A1 08039-21 Ft Duquesne Blvd Waterline Replacement	0.00	0.00	0.00	800,000.00	800,000.00	0.00
*	WBS R-A1 08039-21-2007 Ft Duquesne Blvd Waterline Replacement	0.00	0.00	0.00	800,000.00	800,000.00	800,000.00
Result		0.00	0.00	0.00	2,203,500.00	2,203,500.00	2,203,500.00

2007 DEPOSITORY AGREEMENT FUND — A2 WATER - PUMPING AND STORAGE — BUDGET AS OF DECEMBER 31, 2008

	Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
*	WBS R-A2 98001-12 Highland #1 MFP - CM	0.00	0.00	0.00	20,000.00	20,000.00	0.00
*	WBS R-A2 98001-12-2007 Highland #1 MFP - CM	0.00	0.00	0.00	20,000.00	20,000.00	20,000.00
Result		0.00	0.00	0.00	20,000.00	20,000.00	20,000.00

2007 DEPOSITORY AGREEMENT FUND — E1 TOOLS AND EQUIPMENT — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-E1.08022 2008 Street Repaving Sewer Risers & Lid	0.00	0.00	0.00	450,000.00	450,000.00	0.00
* WBS R-E1.08022-21 2008 St Repaving Sewer Risers & Lids-CO	0.00	0.00	0.00	450,000.00	450,000.00	0.00
WBS R-E1.08022-21-2007 2008 St Repaving Sewer Risers & Lids-CO	0.00	0.00	0.00	450,000.00	450,000.00	450,000.00
Result	0.00	0.00	0.00	450,000.00	450,000.00	450,000.00

2007 DEPOSITORY AGREEMENT FUND — A3 WATER - TREATMENT PLANT — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS R-A3.05006-19-2007 WTP Clarifier No. 4 Collector Equipment	0.00	0.00	0.00	80,000.00	80,000.00	80,000.00
WBS R-A3.05006-23-2007 WTP Clarifier No. 4 Collector Equipment	0.00	0.00	0.00	1,000,000.00	1,000,000.00	1,000,000.00
WBS R-A3.06032-11-2007 WTP Traveling Screen - Engineering	0.00	0.00	0.00	40,000.00	40,000.00	40,000.00
WBS R-A3.06032-12-2007 WTP Traveling Screen - CM	0.00	0.00	0.00	130,000.00	130,000.00	130,000.00
WBS R-A3.06032-21-2007 WTP Traveling Screen - General	0.00	0.00	0.00	1,200,000.00	1,200,000.00	1,200,000.00
WBS R-A3.06032-22-2007 WTP Traveling Screen - Electrical	0.00	0.00	0.00	100,000.00	100,000.00	100,000.00
Result	0.00	0.00	0.00	2,550,000.00	2,550,000.00	2,550,000.00

2007 DEPOSITORY AGREEMENT FUND — Z1 CONTINGENCY — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS I-Z1.50000-2007 CONTINGENCY BOND 2007	6,319,014.16	0.00	0.00	6,223,500.00-	95,514.16	95,514.16
Result	6,319,014.16	0.00	0.00	6,223,500.00-	95,514.16	95,514.16

2007 DEPOSITORY AGREEMENT FUND — B2 SEWER - COMBINED SEWER — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-B2.08015 MH, CB & Sewer Line Point Repair	0.00	0.00	0.00	1,000,000.00	1,000,000.00	0.00
* WBS R-B2.08015-12 MH CB & Sewer Line Point Repair	0.00	0.00	0.00	150,000.00	150,000.00	0.00
WBS R-B2.08015-12-2007 MH CB & Sewer Line Point Repair - CM	0.00	0.00	0.00	150,000.00	150,000.00	150,000.00
* WBS R-B2.08015-21 MH CB & Sewer Line Point Repair - CONST	0.00	0.00	0.00	850,000.00	850,000.00	0.00
WBS R-B2.08015-21-2007 MH CB & Sewer Line Point Repair - CONST	0.00	0.00	0.00	850,000.00	850,000.00	850,000.00
Result	0.00	0.00	0.00	1,000,000.00	1,000,000.00	1,000,000.00

EXHIBIT D
CAPITAL IMPROVEMENT PROGRAM BUDGET
2008 BOND ISSUE
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM - ACTIVE FUNDS
2008 CONSTRUCTION FUND
BUDGET AS OF DECEMBER 31, 2008

		2008 Construction Fund
WATER SYSTEM		
A1 Water - Distribution System	$	17,225,000.00
A2 Water - Pumping & Storage		9,300,000.00
A3 Water - Treatment Plant		34,647,000.00
TOTAL WATER SYSTEM	**$**	**61,172,000.00**
SEWER SYSTEM		
B1 Sewer - Sanitary Sewer	$	-
B2 Sewer - Combined Sewer		8,845,000.00
B4 Sewer - Pump Station		3,460,000.00
B5 Sewer - CSO		-
TOTAL SEWER SYSTEM	**$**	**12,305,000.00**
C1 CITY/URA/SEA/PORT AUTHORITY	**$**	**7,800,000.00**
D1 ENGINEERING	**$**	**9,688,412.00**
E1 TOOLS AND EQUIPMENT	**$**	**5,550,000.00**
F1 IT/GIS	**$**	**-**
Z1 CONTINGENCY	**$**	**1,546,771.58**
TOTAL	**$**	**98,062,183.58**

2008 CONSTRUCTION FUND — A1 WATER - DISTRIBUTION SYSTEM — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A1 02027-21-2008 AUTOMATED METER READING (AMR) PROGRAM	400,000.00	0.00	0.00	0.00	400,000.00	400,000.00
** WBS R-A1 08100 Water Valve & Hydrant Replacement	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00
* WBS R-A1 08100-01 Water Valve & Hydrant Replacement	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00
WBS R-A1 08100-01-2008 Water Valve & Hydrant Replacement	1,500,000.00	0.00	0.00	0.00	1,500,000.00	1,500,000.00
** WBS R-A1 08101 Small Meter Replacement Program	5,000,000.00	0.00	0.00	0.00	5,000,000.00	0.00
* WBS R-A1 08101-01 Small Meter Replacement Program	5,000,000.00	0.00	0.00	0.00	5,000,000.00	0.00
WBS R-A1 08101-01-2008 Small Meter Replacement Program	5,000,000.00	0.00	0.00	0.00	5,000,000.00	5,000,000.00
** WBS R-A1 08102 Purchase Fire Hydrants	200,000.00	0.00	0.00	0.00	200,000.00	0.00
* WBS R-A1 08102-01 Purchase Fire Hydrants	200,000.00	0.00	0.00	0.00	200,000.00	0.00
WBS R-A1 08102-01-2008 Purchase Fire Hydrants	200,000.00	0.00	0.00	0.00	200,000.00	200,000.00
** WBS R-A1 08103 Waterline Relays	1,000,000.00	0.00	0.00	1,125,000.00	2,125,000.00	0.00
* WBS R-A1 08103-01 Waterline Relays	1,000,000.00	0.00	0.00	1,125,000.00	2,125,000.00	0.00
WBS R-A1 08103-01-2008 Waterline Relays	1,000,000.00	0.00	0.00	1,125,000.00	2,125,000.00	2,125,000.00
** WBS R-A1 08104 Valve Inspections and Mapping	1,200,000.00	0.00	0.00	0.00	1,200,000.00	0.00
* WBS R-A1 08104-11 Valve Inspections and Mapping	1,200,000.00	0.00	0.00	0.00	1,200,000.00	0.00
WBS R-A1 08104-11-2008 Valve Inspections and Mapping	1,200,000.00	0.00	0.00	0.00	1,200,000.00	1,200,000.00
** WBS R-A1 08134 60-Inch Transmission Main Improvements	0.00	0.00	0.00	5,300,000.00	5,300,000.00	0.00
* WBS R-A1 08134-01 60" Transmission Main	0.00	0.00	0.00	5,250,000.00	5,250,000.00	0.00
WBS R-A1 08134-01-2008 60" Transmission Main	0.00	0.00	0.00	5,250,000.00	5,250,000.00	5,250,000.00
WBS R-A1 08134-11 60" Transmission Main - Eng	0.00	0.00	0.00	50,000.00	50,000.00	0.00
WBS R-A1 08134-11-2008 60" Transmission Main - Eng	0.00	0.00	0.00	50,000.00	50,000.00	50,000.00
** WBS R-A1 08135 SR 28 Reconstruction - Waterline Reloc	0.00	0.00	0.00	1,500,000.00	1,500,000.00	0.00
* WBS R-A1 08135-01 SR 28 Reconstruction	0.00	0.00	0.00	1,500,000.00	1,500,000.00	0.00
WBS R-A1 08135-01-2008 SR 28 Reconstruction Waterline	0.00	0.00	0.00	1,500,000.00	1,500,000.00	1,500,000.00
Result	9,300,000.00	0.00	0.00	7,925,000.00	17,225,000.00	17,225,000.00

2008 CONSTRUCTION FUND — A2 WATER - PUMPING AND STORAGE — BUDGET AS OF DECEMBER 31, 2008

Object	Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A2 07019-12-2008 Switchgear Upgrade - CM	135,000.00	0.00	0.00	0.00	135,000.00	135,000.00
** WBS R-A2 07019-21-2008 Switchgear Upgrade - Construction	1,365,000.00	0.00	0.00	0.00	1,365,000.00	1,365,000.00
** WBS R-A2 08105 Howard and Lincoln Pump Station	900,000.00	0.00	0.00	0.00	900,000.00	0.00
* WBS R-A2 08105-01 Howard and Lincoln Pump Station	900,000.00	0.00	0.00	0.00	900,000.00	0.00
WBS R-A2 08105-01-2008 Howard and Lincoln Pump Station	900,000.00	0.00	0.00	0.00	900,000.00	900,000.00
** WBS R-A2 08106 Water System Modeling Support	150,000.00	0.00	0.00	0.00	150,000.00	0.00
* WBS R-A2 08106-11 Water System Modeling Support	150,000.00	0.00	0.00	0.00	150,000.00	0.00
WBS R-A2 08106-11-2008 Water System Modeling Support	150,000.00	0.00	0.00	0.00	150,000.00	150,000.00
** WBS R-A2 08107 Water Tank Painting and Improvements	3,000,000.00	0.00	0.00	0.00	3,000,000.00	0.00
* WBS R-A2 08107-01 Water Tank Painting and Improvements	3,000,000.00	0.00	0.00	0.00	3,000,000.00	0.00
WBS R-A2 08107-01-2008 Water Tank Painting and Improvements	3,000,000.00	0.00	0.00	0.00	3,000,000.00	3,000,000.00
** WBS R-A2 08108 Highland No. 2 Cover	3,000,000.00	0.00	0.00	0.00	3,000,000.00	0.00
* WBS R-A2 08108-11 Highland No. 2 Cover - Engineering	200,000.00	0.00	0.00	0.00	200,000.00	0.00
WBS R-A2 08108-11-2008 Highland No. 2 Cover - Engineering	200,000.00	0.00	0.00	0.00	200,000.00	200,000.00
WBS R-A2 08108-12 Highland No. 2 Cover - CM	200,000.00	0.00	0.00	0.00	200,000.00	0.00
WBS R-A2 08108-12-2008 Highland No. 2 Cover - CM	200,000.00	0.00	0.00	0.00	200,000.00	200,000.00
WBS R-A2 08108-21 Highland No. 2 Cover - Construction	2,600,000.00	0.00	0.00	0.00	2,600,000.00	0.00
WBS R-A2 08108-21-2008 Highland No. 2 Cover - Construction	2,600,000.00	0.00	0.00	0.00	2,600,000.00	2,600,000.00
** WBS R-A2 08109 H.H. Pump Station Main Replacement	750,000.00	0.00	0.00	0.00	750,000.00	0.00
* WBS R-A2 08109-11 H.H. Pump Station Main - Engineering	62,500.00	0.00	0.00	0.00	62,500.00	0.00
WBS R-A2 08109-11-2008 H.H. Pump Station Main - Engineering	62,500.00	0.00	0.00	0.00	62,500.00	62,500.00
WBS R-A2 08109-12 H.H. Pump Station Main - CM	62,500.00	0.00	0.00	0.00	62,500.00	0.00
WBS R-A2 08109-12-2008 H.H. Pump Station Main - CM	62,500.00	0.00	0.00	0.00	62,500.00	62,500.00
WBS R-A2 08109-21 H.H. Pump Station Main - Construction	625,000.00	0.00	0.00	0.00	625,000.00	0.00
WBS R-A2 08109-21-2008 H.H. Pump Station Main - Construction	625,000.00	0.00	0.00	0.00	625,000.00	625,000.00
Result	9,300,000.00	0.00	0.00	0.00	9,300,000.00	9,300,000.00

2008 CONSTRUCTION FUND — B4 SEWER - PUMP STATION — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS R-B4.05001-01-2008	Sewage Pump Station Improvements	3,360,000.00	0.00	0.00	0.00	3,360,000.00	3,360,000.00
WBS R-B4.05001-26-2008	Brown's Hill Rd Sewer Separation - CONS	90,000.00	0.00	0.00	0.00	90,000.00	90,000.00
WBS R-B4.05001-17-2008	Brown's Hill Rd Sewer Separation - CM	10,000.00	0.00	0.00	0.00	10,000.00	10,000.00
Result		3,460,000.00	0.00	0.00	0.00	3,460,000.00	3,460,000.00

2008 CONSTRUCTION FUND — A3 WATER - TREATMENT PLANT — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-A3.05006-15-2008	Filter Backwash / Clarification ENG	127,000.00	0.00	0.00	0.00	127,000.00	127,000.00
** WBS R-A3.05006-16-2008	Filter Backwash / Clarification CM	1,095,000.00	0.00	0.00	0.00	1,095,000.00	1,095,000.00
** WBS R-A3.05006-17-2008	Filter Backwash Equalization - ENG	160,000.00	0.00	0.00	0.00	160,000.00	160,000.00
** WBS R-A3.05006-18-2008	Filter Backwash Equalization - CM	500,000.00	0.00	0.00	0.00	500,000.00	500,000.00
** WBS R-A3.05006-24-2008	Filter Backwash Equalization - CONST	18,615,000.00	0.00	0.00	0.00	18,615,000.00	18,615,000.00
** WBS R-A3.05006-25-2008	Filter Backwash / Clarification ELECTR	3,285,000.00	0.00	0.00	0.00	3,285,000.00	3,285,000.00
** WBS R-A3.06007-13-2008	SCADA - CM	190,000.00	0.00	0.00	0.00	190,000.00	190,000.00
** WBS R-A3.06007-21-2008	SCADA - Const	1,810,000.00	0.00	0.00	0.00	1,810,000.00	1,810,000.00
** WBS R-A3.08110	Bruecken Pump Station Standby Power	7,765,000.00	0.00	0.00	0.00	7,765,000.00	0.00
* WBS R-A3.08110-11	Bruecken Standby Power - Engineering	115,000.00	0.00	0.00	0.00	115,000.00	0.00
WBS R-A3.08110-11-2008	Bruecken Standby Power - Engineering	115,000.00	0.00	0.00	0.00	115,000.00	115,000.00
* WBS R-A3.08110-12	Bruecken Standby Power - CM	250,000.00	0.00	0.00	0.00	250,000.00	0.00
WBS R-A3.08110-12-2008	Bruecken Standby Power - CM	250,000.00	0.00	0.00	0.00	250,000.00	250,000.00
* WBS R-A3.08110-21	Bruecken Standby Power - Construction	7,400,000.00	0.00	0.00	0.00	7,400,000.00	0.00
WBS R-A3.08110-21-2008	Bruecken Standby Power - Construction	7,400,000.00	0.00	0.00	0.00	7,400,000.00	7,400,000.00
** WBS R-A3.08111	Highland No. 1 Reservoir MFP Expansion	1,100,000.00	0.00	0.00	0.00	1,100,000.00	0.00
* WBS R-A3.08111-12	Highland No. 1 MFP Expansion - CM	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-A3.08111-12-2008	Highland No. 1 MFP Expansion - CM	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
* WBS R-A3.08111-21	Highland No. 1 MFP Expansion - Const.	1,000,000.00	0.00	0.00	0.00	1,000,000.00	0.00
WBS R-A3.08111-21-2008	Highland No. 1 MFP Expansion - Const.	1,000,000.00	0.00	0.00	0.00	1,000,000.00	1,000,000.00
Result		34,647,000.00	0.00	0.00	0.00	34,647,000.00	34,647,000.00

2008 CONSTRUCTION FUND — C1 CITY / URA / SEA / PORT AUTHORITY — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-C1.08501	Manchester Housing	200,000.00	0.00	0.00	200,000.00-	0.00	0.00
* WBS R-C1.08501-01	Manchester Housing	200,000.00	0.00	0.00	200,000.00-	0.00	0.00
WBS R-C1.08501-01-2008	Manchester Housing	200,000.00	0.00	0.00	200,000.00-	0.00	0.00
** WBS R-C1.08502	Proposed Development Projects	875,000.00	0.00	0.00	875,000.00-	0.00	0.00
* WBS R-C1.08502-01	Proposed Development Projects	875,000.00	0.00	0.00	875,000.00-	0.00	0.00
WBS R-C1.08502-01-2008	Proposed Development Projects	875,000.00	0.00	0.00	875,000.00-	0.00	0.00
** WBS R-C1.08503	Garfield Housing	4,000,000.00	0.00	0.00	2,000,000.00-	2,000,000.00	0.00
* WBS R-C1.08503-01	Garfield Housing	4,000,000.00	0.00	0.00	2,000,000.00-	2,000,000.00	0.00
WBS R-C1.08503-01-2008	Garfield Housing	4,000,000.00	0.00	0.00	2,000,000.00-	2,000,000.00	2,000,000.00
** WBS R-C1.08504	Pittsburgh Technology Center	1,350,000.00	0.00	0.00	1,350,000.00-	0.00	0.00
* WBS R-C1.08504-01	Pittsburgh Technology Center	1,350,000.00	0.00	0.00	1,350,000.00-	0.00	0.00
WBS R-C1.08504-01-2008	Pittsburgh Technology Center	1,350,000.00	0.00	0.00	1,350,000.00-	0.00	0.00
** WBS R-C1.91501-21-2008	NINE MILE RUN REDEVELOPMENT	4,450,000.00	0.00	0.00	2,000,000.00-	2,450,000.00	2,450,000.00
** WBS R-C1.96482-21-2008	ALLEQUIPPA TERRACE	3,750,000.00	0.00	0.00	2,000,000.00-	1,750,000.00	1,750,000.00
** WBS R-C1.98501-21-2008	S.S. INDUSTRIAL DEVELOPMENT	1,600,000.00	0.00	0.00	0.00	1,600,000.00	1,600,000.00
Result		16,225,000.00	0.00	0.00	8,425,000.00-	7,800,000.00	7,800,000.00

2008 CONSTRUCTION FUND — B2 SEWER - COMBINED SEWER — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-B2.08112	COA Sewer Televising and Cleaning	2,250,000.00	0.00	0.00	0.00	2,250,000.00	0.00
* WBS R-B2.08112-01	COA Sewer Televising and Cleaning	2,250,000.00	0.00	0.00	0.00	2,250,000.00	0.00
WBS R-B2.08112-01-2008	COA Sewer Televising and Cleaning	2,250,000.00	0.00	0.00	0.00	2,250,000.00	2,250,000.00
** WBS R-B2.08113	CSO / COA Management	750,000.00	0.00	0.00	0.00	750,000.00	0.00
* WBS R-B2.08113-01	CSO / COA Management	750,000.00	0.00	0.00	0.00	750,000.00	0.00
WBS R-B2.08113-01-2008	CSO / COA Management	750,000.00	0.00	0.00	0.00	750,000.00	750,000.00
** WBS R-B2.08114	MH CB & Sewer Line Point Repair	2,250,000.00	0.00	0.00	0.00	2,250,000.00	0.00
* WBS R-B2.08114-01	MH CB & Sewer Line Point Repair	2,250,000.00	0.00	0.00	0.00	2,250,000.00	0.00
WBS R-B2.08114-01-2008	MH CB & Sewer Line Point Repair	2,250,000.00	0.00	0.00	0.00	2,250,000.00	2,250,000.00
** WBS R-B2.08115	Sewer Rehabilitation - Gunite	750,000.00	0.00	0.00	0.00	750,000.00	0.00
* WBS R-B2.08115-01	Sewer Rehabilitation - Gunite	750,000.00	0.00	0.00	0.00	750,000.00	0.00
WBS R-B2.08115-01-2008	Sewer Rehabilitation - Gunite	750,000.00	0.00	0.00	0.00	750,000.00	750,000.00
** WBS R-B2.08116	Sewer Rehabilitation - Lining	650,000.00	0.00	0.00	0.00	650,000.00	0.00
* WBS R-B2.08116-01	Sewer Rehabilitation - Lining	650,000.00	0.00	0.00	0.00	650,000.00	0.00
WBS R-B2.08116-01-2008	Sewer Rehabilitation - Lining	650,000.00	0.00	0.00	0.00	650,000.00	650,000.00
** WBS R-B2.08117	Sewer Improvements - Planned	1,050,000.00	0.00	0.00	0.00	1,050,000.00	0.00
* WBS R-B2.08117-01	Sewer Improvements - Planned	1,050,000.00	0.00	0.00	10,000.00-	1,040,000.00	0.00
WBS R-B2.08117-01-2008	Sewer Improvements - Planned	1,050,000.00	0.00	0.00	10,000.00-	1,040,000.00	1,040,000.00
* WBS R-B2.08117-05	S 22nd St Sewer Const - Eng	0.00	0.00	0.00	10,000.00	10,000.00	0.00
WBS R-B2.08117-05-2008	S 22nd St Sewer Const - Eng	0.00	0.00	0.00	10,000.00	10,000.00	10,000.00
** WBS R-B2.08118	MS4 Stormwater Compliance	400,000.00	0.00	0.00	0.00	400,000.00	0.00
* WBS R-B2.08118-01	MS4 Stormwater Compliance	400,000.00	0.00	0.00	0.00	400,000.00	0.00
WBS R-B2.08118-01-2008	MS4 Stormwater Compliance	400,000.00	0.00	0.00	0.00	400,000.00	400,000.00
** WBS R-B2.08119	Sewer Flow Monitoring	45,000.00	0.00	0.00	0.00	45,000.00	0.00
* WBS R-B2.08119-01	Sewer Flow Monitoring	45,000.00	0.00	0.00	0.00	45,000.00	0.00
WBS R-B2.08119-01-2008	Sewer Flow Monitoring	45,000.00	0.00	0.00	0.00	45,000.00	45,000.00
** WBS R-B2.08120	Coby Chapin Sewer Extension	200,000.00	0.00	0.00	0.00	200,000.00	0.00
* WBS R-B2.08120-10	Coby Chapin Sewer Extension Easement	10,000.00	0.00	0.00	0.00	10,000.00	0.00
WBS R-B2.08120-10-2008	Coby Chapin Sewer Extension Easement	10,000.00	0.00	0.00	0.00	10,000.00	10,000.00
* WBS R-B2.08120-11	Coby Chapin Sewer Extension Engineering	12,000.00	0.00	0.00	0.00	12,000.00	0.00
WBS R-B2.08120-11-2008	Coby Chapin Sewer Extension Engineering	12,000.00	0.00	0.00	0.00	12,000.00	12,000.00
* WBS R-B2.08120-12	Coby Chapin Sewer Extension - CM	15,000.00	0.00	0.00	0.00	15,000.00	0.00
WBS R-B2.08120-12-2008	Coby Chapin Sewer Extension - CM	15,000.00	0.00	0.00	0.00	15,000.00	15,000.00
* WBS R-B2.08120-21	Coby Chapin Sewer Extension - CONST	163,000.00	0.00	0.00	0.00	163,000.00	0.00
WBS R-B2.08120-21-2008	Coby Chapin Sewer Extension - CONST	163,000.00	0.00	0.00	0.00	163,000.00	163,000.00
** WBS R-B2.08136	SR 28 Reconstruction - Sewer Reloc	0.00	0.00	0.00	500,000.00	500,000.00	0.00
* WBS R-B2.08136-01	SR 28 Reconstruction Sewer Reloc	0.00	0.00	0.00	500,000.00	500,000.00	0.00
WBS R-B2.08136-01-2008	SR 28 Reconstruction Sewer Reloc	0.00	0.00	0.00	500,000.00	500,000.00	500,000.00
Result		8,345,000.00	0.00	0.00	500,000.00	8,845,000.00	7,795,000.00

2008 CONSTRUCTION FUND — E1 TOOLS AND EQUIPMENT — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS R-E1.08130	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	0.00	0.00	1,200,000.00	0.00
* WBS R-E1.08130-01	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	0.00	0.00	1,200,000.00	0.00
WBS R-E1.08130-01-2008	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	0.00	0.00	1,200,000.00	1,200,000.00
** WBS R-E1.08131	Purchase Water Meters / UMEs	750,000.00	0.00	0.00	0.00	750,000.00	0.00
* WBS R-E1.08131-01	Purchase Water Meters / UMEs	750,000.00	0.00	0.00	0.00	750,000.00	0.00
WBS R-E1.08131-01-2008	Purchase Water Meters / UMEs	750,000.00	0.00	0.00	0.00	750,000.00	750,000.00
** WBS R-E1.08132	Vehicles	2,100,000.00	0.00	0.00	0.00	2,100,000.00	0.00
* WBS R-E1.08132-01	Vehicles	2,100,000.00	0.00	0.00	0.00	2,100,000.00	0.00
WBS R-E1.08132-01-2008	Vehicles	2,100,000.00	0.00	0.00	0.00	2,100,000.00	2,100,000.00
** WBS R-E1.08133	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00
* WBS R-E1.08133-01	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00
WBS R-E1.08133-01-2008	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	0.00	0.00	1,500,000.00	1,500,000.00
Result		5,550,000.00	0.00	0.00	0.00	5,550,000.00	5,550,000.00

2008 CONSTRUCTION FUND — D1 ENGINEERING — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
** WBS I-D1.08123	Misc Engineering Services - 2008 CF	1,250,000.00	0.00	0.00	0.00	1,250,000.00	0.00
* WBS I-D1.08123-2008	Misc Engineering Services - 2008 CF	1,250,000.00	0.00	0.00	0.00	1,250,000.00	1,250,000.00
** WBS R-D1.08121	Surveys	175,000.00	0.00	0.00	0.00	175,000.00	0.00
* WBS R-D1.08121-01	Surveys	175,000.00	0.00	0.00	0.00	175,000.00	0.00
WBS R-D1.08121-01-2008	Surveys	175,000.00	0.00	0.00	0.00	175,000.00	175,000.00
** WBS R-D1.08122	CM for Private Development	435,000.00	12,017.00	0.00	0.00	447,017.00	0.00
* WBS R-D1.08122-01	CM for Private Development	435,000.00	0.00	0.00	7,500.00-	427,500.00	0.00
WBS R-D1.08122-01-2008	CM for Private Development	435,000.00	0.00	0.00	7,500.00-	427,500.00	427,500.00
* WBS R-D1.08122-11	Forbes 5th Relocation W&S Facilities	0.00	0.00	0.00	7,500.00	7,500.00	0.00
WBS R-D1.08122-11-2008	Forbes 5th Relocation W&S Facilities	0.00	0.00	0.00	7,500.00	7,500.00	7,500.00
* WBS R-D1.08122-12	N.S. Fred Rogers Memorial	0.00	1,750.00	0.00	0.00	1,750.00	0.00
WBS R-D1.08122-12-2008	N.S. Fred Rogers Memorial	0.00	1,750.00	0.00	0.00	1,750.00	1,750.00
* WBS R-D1.08122-14	5th Ave Waterline 3 PNC/Market Sq Pl	0.00	10,267.00	0.00	0.00	10,267.00	0.00
WBS R-D1.08122-14-2008	5th Ave Waterline 3 PNC/Market Sq Pl	0.00	10,267.00	0.00	0.00	10,267.00	10,267.00
** WBS R-D1.08124	2008 CF Temp Staffing	1,800,000.00	0.00	0.00	0.00	1,800,000.00	0.00
* WBS R-D1.08124-11	2008 CF Temp Staffing - Chester Eng	800,000.00	0.00	0.00	0.00	800,000.00	0.00
WBS R-D1.08124-11-2008	2008 CF Temp Staffing - Chester Eng	800,000.00	0.00	0.00	0.00	800,000.00	800,000.00
* WBS R-D1.08124-12	2008 CF Temp Staffing - Kimball	464,000.00	0.00	0.00	0.00	464,000.00	0.00
WBS R-D1.08124-12-2008	2008 CF Temp Staffing - Kimball	464,000.00	0.00	0.00	0.00	464,000.00	464,000.00
* WBS R-D1.08124-13	2008 CF Temp Staffing - URS	536,000.00	0.00	0.00	0.00	536,000.00	0.00
WBS R-D1.08124-13-2008	2008 CF Temp Staffing - URS	536,000.00	0.00	0.00	0.00	536,000.00	536,000.00
** WBS R-D1.08125	Developer Reviews	295,000.00	0.00	0.00	0.00	295,000.00	0.00
* WBS R-D1.08125-11	Developer Reviews	295,000.00	0.00	0.00	0.00	295,000.00	0.00
WBS R-D1.08125-11-2008	Developer Reviews	295,000.00	0.00	0.00	0.00	295,000.00	295,000.00
** WBS R-D1.08126	Consulting Engineer Additonal Services	350,000.00	0.00	0.00	0.00	350,000.00	0.00
* WBS R-D1.08126-01	Consulting Engineer Additonal Services	125,000.00	0.00	0.00	0.00	125,000.00	0.00
WBS R-D1.08126-01-2008	Consulting Engineer Additonal Services	125,000.00	0.00	0.00	0.00	125,000.00	125,000.00
* WBS R-D1.08126-11	CE - Miscellaneous Design	70,000.00	0.00	0.00	0.00	70,000.00	0.00
WBS R-D1.08126-11-2008	CE - Miscellaneous Design	70,000.00	0.00	0.00	0.00	70,000.00	70,000.00
* WBS R-D1.08126-12	CE - SAP Setup and Testing	40,000.00	0.00	0.00	0.00	40,000.00	0.00
WBS R-D1.08126-12-2008	CE - SAP Setup and Testing	40,000.00	0.00	0.00	0.00	40,000.00	40,000.00
* WBS R-D1.08126-13	CE - Meeting Attendance	15,000.00	0.00	0.00	0.00	15,000.00	0.00
WBS R-D1.08126-13-2008	CE - Meeting Attendance	15,000.00	0.00	0.00	0.00	15,000.00	15,000.00
* WBS R-D1.08126-14	CE - Preparation of Monthly Reports	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-D1.08126-14-2008	CE - Preparation of Monthly Reports	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
** WBS R-D1.08127	Construction Manager Additional Service	210,000.00	0.00	0.00	0.00	210,000.00	0.00
* WBS R-D1.08127-01	Construction Manager Additional Service	85,000.00	0.00	0.00	0.00	85,000.00	0.00
WBS R-D1.08127-01-2008	Construction Manager Additional Service	85,000.00	0.00	0.00	0.00	85,000.00	85,000.00
* WBS R-D1.08127-11	CM - Meetings	25,000.00	0.00	0.00	0.00	25,000.00	0.00
WBS R-D1.08127-11-2008	CM - Meetings	25,000.00	0.00	0.00	0.00	25,000.00	25,000.00
* WBS R-D1.08127-12	CM-SAP Purchase Requisition Preparation	50,000.00	0.00	0.00	0.00	50,000.00	0.00
WBS R-D1.08127-12-2008	CM-SAP Purchase Requisition Preparation	50,000.00	0.00	0.00	0.00	50,000.00	50,000.00
* WBS R-D1.08127-13	CM - Miscellaneous Design	50,000.00	0.00	0.00	0.00	50,000.00	0.00
WBS R-D1.08127-13-2008	CM - Miscellaneous Design	50,000.00	0.00	0.00	0.00	50,000.00	50,000.00
** WBS R-D1.08128	Construction Management for URA Project	700,000.00	0.00	0.00	0.00	700,000.00	0.00
* WBS R-D1.08128-01	Construction Management for URA Project	340,000.00	0.00	0.00	50,000.00-	290,000.00	0.00
WBS R-D1.08128-01-2008	Construction Management for URA Project	340,000.00	0.00	0.00	50,000.00-	290,000.00	290,000.00
* WBS R-D1.08128-11	CM - S.S. Industrial Development	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-D1.08128-11-2008	CM - S.S. Industrial Development	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
* WBS R-D1.08128-12	CM - Nine Mile Run Development	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-D1.08128-12-2008	CM - Nine Mile Run Development	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
* WBS R-D1.08128-13	CM - Bedford Dwellings	10,000.00	0.00	0.00	0.00	10,000.00	0.00
WBS R-D1.08128-13-2008	CM - Bedford Dwellings	10,000.00	0.00	0.00	0.00	10,000.00	10,000.00
* WBS R-D1.08128-14	CM - Allequippa Terrace	100,000.00	0.00	0.00	0.00	100,000.00	0.00
WBS R-D1.08128-14-2008	CM - Allequippa Terrace	100,000.00	0.00	0.00	0.00	100,000.00	100,000.00
* WBS R-D1.08128-15	CM - Pittsburgh Technology Center	50,000.00	0.00	0.00	0.00	50,000.00	0.00
WBS R-D1.08128-15-2008	CM - Pittsburgh Technology Center	50,000.00	0.00	0.00	0.00	50,000.00	50,000.00
* WBS R-D1.08128-16	CM - Susquehanna Street	0.00	0.00	0.00	50,000.00	50,000.00	0.00

2008 CONSTRUCTION FUND — Z1 CONTINGENCY — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS I-Z1.50000-2008	CONTINGENCY BOND 2008	2,008,166.58	0.00	0.00	461,395.00-	1,546,771.58	1,546,771.58
Result		2,008,166.58	0.00	0.00	461,395.00-	1,546,771.58	1,546,771.58

2008 CONSTRUCTION FUND — D1 ENGINEERING — BUDGET AS OF DECEMBER 31, 2008

Object		Original Budget	Supplements	Returns	Transfers	Current Budget	Distributable Budget
WBS R-D1.08128-16-2008	CM - Susquehanna Street	0.00	0.00	0.00	50,000.00	50,000.00	50,000.00
** WBS R-D1.08129	Engineering Department Reimbursement	4,000,000.00	0.00	0.00	461,395.00	4,461,395.00	0.00
* WBS R-D1.08129-11	2008 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	461,395.00	1,461,395.00	0.00
WBS R-D1.08129-11-2008	2008 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	461,395.00	1,461,395.00	1,461,395.00
* WBS R-D1.08129-12	2009 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-12-2008	2009 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	1,000,000.00
* WBS R-D1.08129-13	2010 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-13-2008	2010 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	1,000,000.00
* WBS R-D1.08129-14	2011 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-14-2008	2011 Engineering Dept Reimbursement	1,000,000.00	0.00	0.00	0.00	1,000,000.00	1,000,000.00
Result		9,215,000.00	12,017.00	0.00	461,395.00	9,688,412.00	8,541,395.00

EXHIBIT E
PENNVEST PROGRAM BUDGET
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST FINANCING

CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

	BUDGET
WATER SYSTEM	
Distribution System	$ 15,696,064.35
Pumping and Storage	-
Treatment Plant	-
Tools and Equipment	-
Miscellaneous	-
TOTAL WATER SYSTEM	**$ 15,696,064.35**
SEWER SYSTEM	$ 3,972,929.91
STORM SEWER SYSTEM	854,284.01
CITY AND URA PROJECTS	-
ENGINEERING AND CONSTRUCTION MANAGEMENT	-
CONTINGENCIES	-
TOTAL PENNVEST PROJECTS	**$ 20,523,278.27**

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
WATER SYSTEM IMPROVEMENT PROJECT PHASE I									
PVA-1	1	- - -	WATER SYSTEM IMPROVEMENTS PROJECT	6-00	$ 3,749,000.00				PENNVEST APPLICATION - JAN 16,2001
					(837,719.00)				
					(855,865.00)				
					(742,922.00)				
					(879,800.00)				
					(36,740.00)				
					(25,229.48)				
					(9,241.75)				
					(194,494.00)				
					(17,607.80)				
					(3,921.00)				
					(72,409.07)				
					(25,600.00)				
					(15,306.80)				
					(32,144.10)	$ -	X		
PVA-1	1A	- - -	ADMINISTRATION	6-00	3,000.00				
					(3,000.00)	-	X		
PVA-1	1B	- - -	INTEREST DURING CONSTRUCTION	6-00	35,000.00				
					(10,942.52)	24,057.48	X		
PVA-1	1C	- - -	ENGINEERING DESIGN	6-00	200,000.00				
					(200,000.00)	-	X		
PVA-1	1D	- - -	CONSTRUCTION MANAGMENT	6-00	156,600.00				
					173,051.04	329,651.04	X		
PVA-1	1E	- - -	G & S / ADMINISTRATION	6-00	156,600.00				
					(127,723.63)				
					(16,737.36)	12,139.01	X		

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
PVA-1	1F	00021	CHARTIERS AVENUE 12" WATERLINE RELAY		837,719.00				
					36,740.00				
					25,229.48				
					9,241.75				
					194,494.00				
					32,144.10	1,263,291.50	X		
PVA-1	1G	00022	MARLBOROUGH AVE, BEACON ST, DARLINGTON RD, WIGHTMAN STREET & BARTLETT ST		855,865.00				
					17,607.80				
					3,921.00				
					72,409.07				
					74,943.60				
					19,735.00				
					(1,047.92)	1,043,433.55	X		
PVA-1	1H	01002	NORTH MURTLAND AVE, KEDRON ST & LYRIC ST		742,922.00				
					25,600.00				
					15,306.80				
					82,092.25	865,921.05	X		
PVA-1	1I	00020	PLYMOUTH ST, BASIL WAY, ONEIDA ST PIERMONT ST, BIGHAM ST & SYCAMORE ST		858,282.47	858,282.47	X		
PVA-1	1J	- - -	LEGAL SERVICES		5,884.54	5,884.54	X		
			TOTAL THIS PENNVEST APPLICATION		$ 4,402,660.64				
WATER SYSTEM IMPROVEMENT PROJECT PHASE II									
PVA-1	2	- - -	WATER SYSTEM IMPROVEMENTS PROJECT		$ 275,000.00				CONTINGENCY
					(275,000.00)	-	X		
PVA-1	2A	- - -	ADMINISTRATION & LEGAL		13,000.00				
					(6,643.89)				
					115.77	6,471.88	X		
PVA-1	2B	- - -	INTEREST DURING CONSTRUCTION		80,000.00				
					(79,022.10)	977.90	X		
PVA-1	2C	- - -	ENGINEERING DESIGN		50,000.00				
					(50,000.00)	-	X		
PVA-1	2D	- - -	CONSTRUCTION MANAGMENT		160,000.00				
					46,700.00				
					200,285.04	406,985.04	X		

SEWER SYSTEM

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
PVB-3	3F	01003	STREETS RUN TRUNK SEWER REHABILITATION		1,552,310.00	1,552,310.00	X		
PVB-3	3G	- - -	LAND		9,000.00	9,000.00	X		
			TOTAL THIS PENNVEST APPLICATION		$ 3,812,045.32				
				TOTAL		$ 3,972,929.91			

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
PVA-1	2E	- - -	G & S / ADMINISTRATION		6,630.26 5,357.85	11,988.11	X		
PVA-1	2F	01022	GREENFIELD FIRE PROTECTION IMPROVEMENT		1,980,000.00 (126,745.00) 232,719.23	2,085,974.23	X		
PVA-1	2G	01019-04	SWISSHELM PRESSURE DISTRICT		3,440,000.00 (646,760.00) 620,524.18	3,413,764.18	X		
			TOTAL THIS PENNVEST APPLICATION		$ 5,926,161.34				
WATER SYSTEM IMPROVEMENT PROJECT PHASE III									
PVA-1	3	- - -	WATER SYSTEM IMPROVEMENTS PROJECT		$ -	$ -			
PVA-1	3A	- - -	ADMINISTRATION & LEGAL		18,000.00 (9,006.90)	8,993.10	X		
PVA-1	3B	- - -	INTEREST DURING CONSTRUCTION		75,250.00 (75,250.00)	-	X		
PVA-1	3C	- - -	ENGINEERING DESIGN		200,000.00 (200,000.00)	-	X		
PVA-1	3D	- - -	CONSTRUCTION MANAGMENT		307,000.00 21,500.00 39,628.46	368,128.46	X		
PVA-1	3E	- - -	G & S / ADMINISTRATION		15,411.97	15,411.97	X		
PVA-1	3F	01023	WESTWOOD FIRE PROTECTION IMPROVEMENT		3,837,500.00 (1,865,250.00) 340,860.48	2,313,110.48	X		
PVA-1	3G	01024	SQUIRREL HILL FIRE PROTECTION IMPROVEMENT		2,466,895.00 194,703.36	2,661,598.36	X		
			TOTAL THIS PENNVEST APPLICATION		$ 5,367,242.37				
				TOTAL		$ 15,696,064.35			

THE PITTSBURGH WATER AND SEWER AUTHORITY

PENNVEST FINANCING
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

STORM SEWER SYSTEM

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
OVERBROOK-OLLIE ST STORM SEWER PROJECT									
PVB-1	1	- - -	OVERBROOK-OLLIE ST STORM SEWER PROJE	97-00	$ 1,495,740.17 (185,283.00) (558,555.00) 22,486.32 (2,520.00) (4,000.00) (2,750.00) (24,688.40) (740,430.09)	$ -			
PVB-1	1A	- - -	ADMINISTRATION	97-00	5,889.53	5,889.53	X		LEGAL EXPENSES
PVB-1	1B	- - -	INTEREST DURING CONSTRUCTION	97-00	2,550.39	2,550.39	X		
PVB-1	1C	- - -	ENGINEERING DESIGN	97-00	-	-			
PVB-1	1D	- - -	CONSTRUCTION MANAGMENT	97-00 - - -	69,800.00 10,225.30	80,025.30	X		
PVB-1	1E	- - -	G & S / ADMINISTRATION	97-00	10,508.71	10,508.71	X		
PVB-1	1F	97004	OLLIE STREET STORM SEWER CONSTRUCTIO	33-01 23-02	185,283.00 (22,486.32)	162,796.68	X		
PVB-1	1G	00016	OVERBROOK STORM SEWER CONSTRUCTION	34-01 139-01 47-02 91-02 108-02	558,555.00 2,520.00 4,000.00 2,750.00 24,688.40	592,513.40	X		
			TOTAL THIS PENNVEST APPLICATION		$ 854,284.01				
				TOTAL		$ 854,284.01			

THE PITTSBURGH WATER AND SEWER AUTHORITY

PENNVEST FINANCING
CAPITAL IMPROVEMENT PROGRAM
BUDGET AS OF DECEMBER 31, 2008

SEWER SYSTEM

EXH. NO.	LINE	CITY NUMBER	DESCRIPTION	RES. NO.	AMOUNT	CURRENT BUDGET	COMPLETED CONTRACT	ACTIVE CONTRACT	COMMENTS
RAILSIDE STREET SEWER PROJECT									
PVB-2	2	- - -	RAILSIDE STREET SEWER PROJECT	98-00	$ 165,412.00 (129,993.00) (1,530.00) (4,716.18) (9,219.17) (19,953.65)	$ -			PENNVEST APPLICATION - SEP 5, 2000
PVB-2	2A	- - -	ADMINISTRATION	98-00	3,498.08 829.25	4,327.33	X		
PVB-2	2B	- - -	INTEREST DURING CONSTRUCTION	98-00	248.68	248.68	X		
PVB-2	2C	- - -	ENGINEERING DESIGN	98-00	-	-	X		
PVB-2	2D	- - -	CONSTRUCTION MANAGMENT	98-00	16,969.17	16,969.17	X		
PVB-2	2E	- - -	G & S / ADMINISTRATION	- - - - - -	3,100.00 4,716.18	7,816.18	X		
PVB-2	2F	99012	RAILSIDE STREET SEWER	98-00	129,993.00 1,530.23	131,523.23	X		
			TOTAL THIS PENNVEST APPLICATION		$ 160,884.59				
STREETS RUN TRUNK SEWER PROJECT									
PVB-3	3	- - -	STREETS RUN TRUNK SEWER PROJECT		$ 1,897,790.00	$ 1,897,790.00			PENNVEST APPLICATION - MAY 8, 2001
PVB-3	3A	- - -	ADMINISTRATION & LEGAL		10,000.00 (2,054.68)	7,945.32	X		
PVB-3	3B	- - -	INTEREST DURING CONSTRUCTION		35,000.00	35,000.00	X		
PVB-3	3C	- - -	ENGINEERING DESIGN		152,000.00	152,000.00	X		
PVB-3	3D	- - -	CONSTRUCTION MANAGMENT		158,000.00	158,000.00	X		
PVB-3	3E	- - -	G & S / ADMINISTRATION		-	-	X		

EXHIBIT F
2002 BOND ISSUE STATUS REPORT
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-1	1A	---	EMER. MCC UPGRADE AT BRUECKEN P.S.	N/A	N/A		PWSA	G E INDUST SYST.	47,966.64	60,000.00	(12,033.36)	47,966.64	47,966.64	100.0%
6A-1	2B	02025	HYDRANT AND VALVE REPLACEMENT	N/A		43-02	PWSA	ASTCO CONTR	867,041.60	634,995.00	232,046.60	867,041.60	867,041.60	100.0%
6A-1	2C	03401	PURCHASE BRICKS FOR GRANT ST. REPAIR	N/A		75-03	PWSA	PGH. CLAY PRODS.	11,823.00	11,823.00	-	11,823.00	11,823.00	100.0%
6A-1	3A	01005	02 WATERLINE REPAIR & REPLACE	N/A	18-01	79-01	PWSA	TEDESCO	1,133,521.83	171,508.45	962,013.38	1,133,521.83	1,133,521.83	
								1998 BONDS	937,461.55	937,461.55	-	937,461.55	937,461.55	
								SUBTOTAL	2,070,983.38	1,108,970.00	962,013.38	2,070,983.38	2,070,983.38	100.0%
6A-1	3B	02002	WATERLINE REPAIR CONTRACT	N/A	54-02	106-02	PWSA	INDEPENDENT ENT.	1,627,317.91	888,914.50	738,403.42	1,627,317.92	1,627,317.91	100.0%
6A-1	3C	03017	03 WATERLINE REPAIR AND REPLACEMENT CONTF	N/A	4-03	39-03	PWSA	ASTCO CONTR	1,058,478.10	882,752.50	175,725.60	1,058,478.10	1,058,478.10	100.0%
6A-1	4A	01034	PURCHASE FIRE HYDRANTS	N/A		17-02	PWSA	KENNEDY VALVE	79,214.00	39,747.00	39,467.00	79,214.00	79,214.00	
								1998 BONDS	56,570.00	56,570.00	-	56,570.00	56,570.00	
								SUBTOTAL	135,784.00	96,317.00	39,467.00	135,784.00	135,784.00	100.0%
6A-1	4B	I-A1.04009	PURCHASE FIRE HYDRANTS		114-04	01-05	PWSA	KENNEDY	71,955.00	71,955.00		71,955.00	71,955.00	100.0%
6A-1	5B	I-A1.02015	PURCHASE WATER METERS		24-04	124-04	PWSA	EAP IND.	115,792.50	115,792.50	-	115,792.50	115,792.50	100.0%
6A-1	7A	00015	FIRE PROTECTION SYS. UPGRADES	N/A	74-00	02-02	PWSA	INDEPENDENT ENT.	1,099,224.32	710,796.53	388,427.79	1,099,224.32	1,099,224.32	
								1998 BONDS	98,543.47	98,543.47	-	98,543.47	98,543.47	
								SUBTOTAL	1,197,767.79	809,340.00	388,427.79	1,197,767.79	1,197,767.79	100.0%
6A-1	7B	02003	SMALL FIRE PROTECTION SYSTEM UPGRADES	N/A	54-02	107-02	PWSA	INDEPENDENT ENT.	686,433.61	629,355.00	57,078.61	686,433.61	686,433.61	100.0%
6A-1	7C	03016	SMALL FIRE PROTECTION SYSTEM UPGRADES	N/A	54-02	38-03	PWSA	ASTCO CONTR	838,580.66	797,096.00	41,484.66	838,580.66	838,580.65	100.0%
6A-1	8A	03023	SCHENLEY PLAZA			11-04	PWSA	VARIOUS	67,273.03	67,273.03	-	67,273.03	67,273.03	100.0%
6A-1	10	98027-02	LINCOLN P.S. DISCHARGE LINE	134-97	115-98	12-99	KILLIAM	PALIOTTA	33,240.99	-	33,240.99	33,240.99	33,240.99	
								1995 BONDS	794,787.23	794,787.23	-	794,787.23	794,787.23	
								1998 BONDS	75,000.00	41,732.77	33,267.23	75,000.00	75,000.00	
								SUBTOTAL	903,028.22	836,520.00	66,508.22	903,028.22	903,028.22	100.0%
6A-1	11A	98006	FOX CHAPEL - PUMPS	88-96	43-97	53-98	M. BAKER	TOTAL EQUIPMENT	4,651.38	3,181.38	1,470.00	4,651.38	4,651.38	
								1995 BONDS	143,810.62	143,810.62	-	143,810.62	143,810.62	
								1998 BONDS	507.00	507.00	-	507.00	507.00	
								SUBTOTAL	148,969.00	147,499.00	1,470.00	148,969.00	148,969.00	100.0%
6A-1	11B	98005	FOX CHAPEL - ELEC. EQUIP	88-96	43-97	53-98	M. BAKER	ELECTRO-MEC, INC.	2,993.20	2,543.20	450.00	2,993.20	2,993.20	
								1995 BONDS	22,888.80	22,888.80	-	22,888.80	22,888.80	
								1998 BONDS	-	-	-	-	-	
								SUBTOTAL	25,882.00	25,432.00	450.00	25,882.00	25,882.00	100.0%
6A-1	11C	98009	FOX CHAPEL - MECHANICAL	88-96	43-97	13-99	M. BAKER	M&K CONSTRUCT.	5,500.00	-	5,500.00	5,500.00	5,500.00	
								1995 BONDS	322,279.50	319,900.00	2,379.50	322,279.50	322,279.50	
								SUBTOTAL	327,779.50	319,900.00	7,879.50	327,779.50	327,779.50	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-1	11D	98010	FOX CHAPEL - ELECTRICAL	88-96	43-97	14-99	M. BAKER	MOLETZ ELECTRIC	20,117.98	-	20,117.98	20,117.98	20,117.98	
								1995 BONDS	184,908.20	160,299.50	24,608.20	184,907.70	184,908.20	
								1998 BONDS	20,391.34	-	20,391.34	20,391.34	20,391.34	
								SUBTOTAL	225,417.52	160,299.50	65,117.52	225,417.02	225,417.52	100.0%
6A-1	11E	98008	FOX CHAPEL - WATER LINE	88-96	43-97	76-99	M. BAKER	SPINIELLO COs.	50,620.11	17,508.39	33,111.72	50,620.11	50,620.11	
								1995 BONDS	612,216.61	612,216.61	-	612,216.61	612,216.61	
								SUBTOTAL	662,836.72	629,725.00	33,111.72	662,836.72	662,836.72	100.0%
6A-1	11F	---	FOX CHAPEL - LOUIS GESMOND	N/A	N/A	134-02	PWSA	L. GESMOND	4,600.00	4,600.00	-	4,600.00	4,600.00	100.0%
6A-1	12	---	AUTOMATED METER READING (AMR) PROGRAM				PWSA	SCHLUMBERGER	2,755,125.65	2,748,077.67	7,047.98	2,755,125.65	2,755,125.65	
								REIMBURSEMENT	5,885,420.65	5,885,420.65	-	5,885,420.65	5,885,420.65	
								1998 BONDS	1,266,501.68	1,266,501.68	-	1,266,501.68	1,266,501.68	
								SUBTOTAL	9,907,047.98	9,900,000.00	7,047.98	9,907,047.98	9,907,047.98	100.0%
6A-1	18	---	BOUNDARY ST. 42" WATER SLIP LINING (CMU)			31-04	PWSA	INDEPENDENT	121,449.88	125,000.00	(3,550.12)	121,449.88	121,449.88	100.0%
6A-1	19		WATER SYSTEM IMPROVEMENT PROJECT PHASE III REIMBURSEMENT			97-04	PWSA	OPERATIONS	-					
								2002 BOND TOTAL	$ 10,702,921.39	$ 7,982,919.15	$ 2,720,002.25	$ 10,702,921.40	$ 10,702,921.38	
								REIMBURSEMENT	5,885,420.65	5,885,420.65	-	5,885,420.65	5,885,420.65	
								1991 BOND TOTAL	-	-	-	-	-	
								1993 BOND TOTAL	-	-	-	-	-	
								1995 BOND TOTAL	2,080,890.96	2,053,902.76	26,987.70	2,080,890.46	2,080,890.96	
								1998 BOND TOTAL	2,454,975.04	2,401,316.47	53,658.57	2,454,975.04	2,454,975.04	
								TOTAL	$ 21,124,208.04	$ 18,323,559.03	$ 2,800,648.52	$ 21,124,207.55	$ 21,124,208.03	

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

	AMOUNT BUDGETED	COMPLETED CONTRACTS	ACTIVE CONTRACTS	AUTHORIZED FOR BIDDING	TOTAL	AMOUNT PAID TO DATE
WATER SYSTEM						
DISTRIBUTION SYSTEM	$ 16,588,342.04	$ 16,588,342.03	$ -	$ -	$ 16,588,342.03	$ 16,588,342.03
PUMPING AND STORAGE	3,847,617.37	3,847,617.37	-	-	3,847,617.37	3,847,617.37
TREATMENT PLANT	2,214,177.27	2,214,177.27	-	-	2,214,177.27	2,214,177.27
TOOLS & EQUIPMENT	1,676,797.13	1,676,797.13	-	-	1,676,797.13	1,676,797.13
MISCELLANEOUS	5,646,267.74	5,646,267.74	-	-	5,646,267.74	5,646,267.74
TOTAL WATER SYSTEM	$ 29,973,201.55	$ 29,973,201.54	$ -	$ -	$ 29,973,201.54	$ 29,973,201.54
SEWER SYSTEM	23,899,307.41	23,899,307.42	-	-	23,899,307.42	23,899,307.42
CITY, URA AND S&EA PROJECTS	19,248,405.24	19,248,405.24	-	-	19,248,405.24	19,248,405.24
ENG'R & CONSTR. MGMT	13,303,887.07	13,303,887.07	-	-	13,303,887.07	13,303,887.07
CONTINGENCIES	-	-	-	-	-	-
REVENUE FUND REIMBURSEMENT	5,173,000.00	5,173,000.00	-	-	5,173,000.00	5,173,000.00
TOTALS	**$ 91,597,801.27**	**$ 91,597,801.27**	**$ -**	**$ -**	**$ 91,597,801.27**	**$ 91,597,801.27**
PERCENT OF BUDGET		100.00%	0.00%	0.00%	100.00%	100.00%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-3	3B	- - -	RAPID PCR SYSTEM FOR WTP LABORATORY				PWSA	PHOENIX	54,885.31	54,885.31	-	54,885.31	54,885.31	100.0%
6A-3	3C	R-A2.03006	FLAME/FURNACE ABSORPTION SPECTROMETER	N/A	85-03	116-03	PWSA	PERKIN ELMER LAS	43,868.40	44,218.00	(349.60)	43,868.40	43,868.40	100.0%
6A-3	3D	R-A3.04007	WTP OPERATIONS CENTER WINDOWS		125-04	125-04	PWSA	DELREY WIND.	9,840.00	9,840.00		9,840.00	9,840.00	100.0%
6A-3	3E	R-F1.05010	LABORATORY INFO MGNT (LIMS)			24-05	PWSA	LABLITE	52,600.00	69,800.00	(17,200.00)	52,600.00	52,600.00	100.0%
						40-05	PWSA	P A 5840-04	22,094.43	50,000.00	(27,905.57)	22,094.43	22,094.43	100.0%
6A-3	4	01036	REPAIR FILTER BUILDING ROOF				PWSA	PHOENIX	479,787.36	475,035.00	4,752.36	479,787.36	479,787.36	100.0%
6A-3	7	02008	REHABILITATION OF CLARIFIERS AT THE WTP		126-02	36-04	PWSA	RG FRIDAY , INC.	127,574.54	127,775.10	(200.56)	127,574.54	127,574.54	100.0%
							PWSA	OAKDALE CONSTR.	1,740.00	1,740.00	-	1,740.00	1,740.00	
6A-3	8	99025	CONE VALVE #3 REPLACEMENT	N/A	162-99	147-01	PWSA	WAYNE CROUSE	141,427.55	141,750.00	(322.45)	141,427.55	141,427.55	100.0%
6A-3	10A	99004-G	CHEM. FACILITIES UPGRADE - GEN.	N/A	25-99	5-00	CH2MHILL	OAKDALE CONSTR.	509,546.52	-	509,546.52	509,546.52	509,546.52	
								1995 BONDS	1,664,482.46	1,664,482.46	-	1,664,482.46	1,664,482.46	
								1998 BONDS	545,907.81	528,992.54	16,915.27	545,907.81	545,907.81	
								SUBTOTAL	2,719,936.79	2,193,475.00	526,461.79	2,719,936.79	2,719,936.79	100.0%
6A-3	10B	99004-P	CHEM. FACILITIES UPGRADE - PLUMB.		25-99	75-99	CH2MHILL	W. G. TOMKO, INC.	14,958.44	-	14,958.44	14,958.44	14,958.44	
								1995 BONDS	58,288.22	58,288.22	-	58,288.22	58,288.22	
								1998 BONDS	36,125.32	34,711.78	1,413.54	36,125.32	36,125.32	
								SUBTOTAL	109,371.98	93,000.00	16,371.98	109,371.98	109,371.98	100.0%
6A-3	10C	99004-H	CHEM. FACILITIES UPGRADE - HVAC		25-99	74-99	CH2MHILL	QUALITY SHEET....	47,425.27	13,417.18	34,008.09	47,425.27	47,425.27	
								1995 BONDS	19,885.86	19,885.86	-	19,885.86	19,885.86	
								1998 BONDS	106,567.96	106,567.96	-	106,567.96	106,567.96	
								SUBTOTAL	173,879.09	139,871.00	34,008.09	173,879.09	173,879.09	100.0%
6A-3	10D	01015	CHEM. FACILITIES UPGRADE - ELEC.	N/A	30-01	50-01	CH2MHILL	VANTAGE CORP.	156,422.49	64,178.33	92,244.16	156,422.49	156,422.49	
								1995 BONDS	13,545.00	13,545.00	-	13,545.00	13,545.00	
								1998 BONDS	191,176.67	191,176.67	-	191,176.67	191,176.67	
								SUBTOTAL	361,144.16	268,900.00	92,244.16	361,144.16	361,144.16	100.0%
6A-3	11A	94010-E	PILOT PLANT - ELEC.	97-97	72-98	96-98	CH2MHILL	MOLETZ ELECTRIC	4,521.09	-	4,521.09	4,521.09	4,521.09	
								1995 BONDS	63,555.00	56,475.00	7,080.00	63,555.00	63,555.00	
								1998 BONDS	6,922.65	-	6,922.65	6,922.65	6,922.65	
								SUBTOTAL	74,998.74	56,475.00	18,523.74	74,998.74	74,998.74	100.0%
6A-3	11B	94010	PILOT PLANT	97-97	N/A	97-97	CH2MHILL	CH2MHILL	-	6,051.00	(6,051.00)	-	-	
								1995 BONDS	721,044.00	680,086.00	40,958.00	721,044.00	721,044.00	
								1998 BONDS	-	-	-	-	-	
								SUBTOTAL	721,044.00	686,137.00	34,907.00	721,044.00	721,044.00	100.0%
6A-3	11C	94010-G	PILOT PLANT - GEN	97-97	72-98	107-98	CH2MHILL	C. S. T.	55,812.00	1,778.77	54,033.23	55,812.00	55,812.00	
								1995 BONDS	322,339.23	322,339.23	-	322,339.23	322,339.23	
								1998 BONDS	-	-	-	-	-	
								SUBTOTAL	378,151.23	324,118.00	54,033.23	378,151.23	378,151.23	100.0%
6A-3	12A	01009-01	ROSS P.S. BOILER REPLACEMENT HEATING CONTRACT		18-01	51-01	CHESTER	WAYNE CROUSE	93,627.11	-	93,627.11	93,627.11	93,627.11	
								1995 BONDS	505,485.50	505,485.50	-	505,485.50	505,485.50	
								1998 BONDS	497,105.61	438,514.50	58,591.11	497,105.61	497,105.61	
								SUBTOTAL	1,096,218.22	944,000.00	152,218.22	1,096,218.22	1,096,218.22	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - PUMPING AND STORAGE

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-2	3A	03004-02	PURCHASE PUMPS & OTHER EQUIPMENT	N/A	136-02	158-02	PWSA	BISSNUSS, INC.	55,830.00	55,830.00	-	55,830.00	55,830.00	100.0%
6A-2	5A	98001-01	HIGHLAND NO. 1 SYSTEM REPAIRS & MODIFICATIONS - CONT. 1	21-98	144-98	55-99	PWSA	OAKDALE CONSTR.	424,232.03	-	424,232.03	424,232.03	424,232.03	
								1998 BONDS	4,047,968.75	2,575,360.00	1,472,608.75	4,047,968.75	4,047,968.75	
								SUBTOTAL	4,472,200.78	2,575,360.00	1,896,840.78	4,472,200.78	4,472,200.78	100.0%
6A-2	5C	98001-02	HIGHLAND NO. 1 SYSTEM & FOUND.	21-98	144-98	115-99	PWSA	UNITED ENVIR.	102,780.80	-	102,780.80	102,780.80	102,780.80	
		98001-09	REPAIRS & MODIFICATIONS - CONT. 2					1998 BONDS	3,998,275.02	3,488,000.00	510,275.02	3,998,275.02	3,998,275.02	
								SUBTOTAL	4,101,055.82	3,488,000.00	613,055.82	4,101,055.82	4,101,055.82	100.0%
6A-2	5D	98001-03	HIGHLAND NO. 1 - MEMBRANE FILTR. GENERAL CONSTRUCTION	21-98	3-00	20-00	GANNETT	FORT ALLEN	120,262.84	-	120,262.84	120,262.84	120,262.84	
								1998 BONDS	1,040,535.78	998,950.00	41,585.78	1,040,535.78	1,040,535.78	
								SUBTOTAL	1,160,798.62	998,950.00	161,848.62	1,160,798.62	1,160,798.62	100.0%
6A-2	5E	98001-04	HIGHLAND NO. 1 - MEMBRANE FILTR. ELECTRICAL CONTRACT	21-98	52-99	51-00	GANNETT	VANTAGE CORP.	375,829.19	9,303.75	366,525.44	375,829.19	375,829.19	
								1998 BONDS	677,696.25	677,696.25	-	677,696.25	677,696.25	
								SUBTOTAL	1,053,525.44	687,000.00	366,525.44	1,053,525.44	1,053,525.44	100.0%
6A-2	5E-1	98001-04	HIGHLAND NO. 1 - CABLE RELOCATION	N/A	N/A	N/A	PWSA	VERIZON	10,667.20	10,667.20	-	10,667.20	10,667.20	100.0%
6A-2	5F	98001-05	HIGHLAND NO. 1 - MEMBRANE FILTR. HVAC CONTRACT	21-98	52-99	117-00	GANNETT	WOODSMECH, INC.	26,274.58	28,905.33	(2,630.75)	26,274.58	26,274.58	
								1998 BONDS	138,805.67	138,805.67	-	138,805.67	138,805.67	
6A-2	5G	98001-06	HIGHLAND NO. 1 - MEMBRANE FILTR. PLUMBING CONTRACT	21-98	52-99	118-00	GANNETT	W. G. TOMKO, INC.	48,361.74	-	48,361.74	48,361.74	48,361.74	
								1998 BONDS	144,961.11	133,333.00	11,628.11	144,961.11	144,961.11	
								SUBTOTAL	193,322.85	133,333.00	59,989.85	193,322.85	193,322.85	100.0%
6A-2	5H	98001-07	HIGHLAND NO. 1 - MEMBRANE FILTR. ELEMENTS	21-98	52-99	116-99	GANNETT	PALL CORP.	114,121.60	806,221.10	(129,610.00)	676,611.10	114,121.60	
								1998 BONDS	4,614,778.90	4,614,778.90	-	4,614,778.90	4,614,778.90	
								SUBTOTAL	4,728,900.50	5,421,000.00	(129,610.00)	5,291,390.00	4,728,900.50	89.4%
6A-2	5I	98001-08	HIGHLAND NO. 1 - MEMBRANE FILTR. HIGHLAND PARK SEWER	21-98	52-99	119-00	GANNETT	OAKDALE CONSTR.	147,318.71	-	147,318.71	147,318.71	147,318.71	
								1998 BONDS	812,745.59	716,800.00	95,945.59	812,745.59	812,745.59	
								SUBTOTAL	960,064.30	716,800.00	243,264.30	960,064.30	960,064.30	100.0%
6A-2	5O	98001-15	LANDSCAPING WORK	21-98	52-99	137-01	PWSA	J. ZOTTOLA LAND.	1,192,596.33	804,389.58	388,206.75	1,192,596.33	1,192,596.33	
								1998 BONDS	21,211.42	21,211.42	-	21,211.42	21,211.42	
								SUBTOTAL	1,213,807.75	825,601.00	388,206.75	1,213,807.75	1,213,807.75	100.0%
6A-2	5P	98001-16	HIGHLAND NO. 1 - MEMBRANE FILTR. FILTRATION EQUIPMENT INSTALLATION	21-98	52-99	142-00	GANNETT	OAKDALE CONSTR.	256,637.64	30,065.66	234,216.99	264,282.65	256,637.64	
								1998 BONDS	692,934.34	692,934.34	-	692,934.34	692,934.34	
								SUBTOTAL	949,571.98	723,000.00	234,216.99	957,216.99	949,571.98	100.0%
6A-2	5Q	98001-17	HIGHLAND NO. 1 - MEMBRANE FILTR. ASSEMBLE STRUCTURAL STEEL	21-98	3-00	22-00	GANNETT	FORT ALLEN	2,822.98	-	2,822.98	2,822.98	2,822.98	100.0%
								1998 BONDS	138,326.19	109,000.00	29,326.19	138,326.19	138,326.19	
								SUBTOTAL	141,149.17	109,000.00	32,149.17	141,149.17	141,149.17	100.0%
6A-2	5R	98001-18	HIGHLAND NO. 1 - MEMBRANE FILTR. CONSTRUCT MASONRY WALLS	21-98	3-00	23-00	GANNETT	OAKDALE CONSTR.	10,101.03	127.33	9,973.70	10,101.03	10,101.03	
								1998 BONDS	52,221.67	52,221.67	-	52,221.67	52,221.67	
								SUBTOTAL	62,322.70	52,349.00	9,973.70	62,322.70	62,322.70	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-3	12B	01009-02	ROSS P.S. BOILER REPLACEMENT PLUMBING CONTRACT		18-01	67-01	CHESTER	W. G. TOMKO, INC.	11,515.01	8,252.44	3,262.57	11,515.01	11,515.01	
								1998 BONDS	18,413.56	18,413.56	-	18,413.56	18,413.56	
								SUBTOTAL	29,928.57	26,666.00	3,262.57	29,928.57	29,928.57	100.0%
6A-3	12C	01009-03	ROSS P.S. BOILER REPLACEMENT ELECTRICAL CONTRACT		18-01	52-01	CHESTER	FRANKL ELECTRIC	198,013.75	-	198,013.75	198,013.75	198,013.75	
								1995 BONDS	5,141.25	5,141.25	-	5,141.25	5,141.25	
								1998 BONDS	116,214.68	89,008.75	27,205.93	116,214.68	116,214.68	
								SUBTOTAL	319,369.68	94,150.00	225,219.68	319,369.68	319,369.68	100.0%
6A-3	14	R-A3.05002	LIME MACHINE REPLACEMENT			72-06	PWSA	BISS NUSS	188,518.00	188,518.00		188,518.00	188,518.00	100.0%

2002 BOND TOTAL	$ 2,214,177.27	$ 1,257,239.13	$ 956,938.14	$ 2,214,177.27	$ 2,214,177.27
REIMBURSEMENT	-	-	-	-	-
1991 BOND TOTAL	-	-	-	-	-
1993 BOND TOTAL	-	-	-	-	-
1995 BOND TOTAL	3,373,766.52	3,325,728.52	48,038.00	3,373,766.52	3,373,766.52
1998 BOND TOTAL	1,518,434.26	1,407,385.76	111,048.50	1,518,434.26	1,518,434.26
TOTAL	$ 7,106,378.05	$ 5,990,353.41	$ 1,116,024.64	$ 7,106,378.05	$ 7,106,378.05

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - PUMPING AND STORAGE

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-2	5S	98001-19	HIGHLAND NO. 1 - MEMBRANE FILTR. CONSTRUCT ROOF	21-98	3-00	24-00	GANNETT	OAKDALE CONSTR.	5,782.61	-	5,782.61	5,782.61	5,782.61	
								1998 BONDS	109,869.61	108,100.00	1,769.61	109,869.61	109,869.61	
								SUBTOTAL	115,652.22	108,100.00	7,552.22	115,652.22	115,652.22	100.0%
6A-2	5T	98001-20	HIGHLAND NO. 1 - MEMBRANE FILTR. STAINLESS STEEL PIPE	21-98	50-00	65-00	GANNETT	VEGELY WELDING	4,167.29	-	4,167.29	4,167.29	4,167.29	
								1998 BONDS	204,197.31	193,175.00	11,022.31	204,197.31	204,197.31	
								SUBTOTAL	208,364.60	193,175.00	15,189.60	208,364.60	208,364.60	100.0%
6A-2	5U	---	HIGHLAND NO. 1 - LIGHT POLE RELOCATION	N/A	N/A	N/A	GANNETT	DUQUESNE LIGHT	4,517.20	4,517.20	-	4,517.20	4,517.20	100.0%
6A-2	6	92018	MILLVALE PUMP STA.	N/A	10-95	48-95	PWSA	TALISILA	-	750.00	(750.00)	-	-	
								1991 BONDS	318,208.04	296,739.58	21,468.46	318,208.04	318,208.04	
								SUBTOTAL	318,208.04	297,489.58	20,718.46	318,208.04	318,208.04	100.0%
6A-2	7	02031	LANPHER RESERVOIR LIGHTING REPLACEMENT	N/A	126-02	157-02	PWSA	ALLEGHENY CITY	15,659.20	18,320.00	(2,660.80)	15,659.20	15,659.20	100.0%
6A-2	8A	03018-01	HOWARD ST. P.S. - GENERAL CONTRACT	N/A	156-02	117-03	CHESTER	OAKDALE CONSTR.	740,029.89	592,000.00	161,924.19	753,924.19	740,029.89	100.0%
6A-2	8B	03018-2	HOWARD ST. P.S. - HEATING CONTRACT	N/A	155-02	74-03	CHESTER	CONTROL. CLIMATE	53,758.00	51,900.00	1,858.00	53,758.00	53,758.00	100.0%
6A-2	8C	03018-03	HOWARD ST. P.S. - PLUMBING CONTRACT	N/A	156-02	118-03	CHESTER	EAST-WEST MFG.	54,677.82	44,800.00	9,877.82	54,677.82	54,677.82	100.0%
6A-2	8D	03018-04	HOWARD ST. P.S. - ELECTRICAL WORK	N/A	156-02	119-03	CHESTER	MOLETZ ELECTRIC	81,188.69	69,800.00	11,388.69	81,188.69	81,188.69	100.0%

2002 BOND TOTAL	$ 3,847,617.37	$ 2,527,597.15	$ 1,904,049.03	$ 4,431,646.18	$ 3,847,617.37
REIMBURSEMENT	-	-	-	-	-
1991 BOND TOTAL	318,208.04	296,739.58	21,468.46	318,208.04	318,208.04
1993 BOND TOTAL	-	-	-	-	-
1995 BOND TOTAL	-	-	-	-	-
1998 BOND TOTAL	15,949,371.60	13,775,210.24	2,174,161.36	15,949,371.60	15,949,371.60
TOTAL	$ 20,115,197.01	$ 16,599,546.97	$ 4,099,678.85	$ 20,699,225.82	$ 20,115,197.01

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - SEWER SYSTEM

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6B-1	1A	00019	02 SEWER IMPROVEMENT CONTRACT	N/A	141-00	20-01	PWSA	NICASSIO CORP.	464,369.30	453,016.80	11,352.50	464,369.30	464,369.30	
								1998 BONDS	376,533.20	376,533.20	-	376,533.20	376,533.20	
								SUBTOTAL	840,902.50	829,550.00	11,352.50	840,902.50	840,902.50	100.0%
6B-1	1B	I-B1-02001	02/03 SEWER IMPROVEMENT CONTRACT	N/A	113-02	140-02	PWSA	INDEPENDENT	1,224,983.98	763,727.50	461,256.48	1,224,983.98	1,224,983.98	100.0%
6B-1	1C	I-B1.03014	2004 SEWER IMPROVEMENTS CONTRACT		24-04	115-04	PWSA	INDEPENDENT	1,161,356.56	724,412.50	436,944.06	1,161,356.56	1,161,356.56	100.0%
6B-1	1D	00005 ESOC	EMERGENCY SEWER OPERATING CONTRACT	N/A			PWSA	G. JOHNSTON	349,733.34	349,733.34	-	349,733.34	349,733.34	100.0%
6B-1	2A	00018	2001 MANHOLE/CATCH BASIN CONTRACT	N/A	141-00	32-01	PWSA	M. FACCHIANO	552,188.30	113,717.99	438,470.31	552,188.30	552,188.30	
								1998 BONDS	855,074.51	855,074.51	-	855,074.51	855,074.51	
								SUBTOTAL	1,407,262.81	968,792.50	438,470.31	1,407,262.81	1,407,262.81	100.0%
6B-1	2B	02010	02/03 MANHOLE/CATCH BASIN CONTRACT	N/A	35-02	141-02	PWSA	G. JOHNSTON	986,113.71	930,565.00	55,548.71	986,113.71	986,113.71	100.0%
6B-1	2D	02012CBER	CATCH BASIN EMERGENCY REPAIR CONTRACT	N/A	N/A		PWSA	M. FACCHIANO	126,578.26	126,578.26	-	126,578.26	126,578.26	100.0%
6B-1	2E	I-B2.04002	MH CB CONTRACT 2004	N/A	12-04	87-04	PWSA	FACCHIANO	563,694.61	535,755.50	27,939.11	563,694.61	563,694.61	100.0%
6B-1	4A	00013	2001 SEWER LINING CONTRACT	N/A	74-00	31-01	PWSA	NICASSIO CORP.	672.17	-	672.17	672.17	672.17	
								1998 BONDS	1,467,582.87	849,910.00	617,672.87	1,467,582.87	1,467,582.87	
								SUBTOTAL	1,468,255.04	849,910.00	618,345.04	1,468,255.04	1,468,255.04	100.0%
6B-1	4B	01030	2002 SEWER LINING CONTRACT	N/A	119-01	18-02	PWSA	NICASSIO CORP.	457,474.59	582,150.00	(124,675.41)	457,474.59	457,474.59	100.0%
6B-1	4C	02019	SUPPLEMENTAL SEWER LINING CONTRACT	N/A	35-02	114-02	PWSA	NICASSIO CORP.	629,661.86	603,186.90	26,474.96	629,661.86	629,661.86	100.0%
6B-1	4D	02011	2003 SEWER LINING CONTRACT	N/A	113-02	139-02	PWSA	NICASSIO CORP.	-	594,120.00	(594,120.00)	-	-	
6B-1	4E	02052	2003 SUPPLEMENTAL SEWER LINING	N/A	85-03	130-03	PWSA	INSIGHT PIPE	362,460.25	298,934.00	63,526.25	362,460.25	362,460.25	100.0%
6B-1	4F	03007	2004 SEWER LINING CONTRACT	N/A	94-03	131-03	PWSA	SPINIELLO CO.	719,938.45	687,920.00	32,018.45	719,938.45	719,938.45	100.0%
6B-1	4G	I-B2.04005	SEWER LINING CONTRACT		123-04	39-05	PWSA	INSIGHT	337,952.01	387,545.50	(49,593.48)	337,952.02	337,952.02	100.0%
6B-1	5A	02024	02 SEWER CLEANING & TV INSPECTION	N/A			PWSA	ROBINSON	47,110.60	41,556.35	5,554.25	47,110.60	47,110.60	100.0%
6B-1	5B	02029	2003 SEWER CLEANING AND INSPECTION	N/A	113-02	144-02	PWSA	ROBINSON	137,625.23	124,750.00	12,875.23	137,625.23	137,625.23	100.0%
6B-1	5C	03008	2003 SEWER CLEANING AND INSPECTION	N/A	101-03	129-03	PWSA	ROBINSON PIPE	123,350.20	112,125.00	11,225.20	123,350.20	123,350.20	100.0%
6B-1	5D	- - -	SEWER CLEANING & TV ASSISTANCE	N/A	N/A	N/A	PWSA	CHESTER ENG.	130,456.72	130,456.72	-	130,456.72	130,456.72	100.0%
6B-1	5F	I-B2.04009	SEWER JETTING & VIDEO INSPECTION		123-04	23-05	PWSA	JET JACK	411,418.92	519,010.00	(107,591.08)	411,418.92	411,418.92	100.0%
6B-1	6	01026	PNC PARK 120" SEWER REHAB.	N/A	88-01	146-01	PWSA	PARKWAY CONSTR.	175,932.67	64,378.22	111,554.45	175,932.67	175,932.67	
								1998 BONDS	589,921.78	589,921.78	-	589,921.78	589,921.78	
								SUBTOTAL	765,854.45	654,300.00	111,554.45	765,854.45	765,854.45	100.0%
6B-1	8A	01013-01	CSO STUDY, ENG. AND FLOW MONITORING	N/A		83-02	PWSA	METCALF & EDDY	4,825,238.44	4,825,238.44	-	4,825,238.44	4,825,238.44	100.0%
6B-1	8B	01013-02	CSO STUDY, ENG. AND FLOW MONITORING	N/A		84-02	PWSA	M. BAKER, JR.	4,747,724.99	4,747,724.99	-	4,747,724.99	4,747,724.99	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - TOOLS AND EQUIPMENT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-4	2	- - -	PURCHASE VACTOR TRUCK			42-02	PWSA	A&H EQUIPMENT	192,150.00	192,150.00	-	192,150.00	192,150.00	100.0%
6A-4	3	- - -	PURCHASE AND INSTALL TRUCK CRANE			PGYBK	PWSA	FRANK DOERR	52,288.60	52,288.60	-	52,288.60	52,288.60	100.0%
6A-4	4	---	PURCHASE FIVE (5) DUMP TRUCKS	N/A	N/A	142-02	PWSA	HUNTER TRUCK	378,923.90	378,923.90	-	378,923.90	378,923.90	100.0%
6A-4	5	---	PURCHASE ONE (1) BACKHOE	N/A	N/A	143-02	PWSA	DOYLE EQUIP.	79,897.38	79,897.28	0.10	79,897.38	79,897.38	100.0%
6A-4	6	03801	PURCHASE SMALL VACTOR TRUCK	N/A	14-03	41-03	PWSA	A & H EQUIPMENT	144,995.00	144,995.00	-	144,995.00	144,995.00	100.0%
6A-4	7	03801	PURCHASE TV TRUCK	N/A	14-03	40-03	PWSA	A & H EQUIPMENT	226,735.00	226,735.00	-	226,735.00	226,735.00	100.0%
6A-4	8	R-E1-06012	ARTICULATED CRANE MODEL F270A.22					STEPHENSON EQUIP.	195,439.00	195,439.00		195,439.00	195,439.00	100.0%
6A-4	9	R-E1-06013	ARTICULATED CRANE MODEL F45A.22					STEPHENSON EQUIP.	92,857.00	92,857.00		92,857.00	92,857.00	100.0%
6A-4	10	R-E1.06015	PURCHASE VACTOR TRUCK					A&H EQUIPMENT	276,701.43	276,701.43		276,701.43	276,701.43	100.0%
6A-4	11	R-E1.06027-11	PARTS TO MODIFY VACTOR TRUCK					A&H EQUIPMENT	36,809.82	36,809.82	-	36,809.82	36,809.82	100.0%
								2002 BOND TOTAL	$ 1,676,797.13	$ 1,676,797.03	$ 0.10	$ 1,676,797.13	$ 1,676,797.13	
								REIMBURSEMENT	-	-	-	-	-	
								1991 BOND TOTAL	-	-	-	-	-	
								1993 BOND TOTAL	-	-	-	-	-	
								1995 BOND TOTAL	-	-	-	-	-	
								1998 BOND TOTAL	-	-	-	-	-	
								TOTAL	$ 1,676,797.13	$ 1,676,797.03	$ 0.10	$ 1,676,797.13	$ 1,676,797.13	

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - SEWER SYSTEM

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6B-1	11	04011	JACK'S RUN SEWER SEPARATION	12-02				ALCOSAN	2,290.01	2,000,000.00	(1,997,709.99)	2,290.01	2,290.01	100.0%
6B-1	12	01017	LOWER NINE MILE RUN	N/A	138-02	143-03	PWSA	ALLISON PARK	2,500,094.07	2,677,295.00	(177,200.93)	2,500,094.07	2,500,094.07	100.0%
6B-1	13A	01025	SHOTCRETE SEWER REHABILITATION	N/A	145-01	105-02	PWSA	PARKWAY CONSTR.	1,116,541.85	787,780.00	328,761.85	1,116,541.85	1,116,541.85	100.0%
6B-1	13B	03012	SHOTCRETE SEWER REHABILITATION PROJECT	N/A	50-03	104-03	PWSA	PARKWAY CONSTR.	949,303.86	822,325.00	126,978.86	949,303.86	949,303.86	100.0%
6B-1	14A	1-12-00	2002 MH/CB FRAMES, COVERS AND RISERS	N/A			PWSA	ALLEGHENY FOUND.	19,702.00	17,077.00	2,625.00	19,702.00	19,702.00	
								1998 BONDS	103,753.00	103,753.00	-	103,753.00	103,753.00	
								SUBTOTAL	123,455.00	120,830.00	2,625.00	123,455.00	123,455.00	100.0%
6B-1	5E	I-B2.04003	SEWER JETTING AND VIDEO INSPECTION	N/A	N/A	66-04	PWSA	COLLIER DEV.	126,460.23	104,425.00	22,035.23	126,460.23	126,460.23	100.0%
6B-1	14B	- - -	2003 MANHOLE FRAMES AND COVERS	N/A	N/A	12-03	PWSA	ALLEGHENY FOUND	72,600.00	72,600.00	-	72,600.00	72,600.00	100.0%
6B-1	14C	- - -	2003 MANHOLE FRAMES AND COVERS-SUPPLEME	N/A	N/A	12-03	PWSA	ALLEGHENY FOUND	60,430.00	60,430.00	-	60,430.00	60,430.00	100.0%
6B-1	14D	I-E1.02018	2004 MH/CB FRAMES, COVERS, RISERS			86-04	PWSA	EJ/JORDAN/B&T	33,828.50	31,339.00	2,489.50	33,828.50	33,828.50	100.0%
6B-1	14E	I-E1.50013	2005 STREET REPAVING SEWER RISERS & LIDS			62-05	PWSA	CITY 112-04-2	207,198.25	207,198.25		207,198.25	207,198.25	100.0%
6B-1	16	01004	CEDRIC AVENUE DIVERSION	N/A	78-01	138-01		M. FACCHIANO	$ 14,152.45	$ 14,152.45	$ -	$ 14,152.45	$ 14,152.45	
								1998 BONDS	232,447.30	155,450.00	76,997.30	232,447.30	232,447.30	
								SUBTOTAL	246,599.75	169,602.45	76,997.30	246,599.75	246,599.75	100.0%
6B-1	15	86025B	DAWN AVENUE AREA SEWER	N/A	89-00	8-01	PWSA	NICASSIO CORP.	39,710.39	75,086.55	(35,376.16)	39,710.39	39,710.39	100.0%
								1995 BONDS	205,282.99	205,282.99	-	205,282.99	205,282.99	
								1998 BONDS	64,365.46	64,365.46	-	64,365.46	64,365.46	
								SUBTOTAL	309,358.84	344,735.00	(35,376.16)	309,358.84	309,358.84	100.0%
6B-1	17	01007	UPPER 9-MILE RUN SEWER LINING	N/A	30-01	66-01	PWSA	SPINIELLO COs.	27,881.07	-	27,881.07	27,881.07	27,881.07	
								1998 BONDS	1,183,027.58	992,950.00	190,077.58	1,183,027.58	1,183,027.58	
								SUBTOTAL	1,210,908.65	992,950.00	217,958.65	1,210,908.65	1,210,908.65	100.0%
6B-1	18	02012CBER	CEDRICTON ST. CATCH BASIN & STORM SEWER	N/A	N/A	142-03	PWSA	M. FACCHIANO	114,592.60	114,592.60	-	114,592.60	114,592.60	100.0%
6B-1	19		RAILSIDE/OLLIE/OVERBROOK PWSA REVENUE FUND REIMBURSEMENT			17-04	PWSA	PWSA	45,986.97	45,986.97	$ -	45,986.97	45,986.97	100.0%
6B-1	20	R-B2.07012	NICASSIO SETTLEMENT REINBURSEMENT TO PWSA OPERATIONS				PWSA	PWSA	32,500.00	32,500.00	$ -	32,500.00	32,500.00	100.0%
								2002 BOND TOTAL	$ 23,899,307.41	$ 24,779,390.83	$ (880,083.41)	$ 23,899,307.42	$ 23,899,307.42	
								REIMBURSEMENT	-	-	-	-	-	
								1991 BOND TOTAL	-	-	-	-	-	
								1993 BOND TOTAL	-	-	-	-	-	
								1995 BOND TOTAL	205,282.99	205,282.99	-	205,282.99	205,282.99	
								1998 BOND TOTAL	4,872,705.70	3,987,957.95	884,747.75	4,872,705.70	4,872,705.70	
								TOTAL	$ 28,977,296.10	$ 28,972,631.77	$ 4,664.34	$ 28,977,296.11	$ 28,977,296.11	

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - MISCELLANEOUS

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6A-5	4	97009	CADD - THRU 1997 (SET)	N/A	N/A	14-97	PWSA	S. E. T.	700.00	-	700.00	700.00	700.00	100.0%
								1995 BONDS	202,589.67	200,000.00	2,589.67	202,589.67	202,589.67	
								1998 BONDS	699.00	-	699.00	699.00	699.00	
								SUBTOTAL	203,988.67	200,000.00	3,988.67	203,988.67	203,988.67	100.0%
6A-5	5	- - -	I.T. SYSTEMS PHASE I - INTELLIGENCE/EA			100-02	US WATER	INTELLIGENCE/EA	1,760,469.94	1,970,000.00	(209,530.06)	1,760,469.94	1,760,469.94	100.0%
6A-5	6	- - -	I.T. SYSTEMS PHASE I - US WATER CONSULT SERVICE			103-02	US WATER	US WATER	1,214,795.00	717,000.00	497,795.00	1,214,795.00	1,214,795.00	100.0%
6A-5	7	- - -	I.T. SYSTEMS PHASE I - COMPUTER EQUIPMENT			104-02	US WATER	INSIGHT	23,219.84	100,000.00	(76,780.16)	23,219.84	23,219.84	100.0%
6A-5	8	- - -	HR/PAYROLL/TIME AND TAX FILING SERVICES				PWSA	CERIDIAN	34,736.59	40,000.00	(5,263.41)	34,736.59	34,736.59	100.0%
6A-5	9	- - -	2002 PURCHASE CITY OF PITTSBURGH ASPHALT				PWSA	CITY OF PGH	130,766.29	86,388.19	44,378.10	130,766.29	130,766.29	100.0%
6A-5	10	- - -	I.T. SYSTEMS PHASE II - INTELLIGENCE/EA			99-03	US WATER	INTELLIGENCE/EA	724,489.77	790,000.00	(65,510.23)	724,489.77	724,489.77	100.0%
6A-5	11	- - -	I.T. SYSTEMS PHASE II - US WATER CONSULT SERVICE				US WATER	US WATER	830,000.00	722,000.00	108,000.00	830,000.00	830,000.00	100.0%
6A-5	12	- - -	I.T. SYSTEMS PHASE II - MICRONAGE			108-03	US WATER	MICRONAGE	870,500.00	560,000.00	310,500.00	870,500.00	870,500.00	100.0%
6A-5	13	- - -	2003 PURCHASE CITY ASPHALT				PWSA	CITY OF PGH	56,590.31	23,839.10	32,751.21	56,590.31	56,590.31	100.0%
								2002 BOND TOTAL	$ 5,646,267.74	$ 5,009,227.29	$ 637,040.45	$ 5,646,267.74	$ 5,646,267.74	
								REIMBURSEMENT	-	-	-	-	-	
								1991 BOND TOTAL	-	-	-	-	-	
								1993 BOND TOTAL	-	-	-	-	-	
								1995 BOND TOTAL	202,589.67	200,000.00	2,589.67	202,589.67	202,589.67	
								1998 BOND TOTAL	699.00	-	699.00	699.00	699.00	
								TOTAL	$ 5,849,556.41	$ 5,209,227.29	$ 640,329.12	$ 5,849,556.41	$ 5,849,556.41	

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

CITY, URA, AND S&EA PROJECTS

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6C-1	30	85206	PANTHER HOLLOW BRIDGE	N/A	N/A	17-98		C. O. P.	-	181,354.35	(181,354.35)	-	-	
								1995 BONDS	8,645.65	8,645.65	-	8,645.65	8,645.65	
								SUBTOTAL	8,645.65	190,000.00	(181,354.35)	8,645.65	8,645.65	100.0%
6C-1	31	---	WARRIOR HILL/OAKBROOK CIRC.-URA	N/A	N/A	33-96		URA	-	165,995.30	(165,995.30)	-	-	
								1995 BONDS	664,004.70	664,004.70	-	664,004.70	664,004.70	
								SUBTOTAL	664,004.70	830,000.00	(165,995.30)	664,004.70	664,004.70	100.0%
6C-1	32	---	FRANKSTOWN COURT	N/A	N/A	37-98		URA	-	8,712.11	(8,712.11)	-	-	
								1995 BONDS	42,287.89	42,287.89	-	42,287.89	42,287.89	
								SUBTOTAL	42,287.89	51,000.00	(8,712.11)	42,287.89	42,287.89	100.0%
6C-1	33	---	SMALLMAN - SIDEWALK	N/A	N/A	125-97		C. O. P.	-	14,068.95	(14,068.95)	-	-	
								1995 BONDS	40,931.05	40,931.05	-	40,931.05	40,931.05	
								SUBTOTAL	40,931.05	55,000.00	(14,068.95)	40,931.05	40,931.05	100.0%
6C-1	34	92411	COLEMAN STREET	N/A	N/A	139-00		C. O. P.	-	29,751.39	(29,751.39)	-	-	
								1991 BONDS	85,399.97	85,399.97	-	85,399.97	85,399.97	
								1995 BONDS	4,821.64	4,821.64	-	4,821.64	4,821.64	
								SUBTOTAL	90,221.61	119,973.00	(29,751.39)	90,221.61	90,221.61	100.0%
6C-1	35	01280-4	BESSIE AVENUE WALL	N/A	N/A	40-02		C. O. P.	15,900.00	15,900.00	-	15,900.00	15,900.00	100.0%
6C-1	36	00004	SEAGATE / BUNCHER			61-01		URA	466,477.93	500,000.00	(33,522.07)	466,477.93	466,477.93	100.0%
								2002 BOND TOTAL	$ 19,248,405.24	$ 5,001,572.19	$ 15,251,372.39	$ 20,252,944.58	$ 19,248,405.24	
								REIMBURSEMENT	-	-	-	-	-	
								1991 BOND TOTAL	1,503,608.39	1,503,608.39	-	1,503,608.39	1,503,608.39	
								1993 BOND TOTAL	278,066.60	278,066.60	-	278,066.60	278,066.60	
								1995 BOND TOTAL	21,647,601.14	14,516,230.89	7,131,370.25	21,647,601.14	21,647,601.14	
								1998 BOND TOTAL	9,408,056.27	8,693,950.51	714,105.76	9,408,056.27	9,408,056.27	
								TOTAL	$ 52,085,737.64	$ 29,993,428.58	$ 23,096,848.40	$ 53,090,276.98	$ 52,085,737.64	

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

CITY, URA, AND S&EA PROJECTS

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6C-1	1	---	FORBES AVENUE/MARKET STREET RECONSTRUC	N/A	N/A			C. O. P.	-	-	-	-	-	N/A
6C-1	2	---	NEIGHBORHOOD STREETS	N/A	N/A			COP	-	-	-	-	-	0.0%
6C-1	3	---	COMMERCIAL STREET	N/A	N/A	27-02		C. O. P.	598,208.95	600,000.00	(1,791.05)	598,208.95	598,208.95	100.0%
6C-1	4	---	CRANE AVENUE SIDEWALK PROJECT	N/A	N/A			C. O. P.	-	-	-	-	-	N/A
6C-1	5	---	BEECHWOOD/MONITOR INT. IMPROVEMENTS	N/A	N/A			C. O. P.	-	-	-	-	-	N/A
6C-1	6	---	BROOKLINE BOULEVARD	N/A	N/A			C. O. P.	-	-	-	-	-	N/A
			URBAN REDEVELOPMENT AUTHORITY (URA)											
6C-1	7	---	S.S. INDUSTRIAL DEVELOPMENT	N/A	N/A	111-96		URA	4,723,548.21	-	4,723,548.21	4,723,548.21	4,723,548.21	
								1995 BONDS	5,811,059.49	1,760,000.00	4,051,059.49	5,811,059.49	5,811,059.49	
								1998 BONDS	1,386,450.37	-	1,386,450.37	1,386,450.37	1,386,450.37	
								SUBTOTAL	11,921,058.07	1,760,000.00	10,161,058.07	11,921,058.07	11,921,058.07	100.0%
6C-1	8	---	NINE MILE RUN REDEVELOPMENT	N/A	N/A	125-98		URA	3,800,281.70	-	3,800,281.70	3,800,281.70	3,800,281.70	
								1991 BONDS	86,345.95	86,345.95	-	86,345.95	86,345.95	
								1993 BONDS	278,066.60	278,066.60	-	278,066.60	278,066.60	
								1995 BONDS	3,090,898.21	635,587.45	2,455,310.76	3,090,898.21	3,090,898.21	
								1998 BONDS	1,377,221.85	-	1,377,221.85	1,377,221.85	1,377,221.85	
								SUBTOTAL	8,632,814.31	1,000,000.00	7,632,814.31	8,632,814.31	8,632,814.31	100.0%
6C-1	9	---	ALLEQUIPPA TERRACE	N/A	N/A			URA	1,304,991.26	-	1,304,991.26	1,304,991.26	1,304,991.26	
								1998 BONDS	1,523,639.40	1,000,000.00	523,639.40	1,523,639.40	1,523,639.40	
								SUBTOTAL	2,828,630.66	1,000,000.00	1,828,630.66	2,828,630.66	2,828,630.66	100.0%
6C-1	10	---	BEDFORD DWELLINGS	N/A	N/A			URA	3,283,482.40	-	4,873,330.97	4,873,330.97	3,283,482.40	
								1995 BONDS	70,374.14	70,374.14	-	70,374.14	70,374.14	
								1998 BONDS	36,294.89	29,625.86	6,669.03	36,294.89	36,294.89	
								SUBTOTAL	3,390,151.43	100,000.00	4,880,000.00	4,980,000.00	3,390,151.43	100.0%
6C-1	16	---	SOUTH SIDE RIVERFRONT HOUSING	N/A	N/A			URA	1,380,845.04	-	1,380,845.04	1,380,845.04	1,380,845.04	
								1995 BONDS	1,170,000.00	545,000.00	625,000.00	1,170,000.00	1,170,000.00	
								1998 BONDS	325,788.24	-	325,788.24	325,788.24	325,788.24	
								SUBTOTAL	2,876,633.28	545,000.00	2,331,633.28	2,876,633.28	2,876,633.28	100.0%
6C-1	11	---	NEW DEVELOPMENT INITIATIVES	N/A	N/A			URA	-	-	-	-	-	N/A
6C-1	12	---	EAST LIBERTY DEVELOPMENT	N/A	N/A			URA	-	-	-	-	-	N/A
6C-1	13	---	KEYSTONE OPPORTUNITY ZONES	N/A	N/A			URA	-	-	-	-	-	N/A
6C-1	13A	---	SILVER LAKE COMMONS	N/A	N/A			URA	155,000.00	155,000.00	-	155,000.00	155,000.00	100.0%
6C-1	14	---	GARFIELD (HOPE 6)	N/A	N/A			URA	-	-	-	-	-	
6C-1	15	---	STRIP DISTRICT / LAWRENCEVILLE	N/A	N/A			URA	-	-	-	-	-	N/A

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

ENGINEERING AND CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6D-1	1A	- - -	2002 REIMB FOR PWSA ENGINEERING DEPT	N/A	N/A	N/A	PWSA	PWSA	723,054.00	723,054.00	-	723,054.00	723,054.00	100.0%
6D-1	1B	- - -	2003 REIMB FOR PWSA ENGINEERING DEPT	N/A	N/A	N/A	PWSA	PWSA	1,185,600.00	1,185,600.00	-	1,185,600.00	1,185,600.00	100.0%
6D-1	1C	- - -	2004 REIMB FOR PWSA ENGINEERING DEPT	N/A	N/A	N/A	PWSA	PWSA	1,021,300.00	1,021,300.00	-	1,021,300.00	1,021,300.00	100.0%
6D-1	2A	---	2002 CONSTRUCTION MGMT.		N/A	N/A		CHESTER ENGINEER:	2,393,534.67	2,393,534.67	-	2,393,534.67	2,393,534.67	100.0%
								1998 BONDS	957,909.03	957,909.03	-	957,909.03	957,909.03	
								SUBTOTAL	3,351,443.70	3,351,443.70	-	3,351,443.70	3,351,443.70	100.0%
6D-1	2B	---	SEWAGE PUMP STATION FLOW MONITORING					CHESTER ENGINEER:	59,439.00	59,439.00	-	59,439.00	59,439.00	
								1998 BONDS	11,280.00	11,280.00	-	11,280.00	11,280.00	
								SUBTOTAL	70,719.00	70,719.00	-	70,719.00	70,719.00	- - -
6D-1	2C	---	2003 CONSTRUCTION MANANGEMENT					CHESTER/ATS	1,933,494.81	1,577,745.33	355,749.48	1,933,494.81	1,933,494.81	100.0%
6D-1	2D	---	2003 CONSULTING ENG. ADD'L SERVICES					CHESTER ENGINEER:	353,105.98	250,000.00	103,105.98	353,105.98	353,105.98	100.0%
6D-1	2E	---	2004 CONSTRUCTION MANAGEMENT					ATS CHESTER	1,252,930.76	1,300,000.00	(47,069.24)	1,252,930.76	1,252,930.76	100.0%
6D-1	2F	---	2004 CONSULT ENG ADD'L SERVICES					ATS CHESTER	1,050,426.00	1,050,426.00	-	1,050,426.00	1,050,426.00	100.0%
6D-1	2G		2005 CONSTRUCTION MANAGEMENT					ATS CHESTER	1,735,803.88	1,735,803.88		1,735,803.88	1,735,803.88	100.0%
6D-1	2H		2007 - 2008 CONSTRUCTION MANAGEMENT					CHESTER	52,311.70	52,311.70		52,311.70	52,311.70	100.0%
6D-1	3A	---	MISCELLANEOUS ENGINEERING SERVICES	N/A		63-02	PWSA	GANNETT FLEMING	1,268,485.40	1,268,485.40	-	1,268,485.40	1,268,485.40	100.0%
6D-1	4	97026	HIGHLAND #1 - COVER	21-98	N/A	N/A		GANNETT FLEMING	73,139.77	-	73,139.77	73,139.77	73,139.77	
								1998 BONDS	1,136,971.95	634,303.00	502,668.95	1,136,971.95	1,136,971.95	
								SUBTOTAL	1,210,111.72	634,303.00	575,808.72	1,210,111.72	1,210,111.72	100.0%
6D-1	5	95016	FOX CHAPEL P.S.	88-96	N/A	N/A		MICHAEL BAKER	21,390.84	-	20,046.30	21,390.84	21,390.84	
								1995 BONDS	294,676.43	272,500.00	22,176.43	294,676.43	294,676.43	
								1998 BONDS	11,250.83	-	11,250.83	11,250.83	11,250.83	
								SUBTOTAL	327,318.10	272,500.00	53,473.56	327,318.10	327,318.10	100.0%
6D-1	6	---	D.E.C. REIMB.	N/A	N/A	N/A		C. O. P.	737.64	54,358.54	(53,620.90)	737.64	737.64	
								1995 BONDS	435,481.05	435,481.05	-	435,481.05	435,481.05	
								1998 BONDS	10,160.41	10,160.41	-	10,160.41	10,160.41	
								SUBTOTAL	446,379.10	500,000.00	(53,620.90)	446,379.10	446,379.10	100.0%
6D-1	7	97012	WTP CHEMICALS	22-98	N/A	N/A		CH2MHILL	50,053.49	106,314.15	(56,260.66)	50,053.49	50,053.49	
								1995 BONDS	830,637.96	830,637.96	-	830,637.96	830,637.96	
								1998 BONDS	33,047.89	33,047.89	-	33,047.89	33,047.89	
								SUBTOTAL	913,739.34	970,000.00	(56,260.66)	913,739.34	913,739.34	100.0%
6D-1	8	97014	LINCOLN PUMP STATIONS LINES	134-97	N/A	N/A		KILLAM	-	1,576.60	(1,576.60)	-	-	
								1995 BONDS	93,423.40	93,423.40	-	93,423.40	93,423.40	
								1998 BONDS	-	-	-	-	-	
								SUBTOTAL	93,423.40	95,000.00	(1,576.60)	93,423.40	93,423.40	100.0%
6D-1	9	99006	NINE MILE RUN - ENG.	124-99	N/A	N/A		CDM	54,446.25	54,451.07	(4.82)	54,446.25	54,446.25	100.0%
								1995 BONDS	1,363,573.76	1,363,573.76	-	1,363,573.76	1,363,573.76	
								1998 BONDS	60,411.17	60,411.17	-	60,411.17	60,411.17	
								SUBTOTAL	1,478,431.18	1,478,436.00	(4.82)	1,478,431.18	1,478,431.18	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

CITY, URA, AND S&EA PROJECTS

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
			CONVENTION CENTER - S&EA											
6C-1	17	---	10th Street - 12" Water Line	N/A	N/A			S&EA	-	-	-	-	-	
6C-1	18	---	Riverfront Park Water Lines	N/A	N/A			S&EA	-	-	-	-	-	
6C-1	19	---	Duquesne Boulevard 12" Sewer	N/A	N/A			S&EA	-	-	-	-	-	
6C-1	20	---	Storm Sewer Outfalls	N/A	N/A			S&EA	-	-	-	-	-	
6C-1	21	---	Separate Combined Sewers	N/A	N/A			S&EA	-	-	-	-	-	
6C-1	22	---	Design Services/Admin	N/A	N/A			S&EA	-	-	-	-	-	
									2,834,758.14	2,249,448.91	-	2,249,448.91	2,834,758.14	
								1995 BONDS	880,459.88	880,459.88	-	880,459.88	880,459.88	
								1995 BONDS	1,687,940.16	1,687,940.16	-	1,687,940.16	1,687,940.16	
								1998 BONDS	505,104.22	505,104.22	-	505,104.22	505,104.22	
								SUBTOTAL	5,908,262.40	5,322,953.17	-	5,322,953.17	5,908,262.40	100.0%
6C-1			**NORTH SHORE / RIVERFRONT PARK - S&EA**											
6C-1	23	---	Riverfront Park Water Lines	N/A	N/A	95-99		S&EA	-	-	-	-	-	
6C-1	24	---	Storm Sewer Outfalls	N/A	N/A	95-99		S&EA	-	-	-	-	-	
6C-1	25	---	Sanitary Connection to Park Facilities	N/A	N/A	95-99		S&EA	-	-	-	-	-	
6C-1	26	---	DESIGN SERVICES	N/A	N/A	95-99		S&EA	-	-	-	-	-	
									684,397.99	684,397.99	-	684,397.99	684,397.99	100.0%
								1991 BONDS	670,000.00	670,000.00	-	670,000.00	670,000.00	
								1995 BONDS	6,841,896.44	6,841,896.44	-	6,841,896.44	6,841,896.44	
								1998 BONDS	851,366.87	3,757,030.00	(2,905,663.13)	851,366.87	851,366.87	
								1998 BONDS	3,370,261.50	3,370,261.50	-	3,370,261.50	3,370,261.50	
								SUBTOTAL	12,417,922.80	15,323,585.93	(2,905,663.13)	12,417,922.80	12,417,922.80	
									3,519,156.13	2,933,846.90	-	2,933,846.90	3,519,156.13	
			SUBTOTAL - S&EA											
6C-1	27	---	NEW PENNLEY PLACE (BROAD ST.)	N/A	N/A	32-99		C. O. P.	-	133,825.08	(133,825.08)	-	-	
								1991 BONDS	17,263.19	17,263.19	-	17,263.19	17,263.19	
								1995 BONDS	276,765.89	276,765.89	-	276,765.89	276,765.89	
								1998 BONDS	1,579.03	1,579.03	-	1,579.03	1,579.03	
								SUBTOTAL	295,608.11	429,433.19	(133,825.08)	295,608.11	295,608.11	100.0%
6C-1	28	94407	FT. DUQUESNE BOULEVARD	N/A	N/A	45-00		C. O. P.	513.62	126,638.47	(126,124.85)	513.62	513.62	
								1991 BONDS	644,599.28	644,599.28	-	644,599.28	644,599.28	
								1995 BONDS	144,350.44	144,350.44	-	144,350.44	144,350.44	
								1998 BONDS	14,995.10	14,995.10	-	14,995.10	14,995.10	
								SUBTOTAL	804,458.44	930,583.29	(126,124.85)	804,458.44	804,458.44	100.0%
6C-1	29	86401	WOOD STREET	N/A	N/A	70-98		C. O. P.	-	136,479.64	(136,479.64)	-	-	
								1995 BONDS	913,165.56	913,165.56	-	913,165.56	913,165.56	
								1998 BONDS	15,354.80	15,354.80	-	15,354.80	15,354.80	
								SUBTOTAL	928,520.36	1,065,000.00	(136,479.64)	928,520.36	928,520.36	100.0%

EXHIBIT G
2005 BOND ISSUE STATUS REPORT
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

ENGINEERING AND CONSTRUCTION MANAGEMENT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6D-1	13	- - -	OCCUPANCY, PERMITS, FEES, ETC.					MISCELLANEOUS	21,995.63	3,828.50	18,167.13	21,995.63	21,995.63	100.0%
6D-1	14	- - -	LEGAL SERVICES FOR BOND ISSUE					BUCHANAN INGERSO	1,449.54	1,449.54	-	1,449.54	1,449.54	100.0%
6D-1	15	- - -	VARIOUS WATER LINE DESIGN (HOWLEY, HARKER, PIUS ST. ETC.					ATS	10,330.60	10,337.34	(6.74)	10,330.60	10,330.60	
								1995 BONDS	76,813.45	76,813.45	- -	76,813.45	76,813.45	
									87,144.05	87,150.79	(6.74)	87,144.05	87,144.05	100.0%
6D-1	16	---	BACKUP POWER STUDY FOR VAR. FACILITIES	48-03				D & D	20,688.11	20,688.11	-	20,688.11	20,688.11	100.0%
6D-1	17	---	ADVANTICA SOFTWARE LICENSE					ADVANTICA	12,669.00	12,669.00	-	12,669.00	12,669.00	100.0%
6D-1	18	---	SCHENLEY PLAZA DESIGN				W. SMITH		7,500.00	7,500.00		7,500.00	7,500.00	100.0%
								2002 BOND TOTAL	$ 13,303,887.07	$ 12,890,872.83	$ 411,669.70	$ 13,303,887.07	$ 13,303,887.07	
								REIMBURSEMENT	-	-	-	-	-	
								1991 BOND TOTAL	-	-	-	-	-	
								1993 BOND TOTAL	-	-	-	-	-	
								1995 BOND TOTAL	3,094,606.05	3,072,429.62	22,176.43	3,094,606.05	3,094,606.05	
								1998 BOND TOTAL	2,221,031.28	1,707,111.50	513,919.78	2,221,031.28	2,221,031.28	
								TOTAL	$ 18,619,524.40	$ 17,670,413.95	$ 947,765.91	$ 18,619,524.40	$ 18,619,524.40	

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM
2005 BOND ISSUE
STATUS AS OF DECEMBER 31, 2008

	AMOUNT BUDGETED	COMPLETED CONTRACTS	ACTUAL COST ACTIVE CONTRACTS	TOTAL COMPLETE AND ACTIVE	RETAINAGE HELD	REIMBURSE-MENTS	SAP POSTING ERROR	AMOUNT REQUISITIONED
WATER SYSTEM								
A1 Water - Distribution System	$ 5,138,312.28	$ 2,842,300.77	$ 1,852,485.91	$ 4,694,786.68	$ 14,387.61	$ 9,594.60	$ (70,132.99)	$ 4,760,126.66
A2 Water - Pumping & Storage	1,119,819.90	288,954.23	608,424.43	897,378.66	-	-	-	897,378.66
A3 Water - Treatment Plant	3,738,292.12	271,881.58	2,211,388.66	2,483,270.24	4,604.80	35.26	-	2,478,700.70
TOTAL WATER SYSTEM	**$ 9,996,424.30**	**$ 3,403,136.58**	**$ 4,672,299.00**	**$ 8,075,435.58**	**$ 18,992.41**	**$ 9,629.86**	**$ (70,132.99)**	**$ 8,136,206.02**
SEWER SYSTEM								
B1 Sewer - Sanitary Sewer	$ 892,888.62	$ -	$ 905,268.39	$ 905,268.39	$ -	$ -		$ 905,268.39
B2 Sewer - Combined Sewer	26,326,089.10	5,309,519.91	18,663,016.84	23,972,536.75	63,369.61	1,038,787.09	66,519.89	24,881,434.34
B4 Sewer - Pump Station	541,623.83	-	365,194.44	365,194.44	-	-	-	365,194.44
B5 Sewer - CSO	-	-	-	-	-	-	-	-
TOTAL SEWER SYSTEM	**$ 27,760,601.55**	**$ 5,309,519.91**	**$ 19,933,479.67**	**$ 25,242,999.58**	**$ 63,369.61**	**$ 1,038,787.09**	**$ 66,519.89**	**$ 26,151,897.17**
C1 CITY/URA/SEA/PORT AUTHORITY	**$ 3,186,745.53**	**$ -**	**$ 1,813,510.95**	**$ 1,813,510.95**	**$ -**	**$ 302,032.63**	**$ -**	**$ 2,115,543.58**
D1 ENGINEERING	**$ 8,988,233.13**	**$ 6,791,372.28**	**$ 1,982,497.61**	**$ 8,773,869.89**	**$ -**	**$ 152,618.40**	**$ -**	**$ 8,926,488.29**
E1 TOOLS AND EQUIPMENT	**$ 1,009,191.13**	**$ 327,909.25**	**$ 351,572.80**	**$ 679,482.05**	**$ -**	**$ -**	**$ -**	**$ 679,482.05**
F1 IT/GIS	**$ 221,596.88**	**$ 221,596.88**	**$ -**	**$ 221,596.88**	**$ -**	**$ -**	**$ -**	**$ 221,596.88**
Z1 CONTINGENCY	**$ 343,862.47**							
TOTAL 2005 BOND ISSUE	**$ 51,506,654.99**	**$ 16,053,534.90**	**$ 28,753,360.03**	**$ 44,806,894.93**	**$ 82,362.01**	**$ 1,503,067.98**	**$ (3,613.10)**	**$ 46,231,213.99**

THE PITTSBURGH WATER AND SEWER AUTHORITY
2002 BOND ISSUE
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

CONTINGENCY, CONTINUING PROJECTS AND PWSA REIMBURSEMENTS

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% PAID
6E-1	3	- - -	PWSA REVENUE FUND REIMBURSEMENT					N/A	5,173,000.00	5,173,000.00	-	5,173,000.00	5,173,000.00	N/A
								2002 BOND TOTAL	$ 5,173,000.00	$ 5,173,000.00	$ -	$ 5,173,000.00	$ 5,173,000.00	N/A

2005 BOND ISSUE — A1 WATER - DISTRIBUTION SYSTEM - COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A1.02027-21-2005	AUTOMATED METER READING (AMR) PROGRAM	15,000.00	225,180.84	240,180.84	0.00	240,180.84	0.00	100.00
** WBS R-A1.05015	Upper Oakland Water System Upgrade	1,148,988.00	191,993.21	1,340,981.21	1,101.81	1,342,081.21	(2,201.81)	100.16
* WBS R-A1.05015-12	Upper Oakland Water - CM	79,167.00	16,069.00	95,236.00	0.00	95,236.00	0.00	100.00
WBS R-A1.05015-12-2005	Upper Oakland Water - CM	79,167.00	16,069.00	95,236.00	0.00	95,236.00	0.00	100.00
* WBS R-A1.05015-21	Upper Oakland Water - Con.-Contract #1	0.00	0.00	0.00	1,100.00	1,100.00	(2,200.00)	●/O
WBS R-A1.05015-21-2002	Upper Oakland Water - Cont #1 - 2002Bond	0.00	0.00	0.00	1,100.00	1,100.00	(2,200.00)	●/O
* WBS R-A1.05015-21-2005	Upper Oakland Water - Const.	0.00	0.00	0.00	0.00	0.00	0.00	●/O
* WBS R-A1.05015-22	Upper Oakland Water - Const. - 2005Bond	1,069,821.00	175,924.21	1,245,745.21	1.81	1,245,745.21	(1.81)	100.00
WBS R-A1.05015-22-2005	Upper Oakland Water - Const. - 2005Bond	1,069,821.00	175,924.21	1,245,745.21	1.81	1,245,745.21	(1.81)	100.00
** WBS R-A1.06010	Greentree Road Waterline	590,000.00	(8,960.55)	581,039.45	0.00	581,039.45	0.00	100.00
* WBS R-A1.06010-11	Greentree - Design & Survey	40,000.00	(13,198.78)	26,801.22	0.00	26,801.22	0.00	100.00
WBS R-A1.06010-11-2005	Greentree - Design & Survey	40,000.00	(13,198.78)	26,801.22	0.00	26,801.22	0.00	100.00
* WBS R-A1.06010-12	Greentree - CM	50,000.00	(28,509.99)	21,490.01	0.00	21,490.01	0.00	100.00
WBS R-A1.06010-12-2005	Greentree - CM	50,000.00	(28,509.99)	21,490.01	0.00	21,490.01	0.00	100.00
* WBS R-A1.06010-21	Greentree - Construction	500,000.00	32,748.22	532,748.22	0.00	532,748.22	0.00	100.00
WBS R-A1.06010-21-2005	Greentree - Construction	500,000.00	32,748.22	532,748.22	0.00	532,748.22	0.00	100.00
** WBS R-A1.06025	Fluoride Sampling	0.00	20,182.30	20,182.30	0.00	20,182.30	0.00	100.00
* WBS R-A1.06025-11	Fluoride Sampling - Engineering	0.00	20,182.30	20,182.30	0.00	20,182.30	0.00	100.00
WBS R-A1.06025-11-2005	Fluoride Sampling - Engineering	0.00	20,182.30	20,182.30	0.00	20,182.30	0.00	100.00
** WBS R-A1.06028	2006 Purchase Fire Hydrants	0.00	37,068.00	37,068.00	0.00	37,068.00	0.00	100.00
* WBS R-A1.06028-21	2006 Purchase Fire Hydrants	0.00	37,068.00	37,068.00	0.00	37,068.00	0.00	100.00
WBS R-A1.06028-21-2005	2006 Purchase Fire Hydrants	0.00	37,068.00	37,068.00	0.00	37,068.00	0.00	100.00
** WBS R-A1.07010	Waterline Relay Various Locations	0.00	139,556.68	139,556.68	0.00	139,556.68	0.00	100.00
* WBS R-A1.07010-01	Ligonier St Survey	0.00	24,702.18	24,702.18	0.00	24,702.18	0.00	100.00
WBS R-A1.07010-01-2005	Ligonier St Survey	0.00	24,702.18	24,702.18	0.00	24,702.18	0.00	100.00
* WBS R-A1.07010-02	Lothrop St Survey	0.00	21,911.44	21,911.44	0.00	21,911.44	0.00	100.00
WBS R-A1.07010-02-2005	Lothrop St Survey	0.00	21,911.44	21,911.44	0.00	21,911.44	0.00	100.00
* WBS R-A1.07010-03	Harcum Way Survey	0.00	23,078.39	23,078.39	0.00	23,078.39	0.00	100.00
WBS R-A1.07010-03-2005	Harcum Way Survey	0.00	23,078.39	23,078.39	0.00	23,078.39	0.00	100.00
* WBS R-A1.07010-04	Langtry St Survey	0.00	16,154.05	16,154.05	0.00	16,154.05	0.00	100.00
WBS R-A1.07010-04-2005	Langtry St Survey	0.00	16,154.05	16,154.05	0.00	16,154.05	0.00	100.00
* WBS R-A1.07010-05	Buena Vista St Survey	0.00	21,312.26	21,312.26	0.00	21,312.26	0.00	100.00
WBS R-A1.07010-05-2005	Buena Vista St Survey	0.00	21,312.26	21,312.26	0.00	21,312.26	0.00	100.00
* WBS R-A1.07010-06	Bates St Survey	0.00	32,398.36	32,398.36	0.00	32,398.36	0.00	100.00
WBS R-A1.07010-06-2005	Bates St Survey	0.00	32,398.36	32,398.36	0.00	32,398.36	0.00	100.00
** WBS R-A1.07022	4th Avenue 12" Waterline Relay	0.00	209,158.85	209,158.85	0.00	209,158.85	0.00	100.00
* WBS R-A1.07022-21	4th Avenue 12" Waterline Relay	0.00	209,158.85	209,158.85	0.00	209,158.85	0.00	100.00
WBS R-A1.07022-21-2005	4th Avenue 12" Waterline Relay	0.00	209,158.85	209,158.85	0.00	209,158.85	0.00	100.00
** WBS R-A1.08045	Walnut St Waterline Relay	0.00	273,033.44	273,033.44	0.00	273,033.44	0.00	100.00
* WBS R-A1.08045-21	Walnut St Waterline Relay - Construction	0.00	273,033.44	273,033.44	0.00	273,033.44	0.00	100.00
WBS R-A1.08045-21-2005	Walnut St Waterline Relay - Construction	0.00	273,033.44	273,033.44	0.00	273,033.44	0.00	100.00
Result		1,753,988.00	1,087,212.77	2,841,200.77	1,101.81	2,842,300.77	(2,201.81)	100.08

Company : 1
Program Id : ZPPSR_DRAWDOWN_BY_BOND
Requested By : CJORDAN

PWSA
Drawdown Analysis by Bond
Bond 2005

Date : 12/31/2008
Time :
Page : 1

Month	Monthly Drawdown Amount: Bond Issue	Monthly: Estimated	Monthly: Actual	Cummulative Drawdown Amount: Bond Issue	Cummulative: Estimated	Cummulative: Actual	Cummulative % of Drawdown Amount: Bond Iss%	Cummulative: Estimated%	Cummulative: Actual%	Cummulative: 24-month%	Cummulative: 30-month%
Oct 2005	200,000	200,000	71,844	200,000	200,000	71,844	0.4	0.4	0.1	4.2	3.3
Nov 2005	250,000	250,000	44,419	450,000	450,000	116,263	0.9	0.9	0.2	8.3	6.7
Dec 2005	300,000	300,000	1,561,949	750,000	750,000	1,678,212	1.5	1.5	3.4	12.5	10.0
Jan 2006	300,000	300,000	326,923	1,050,000	1,050,000	2,005,135	2.1	2.1	4.0	16.7	13.3
Feb 2006	319,131	319,131	525,641	1,369,131	1,369,131	2,530,776	2.7	2.7	5.1	20.8	16.7
Mar 2006	1,400,375	1,400,375	269,374	2,769,506	2,769,506	2,800,151	5.5	5.5	5.6	25.0	20.0
Apr 2006	1,637,457	1,637,457	203,282	4,406,963	4,406,963	3,003,432	8.8	8.8	6.0	29.2	23.3
May 2006	1,445,292	1,445,292	542,201	5,852,255	5,852,255	3,545,633	11.7	11.7	7.1	33.3	26.7
Jun 2006	1,757,692	1,757,692	1,634,769	7,609,947	7,609,947	5,180,402	15.2	15.2	10.4	37.5	30.0
Jul 2006	1,731,820	1,731,820	784,343	9,341,767	9,341,767	5,964,745	18.7	18.7	11.9	41.7	33.3
Aug 2006	1,653,101	1,653,101	2,420,421	10,994,868	10,994,868	8,385,166	22.0	22.0	16.8	45.8	36.7
Sep 2006	1,809,523	1,809,523	109,613	12,804,391	12,804,391	8,494,779	25.6	25.6	17.0	50.0	40.0
Oct 2006	1,642,439	1,642,439	2,082,485	14,446,830	14,446,830	10,577,264	28.9	28.9	21.2	54.2	43.3
Nov 2006	1,720,651	1,720,651	3,314,347	16,167,481	16,167,481	13,891,611	32.3	32.3	27.8	58.3	46.7
Dec 2006	1,668,590	1,668,590	1,016,301	17,836,071	17,836,071	14,907,912	35.7	35.7	29.8	62.5	50.0
Jan 2007	1,499,938	1,499,938	1,206,416	19,336,009	19,336,009	16,114,328	38.7	38.7	32.2	66.7	53.3
Feb 2007	1,608,772	1,608,772	1,167,793	20,944,781	20,944,781	17,282,121	41.9	41.9	34.6	70.8	56.7
Mar 2007	1,394,575	1,394,575	886,666	22,339,356	22,339,356	18,168,787	44.7	44.7	36.3	75.0	60.0
Apr 2007	1,561,893	1,561,893	1,277,399	23,901,249	23,901,249	19,446,186	47.8	47.8	38.9	79.2	63.3
May 2007	1,503,308	1,503,308	1,072,267	25,404,557	25,404,557	20,518,453	50.8	50.8	41.0	83.3	66.7
Jun 2007	1,693,645	1,693,645	1,877,977	27,098,202	27,098,202	22,396,430	54.2	54.2	44.8	87.5	70.0
Jul 2007	1,549,223	1,549,223	1,229,736	28,647,425	28,647,425	23,626,165	57.3	57.3	47.3	91.7	73.3
Aug 2007	1,622,192	1,622,192	1,326,795	30,269,617	30,269,617	24,952,960	60.5	60.5	49.9	95.8	76.7
Sep 2007	1,652,995	1,652,995	246,509	31,922,612	31,922,612	25,199,469	63.8	63.8	50.4	100.0	80.0
Oct 2007	1,405,611	1,405,611	3,597,651	33,328,223	33,328,223	28,797,120	66.7	66.7	57.6		83.3
Nov 2007	1,546,380	1,546,380	2,264,847	34,874,603	34,874,603	31,061,966	69.8	69.8	62.1		86.7
Dec 2007	1,479,146	1,479,146	1,563,308	36,353,749	36,353,749	32,625,274	72.7	72.7	65.3		90.0
Jan 2008	1,400,400	1,400,400	787,302	37,754,149	37,754,149	33,412,576	75.5	75.5	66.8		93.3
Feb 2008	1,461,632	1,461,632	1,850,679	39,215,781	39,215,781	35,263,255	78.4	78.4	70.5		96.7
Mar 2008	1,300,230	1,300,230	1,156,475	40,516,011	40,516,011	36,419,730	81.0	81.0	72.8		100.0
Apr 2008	1,300,230	1,300,230	1,945,658	41,816,241	41,816,241	38,365,388	83.6	83.6	76.7		
May 2008	1,362,146	1,362,146	233,172	43,178,387	43,178,387	38,598,560	86.4	86.4	77.2		
Jun 2008	1,362,146	1,362,146	2,426,770	44,540,533	44,540,533	41,025,330	89.1	89.1	82.1		
Jul 2008	1,300,230	1,300,230	1,078,384	45,840,763	45,840,763	42,103,713	91.7	91.7	84.2		
Aug 2008	1,424,061	1,424,061	1,121,028	47,264,824	47,264,824	43,224,742	94.5	94.5	86.5		
Sep 2008	1,315,624	1,315,624	709,226	48,580,448	48,580,448	43,933,968	97.2	97.2	87.9		
Oct 2008	1,418,589	1,418,589	1,019,182	49,999,037	49,999,037	44,953,149	100.0	100.0	89.9		
Nov 2008			309,023	49,999,037	49,999,037	45,262,172			90.5		
Dec 2008			969,042	49,999,037	49,999,037	46,231,214			92.5		
* TOTAL	49,999,037	49,999,037	46,231,214								

*** End of Report ***

2005 BOND ISSUE — A2 WATER - PUMPING & STORAGE ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A2.05025	Mission Street Boiler Replacement	562,000.00	(146,803.41)	415,196.59	0.00	402,706.59	12,490.00	96.99
* WBS R-A2.05025-11	Mission St Boiler - Eng	25,000.00	(20,096.20)	4,903.80	0.00	4,903.80	0.00	100.00
* WBS R-A2.05025-12	Mission St Boiler - CM	37,000.00	0.00	37,000.00	0.00	24,510.00	12,490.00	66.24
* WBS R-A2.05025-21	Mission St Boiler	500,000.00	(126,707.21)	373,292.79	0.00	373,292.79	0.00	100.00
** WBS R-A2.06024	Water Tank Inspection	0.00	199,689.08	199,689.08	0.00	102,689.08	97,000.00	51.42
* WBS R-A2.06024-11	Spring Hill Water Tank Inspection	0.00	19,162.15	19,162.15	0.00	19,162.15	0.00	100.00
* WBS R-A2.06024-12	Allentown Water Tank Inspection	0.00	23,219.62	23,219.62	0.00	23,219.62	0.00	100.00
* WBS R-A2.06024-13	Brashear Tank Inspection	0.00	44,646.13	44,646.13	0.00	44,646.13	0.00	100.00
* WBS R-A2.06024-14	Bedford Tank Inspection	0.00	12,661.18	12,661.18	0.00	12,661.18	0.00	100.00
* WBS R-A2.06024-15	Garfield Tank Inspection	0.00	25,000.00	25,000.00	0.00	0.00	25,000.00	0.00
* WBS R-A2.06024-16	Herron Hill Tank Inspection	0.00	25,000.00	25,000.00	0.00	0.00	25,000.00	0.00
* WBS R-A2.06024-17	Lincoln Tank Inspection	0.00	25,000.00	25,000.00	0.00	3,000.00	22,000.00	12.00
* WBS R-A2.06024-18	Squirrel Hill Tank Inspection	0.00	25,000.00	25,000.00	0.00	0.00	25,000.00	0.00
** WBS R-A2.07008	Repair to Bruecken Motor No. 5	0.00	98,480.00	98,480.00	0.00	38,545.56	59,934.44	39.14
* WBS R-A2.07008-12	Repair to Bruecken Motor No. 5 - CM	0.00	7,500.00	7,500.00	0.00	6,141.56	1,358.44	81.89
* WBS R-A2.07008-21	Repair to Bruecken Motor No. 5	0.00	90,980.00	90,980.00	0.00	32,404.00	58,576.00	35.62
** WBS R-A2.07016	Lincoln Pump Station Valve Replacement	0.00	50,000.00	50,000.00	0.00	0.00	50,000.00	0.00
* WBS R-A2.07016-21	Lincoln Pump Station Valve -Construction	0.00	50,000.00	50,000.00	0.00	0.00	50,000.00	0.00
** WBS R-A2.08013	Lincoln Pump #2 Replacement	0.00	7,500.00	7,500.00	0.00	6,860.84	639.16	91.48
* WBS R-A2.08013-11	Design - Internal	0.00	7,500.00	7,500.00	0.00	6,860.84	639.16	91.48
** WBS R-A2.08014	Howard Pump #6 & 7 Replacement	0.00	60,000.00	60,000.00	0.00	57,622.36	2,377.64	96.04
* WBS R-A2.08014-11	Howard Pumps #6 & 7 Replacement - Design	0.00	60,000.00	60,000.00	0.00	57,622.36	2,377.64	96.04
Result		562,000.00	268,865.67	830,865.67	0.00	608,424.43	222,441.24	73.23

2005 BOND ISSUE — A1 WATER - DISTRIBUTION SYSTEM ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A1.05027	Valve & Hydrant Replacement Contract	552,000.00	560,909.51	1,112,909.51	11.70	1,052,560.54	60,337.27	94.58
* WBS R-A1.05027-11	Design	15,000.00	0.00	15,000.00	0.00	9,871.22	5,128.78	65.81
WBS R-A1.05027-11-2005	Design	15,000.00	0.00	15,000.00	0.00	9,871.22	5,128.78	65.81
* WBS R-A1.05027-12	Construction Management	37,000.00	45,400.02	82,400.02	0.00	70,524.11	11,875.91	85.59
WBS R-A1.05027-12-2005	Construction Management	37,000.00	43,339.48	80,339.48	0.00	70,524.11	9,815.37	87.78
* WBS R-A1.05027-21	Construction	500,000.00	515,509.49	1,015,509.49	11.70	972,165.21	43,332.58	95.73
WBS R-A1.05027-21-2005	Construction	500,000.00	515,509.49	1,015,509.49	11.70	972,165.21	43,332.58	95.73
** WBS R-A1.07002	Waterline Reconstruction	0.00	1,084,202.00	1,084,202.00	321,806.86	755,361.79	7,033.35	99.35
* WBS R-A1.07002-11	Bellefonte St Survey	0.00	15,887.81	15,887.81	0.00	15,887.81	0.00	100.00
WBS R-A1.07002-11-2005	Bellefonte St Survey	0.00	15,887.81	15,887.81	0.00	15,887.81	0.00	100.00
* WBS R-A1.07002-12	Bellefonte St - CM	0.00	73,608.24	73,608.24	0.00	52,691.77	20,916.47	71.58
WBS R-A1.07002-12-2005	Bellefonte St - CM	0.00	73,608.24	73,608.24	0.00	52,691.77	20,916.47	71.58
* WBS R-A1.07002-21	Waterline Reconstruction	0.00	994,705.95	994,705.95	321,806.86	686,782.21	(13,883.12)	101.40
WBS R-A1.07002-21-2005	Waterline Reconstruction	0.00	994,705.95	994,705.95	321,806.86	686,782.21	(13,883.12)	101.40
** WBS R-A1.07014	Purchase Fire Hydrants	0.00	100,000.00	100,000.00	0.00	44,563.58	55,436.42	44.56
* WBS R-A1.07014-21	Purchase Fire Hydrants	0.00	100,000.00	100,000.00	0.00	44,563.58	55,436.42	44.56
WBS R-A1.07014-21-2005	Purchase Fire Hydrants	0.00	100,000.00	100,000.00	0.00	44,563.58	55,436.42	44.56
Result		552,000.00	1,745,111.51	2,297,111.51	321,818.56	1,852,485.91	122,807.04	94.65

2005 BOND ISSUE — A3 WATER - TRAETMENT PLANT - COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-A3.06007-11-2005	SCADA - Prelim Design	18,000.00	0.00	18,000.00	0.00	18,000.00	0.00	100.00
WBS R-A3.06007-12-2005	SCADA - Design	226,523.00	(50,117.00)	176,406.00	0.00	176,406.00	0.00	100.00
WBS R-A3.06007-13-2005	SCADA - CM	167,627.00	(167,627.00)	0.00	0.00	0.00	0.00	●/O
WBS R-A3.06007-21-2005	SCADA - Const	2,265,230.00	(2,265,230.00)	0.00	0.00	0.00	0.00	●/O
WBS R-A3.06032-11-2005	WTP Traveling Screen - Engineering	0.00	77,475.58	77,475.58	0.00	77,475.58	0.00	100.00
WBS R-A3.06032-12-2005	WTP Traveling Screen - CM	0.00	0.00	0.00	0.00	0.00	0.00	●/O
WBS R-A3.06032-21-2005	WTP Traveling Screen - General	0.00	0.00	0.00	0.00	0.00	0.00	●/O
Result		2,677,380.00	(2,405,498.42)	271,881.58	0.00	271,881.58	0.00	100.00

2005 BOND ISSUE — A2 WATER - PUMPING & STORAGE COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A2.06006	Saline Pump Station Valve Replacement	100,000.00	(25,158.00)	74,842.00	0.00	74,842.00	0.00	100.00
* WBS R-A2.06006-21	Saline Pump Station Valve Replacement	100,000.00	(25,158.00)	74,842.00	0.00	74,842.00	0.00	100.00
WBS R-A2.06006-21-2005	Saline Pump Station Valve Replacement	100,000.00	(25,158.00)	74,842.00	0.00	74,842.00	0.00	100.00
** WBS R-A2.07003	Breucken P.S. Refurbish Motor #2	0.00	187,830.00	187,830.00	0.00	187,830.00	0.00	100.00
* WBS R-A2.07003-21	Breucken P.S. Refurbish Motor #2	0.00	187,830.00	187,830.00	0.00	187,830.00	0.00	100.00
WBS R-A2.07003-21-2005	Breucken P.S. Refurbish Motor #2	0.00	187,830.00	187,830.00	0.00	187,830.00	0.00	100.00
** WBS R-A2.07019-11-2005	Switchgear Upgrade - Design	0.00	26,282.23	26,282.23	0.00	26,282.23	0.00	100.00
Result		100,000.00	188,954.23	288,954.23	0.00	288,954.23	0.00	100.00

2005 BOND ISSUE — B1 SEWER - SANITARY SEWER ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-B1.06002	COA Sanitary Sewer Inspection	620,000.00	272,888.62	892,888.62	193,791.77	905,268.39	(206,171.54)	123.09
* WBS R-B1.06002-11	COA San Insp - CM	100,000.00	167,192.27	267,192.27	0.00	267,677.11	(484.84)	100.18
* WBS R-B1.06002-21	COA San Insp - Const	520,000.00	101,750.35	621,750.35	193,791.77	633,645.28	(205,686.70)	133.08
* WBS R-B1.06002-12	COA San Insp - Engineering	0.00	3,946.00	3,946.00	0.00	3,946.00	0.00	100.00
Result		620,000.00	272,888.62	892,888.62	193,791.77	905,268.39	(206,171.54)	123.09

2005 BOND ISSUE — A3 WATER - TREATMENT PLANT ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A3.05005	Clearwell Improvements	3,764,670.00	(3,422,170.00)	342,500.00	0.00	299,902.01	42,597.99	87.56
* WBS R-A3.05005-12	Clearwell Design - Contract #1	300,000.00	0.00	300,000.00	0.00	269,263.65	30,736.35	89.75
WBS R-A3.05005-12-2005	Clearwell Imp Des - Cont #1	150,000.00	0.00	150,000.00	0.00	131,812.48	18,187.52	87.87
WBS R-A3.05005-13-2005	Clearwell Imp Des - Cont #2	150,000.00	0.00	150,000.00	0.00	137,451.17	12,548.83	91.63
* WBS R-A3.05005-11	Clearwell Imp - Eng	22,500.00	20,000.00	42,500.00	0.00	30,638.36	11,861.64	72.09
WBS R-A3.05005-11-2005	Clearwell Imp - Eng	22,500.00	20,000.00	42,500.00	0.00	30,638.36	11,861.64	72.09
* WBS R-A3.05005-14	Clearwell Imp - CM	237,170.00	(237,170.00)	0.00	0.00	0.00	0.00	●/O
WBS R-A3.05005-14-2005	Clearwell Imp - CM	237,170.00	(237,170.00)	0.00	0.00	0.00	0.00	●/O
* WBS R-A3.05005-21	Clearwell Constuction - Contract #1	3,205,000.00	(3,205,000.00)	0.00	0.00	0.00	0.00	●/O
WBS R-A3.05005-21-2005	Clearwell Imp Const.	3,205,000.00	(3,205,000.00)	0.00	0.00	0.00	0.00	●/O
** WBS R-A3.05006-01	FILTER BACKWASH HANDLING - STUDY	0.00	419,554.69	419,554.69	0.00	419,554.69	0.00	100.00
* WBS R-A3.05006-01-2005	FILTER BACKWASH HANDLING - STUDY	0.00	419,554.69	419,554.69	0.00	419,554.69	0.00	100.00
** WBS R-A3.05006-11	FILTER BACKWASH HANDLING DESIGN	0.00	530,445.31	530,445.31	0.00	120,530.88	409,914.43	22.72
* WBS R-A3.05006-11-2005	FILTER BACKWASH HANDLING DESIGN	0.00	530,445.31	530,445.31	0.00	120,530.88	409,914.43	22.72
** WBS R-A3.05006-13	Filter Backwash - Standby Power Design	0.00	520,000.00	520,000.00	0.00	369,169.78	150,830.22	70.99
* WBS R-A3.05006-13-2005	Filter Backwash - Standby Power Design	0.00	520,000.00	520,000.00	0.00	369,169.78	150,830.22	70.99
** WBS R-A3.05006-14	Filter Backwash / Clarification I&D	0.00	738,000.00	738,000.00	0.00	415,220.04	322,779.96	56.26
* WBS R-A3.05006-14-2005	Filter Backwash / Clarification I&D	0.00	738,000.00	738,000.00	0.00	415,220.04	322,779.96	56.26
** WBS R-A3.05026	Chlorine Booster Stations	186,100.00	2,810.54	188,910.54	2,500.00	352,738.80	(166,328.26)	188.05
* WBS R-A3.05026-11	Chlorine Booster - Eng	15,000.00	53,600.00	68,600.00	0.00	62,840.75	5,759.25	91.60
WBS R-A3.05026-11-2005	Chlorine Booster - Eng	15,000.00	53,600.00	68,600.00	0.00	62,840.75	5,759.25	91.60
* WBS R-A3.05026-12	Chlorine Booster Stations - CM	11,100.00	(11,100.00)	0.00	0.00	0.00	0.00	●/O
WBS R-A3.05026-12-2005	Chlorine Booster Stations - CM	11,100.00	(11,100.00)	0.00	0.00	0.00	0.00	●/O
* WBS R-A3.05026-21	Chlorine Booster Stations - Const	150,000.00	(44,326.00)	105,674.00	2,500.00	277,334.99	(174,160.99)	264.81
WBS R-A3.05026-21-2005	Chlorine Booster Stations - Const	150,000.00	(44,326.00)	105,674.00	2,500.00	277,334.99	(174,160.99)	264.81
* WBS R-A3.05026-22	Lincoln Tank Site Survey	10,000.00	4,636.54	14,636.54	0.00	12,563.06	2,073.48	85.83
WBS R-A3.05026-22-2005	Lincoln Tank Site Survey	10,000.00	4,636.54	14,636.54	0.00	12,563.06	2,073.48	85.83
** WBS R-A3.06019	WTP Lab Rehab	0.00	530,000.00	530,000.00	343,729.00	37,272.46	148,998.54	71.89
* WBS R-A3.06019-11	WTP Lab Rehab - Design	0.00	30,000.00	30,000.00	0.00	28,008.67	1,991.33	93.36
WBS R-A3.06019-11-2005	WTP Lab Rehab - Design	0.00	30,000.00	30,000.00	0.00	28,008.67	1,991.33	93.36
* WBS R-A3.06019-12	WTP Lab Rehab - CM	0.00	50,000.00	50,000.00	0.00	9,263.79	40,736.21	18.53
WBS R-A3.06019-12-2005	WTP Lab Rehab - CM	0.00	50,000.00	50,000.00	0.00	9,263.79	40,736.21	18.53
* WBS R-A3.06019-21	WTP Lab Rehab - Construction	0.00	450,000.00	450,000.00	343,729.00	0.00	106,271.00	76.38
WBS R-A3.06019-21-2005	WTP Lab Rehab - Construction	0.00	450,000.00	450,000.00	343,729.00	0.00	106,271.00	76.38
** WBS R-A3.06032-12-2005	WTP Traveling Screen - CM	0.00	0.00	0.00	0.00	0.00	0.00	●/O
** WBS R-A3.07007	Rapid Mix	0.00	197,000.00	197,000.00	0.00	197,000.00	0.00	100.00
* WBS R-A3.07007-21	Rapid Mix	0.00	197,000.00	197,000.00	0.00	197,000.00	0.00	100.00
WBS R-A3.07007-21-2005	Rapid Mix	0.00	197,000.00	197,000.00	0.00	197,000.00	0.00	100.00
Result		3,950,770.00	(484,359.46)	3,466,410.54	346,229.00	2,211,388.66	908,792.88	73.78

2005 BOND ISSUE — B2 SEWER - COMBINED SEWER COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS I-B2.04004	Sewer Rehabilitation Gunite Contract	1,074,000.00	483,584.62	1,557,584.62	10.11	1,557,584.62	(10.11)	100.00
* WBS I-B2.04004-2005	Sewer Rehab Gunite Contract - Const	1,074,000.00	483,584.62	1,557,584.62	10.11	1,557,584.62	(10.11)	100.00
** WBS I-B2.05017	MH CB & Sewer Line Point Repair Contract	949,395.00	209,531.91	1,158,926.91	31,953.19	1,158,926.94	(31,953.22)	102.76
* WBS I-B2.05017-2005	MH CB & Sewer Line Point Repair Contract	949,395.00	209,531.91	1,158,926.91	31,953.19	1,158,926.94	(31,953.22)	102.76
** WBS R-B2.05016	Sewer Cleaning, TVing, & MH Inspection	764,606.65	90,260.42	854,867.07	3.41	854,867.23	(3.57)	100.00
* WBS R-B2.05016-13	Sewer Cleaning TVing & MH Inspection-CM	97,500.00	74,009.19	171,509.19	0.00	171,509.19	0.00	100.00
* WBS R-B2.05016-21	Sewer Cleaning TVing & MH Inspection-CON	667,106.65	16,251.23	683,357.88	3.41	683,358.04	(3.57)	100.00
** WBS R-B2.05022	Sewer Lining Contract	1,074,000.00	(512,077.94)	561,922.06	187,409.74	561,922.06	(187,409.74)	133.35
* WBS R-B2.05022-13	Sewer Lining Contract - CM	74,000.00	(7,937.56)	66,062.44	0.00	66,062.44	0.00	100.00
* WBS R-B2.05022-21	Sewer Lining Contract - Construction	1,000,000.00	(504,140.38)	495,859.62	187,409.74	495,859.62	(187,409.74)	137.79
** WBS R-B2.05024	12th St Storm Sewer	577,000.00	(569,717.28)	7,282.72	0.00	7,282.72	0.00	100.00
* WBS R-B2.05024-11	12th St Sewer - Eng	40,000.00	(32,717.28)	7,282.72	0.00	7,282.72	0.00	100.00
* WBS R-B2.05024-12	12th St Sewer - CM	37,000.00	(37,000.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-B2.05024-21	12th St Sewer - Const	500,000.00	(500,000.00)	0.00	0.00	0.00	0.00	●/○
** WBS R-B2.06009	Flow Monitoring	40,000.00	102,381.38	142,381.38	0.00	142,381.38	0.00	100.00
* WBS R-B2.06009-11	Calera Street - Flow Monitoring	0.00	7,920.41	7,920.41	0.00	7,920.41	0.00	100.00
* WBS R-B2.06009-12	Brighton Road - Flow Monitoring	40,000.00	(16,972.79)	23,027.21	0.00	23,027.21	0.00	100.00
* WBS R-B2.06009-13	Fox Chapel Interceptor - Flow Monitoring	0.00	25,838.55	25,838.55	0.00	25,838.55	0.00	100.00
* WBS R-B2.06009-14	Negley Run - Flow Monitoring	0.00	69,235.72	69,235.72	0.00	69,235.72	0.00	100.00
* WBS R-B2.06009-15	Berkshire Ave - Flow Monitoring	0.00	16,359.49	16,359.49	0.00	16,359.49	0.00	100.00
** WBS R-B2.06021	COA Critical Sewer Inspection	600,000.00	20,045.23	620,045.23	1.06	620,044.17	0.00	100.00
* WBS R-B2.06021-12	COA Critical Sewer Inspection - CM	100,000.00	90,622.26	190,622.26	0.00	310,998.22	(120,375.96)	163.15
* WBS R-B2.06021-11	COA Critical Sewer Inspection - Design	0.00	5,077.73	5,077.73	0.00	5,077.73	0.00	100.00
* WBS R-B2.06021-21	COA Critical Sewer Inspection - Const	500,000.00	(75,654.76)	424,345.24	1.06	303,968.22	120,375.96	71.63
** WBS R-B2.07021	Becks Run Sewer Replacement @ PAW Plant	0.00	406,510.79	406,510.79	0.00	406,510.79	0.00	100.00
* WBS R-B2.07021-21	Becks Run Sewer Replacement @ PAW Plant	0.00	406,510.79	406,510.79	0.00	406,510.79	0.00	100.00
Result		5,079,001.65	230,519.13	5,309,520.78	219,377.51	5,309,519.91	(219,376.64)	104.13

2005 BOND ISSUE — B2 SEWER - COMBINED SEWER ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS I-B2.05014	Sewer Improvement Contract	1,366,690.21	76,654.77	1,443,344.98	775,909.71	1,380,290.84	(712,855.57)	149.39
* WBS I-B2.05014-2005-11	Construction Management	100,000.00	90,053.12	190,053.12	0.00	183,389.00	6,664.12	96.49
* WBS I-B2.05014-2005-21	Construction	1,266,690.21	(13,398.35)	1,253,291.86	775,909.71	1,196,901.84	(719,519.69)	157.41
WBS I-B2.05014-2005-22	Construction	0.00	36,601.65	36,601.65	0.00	870,183.58	(833,581.93)	2,377.44
** WBS I-B2.06008	MH, CB & Sewer Point Repair	850,000.00	674,902.96	1,524,902.96	73,954.98	1,511,120.94	(60,172.96)	103.95
* WBS I-B2.06008-2005	MH, CB & Sewer Point Repair	850,000.00	674,902.96	1,524,902.96	73,954.98	1,511,120.94	(60,172.96)	103.95
WBS I-B2.06008-2005-11	MH, CB & Sewer Point Repair-Design	5,000.00	(5,000.00)	0.00	0.00	0.00	0.00	●/○
WBS I-B2.06008-2005-12	MH, CB & Sewer Point Repair-CM	75,000.00	188,683.00	263,683.00	0.00	262,125.67	1,557.33	99.41
WBS I-B2.06008-2005-21	MH, CB & Sewer Point Repair-Construction	770,000.00	491,219.96	1,261,219.96	73,954.98	1,248,995.27	(61,730.29)	104.89
** WBS R-B2.05018	SHERADEN PARK PROJECT	1,000,000.00	(48,956.00)	951,044.00	0.00	856,856.60	94,187.40	90.10
* WBS R-B2.05018-11	SHERADEN PARK COE / BAKER	0.00	7,461.37	7,461.37	0.00	7,461.37	0.00	100.00
WBS R-B2.05018-11-2005	SHERADEN PARK COE / BAKER	0.00	7,461.37	7,461.37	0.00	7,461.37	0.00	100.00
* WBS R-B2.05018-12	SHERADEN PARK PWSA MISC COSTS	140,800.00	(68,956.00)	71,844.00	0.00	71,844.00	0.00	100.00
WBS R-B2.05018-12-2005	SHERADEN PARK PWSA MISC COSTS	140,800.00	(68,956.00)	71,844.00	0.00	71,844.00	0.00	100.00
* WBS R-B2.05018-21	SHERADEN PARK CONSTRUCTION	800,000.00	(32,461.37)	767,538.63	0.00	668,250.00	99,288.63	87.06
WBS R-B2.05018-21-2005	SHERADEN PARK CONSTRUCTION	800,000.00	(32,461.37)	767,538.63	0.00	668,250.00	99,288.63	87.06
* WBS R-B2.05018-13	SHERADEN PARK - CM	59,200.00	45,000.00	104,200.00	0.00	109,301.23	(5,101.23)	104.90
WBS R-B2.05018-13-2005	SHERADEN PARK - CM	59,200.00	45,000.00	104,200.00	0.00	109,301.23	(5,101.23)	104.90
** WBS R-B2.05019	CSO Project - Region One (M & E)	3,309,454.56	0.00	3,309,454.56	0.00	2,922,190.59	387,263.97	88.30
* WBS R-B2.05019-11	CSO Project - Region One (M & E)	3,309,454.56	0.00	3,309,454.56	0.00	2,922,190.59	387,263.97	88.30
WBS R-B2.05019-11-2005	CSO Project - Region One - 2005	3,309,454.56	0.00	3,309,454.56	0.00	2,922,190.59	387,263.97	88.30
** WBS R-B2.05020	CSO Project - Region Two (Baker)	3,135,550.01	0.00	3,135,550.01	0.00	2,844,941.58	290,608.43	90.73
* WBS R-B2.05020-11	CSO Project - Region Two (Baker)	3,135,550.01	0.00	3,135,550.01	0.00	2,844,941.58	290,608.43	90.73
WBS R-B2.05020-11-2005	CSO Project - Region Two (Baker)	3,135,550.01	0.00	3,135,550.01	0.00	2,844,941.58	290,608.43	90.73
** WBS R-B2.05021	Sew Imp Proj Var Loc	605,739.00	81,477.20	687,216.20	103,177.11	712,391.59	(128,352.50)	118.68
* WBS R-B2.05021-11	SI Var Loc - Eng	25,000.00	(21,694.50)	3,305.50	0.00	3,305.95	(0.45)	100.01
WBS R-B2.05021-11-2005	SI Var Loc - Eng	25,000.00	(21,694.50)	3,305.50	0.00	3,305.95	(0.45)	100.01
* WBS R-B2.05021-12	SI Var Loc - CM	40,014.00	9,088.22	49,102.22	0.00	61,144.45	(12,042.23)	124.52
WBS R-B2.05021-12-2005	SI Var Loc - CM	40,014.00	9,088.22	49,102.22	0.00	61,144.45	(12,042.23)	124.52
* WBS R-B2.05021-21	Si Var Loc - Const	540,725.00	94,083.48	634,808.48	103,177.11	647,941.19	(116,309.82)	118.32
WBS R-B2.05021-21-2005	SI Var Loc - Const	540,725.00	94,083.48	634,808.48	103,177.11	647,941.19	(116,309.82)	118.32
** WBS R-B2.05023	Jack's Run - Belguim St Sewer	2,255,400.00	(775,440.11)	1,479,959.89	210,628.30	1,822,897.89	(553,566.30)	137.40
* WBS R-B2.05023-11	Jack's Run - Design	0.00	15,838.50	15,838.50	0.00	6,000.10	9,838.40	37.88
WBS R-B2.05023-11-2005	Jack's Run - Design	0.00	15,838.50	15,838.50	0.00	6,000.10	9,838.40	37.88
* WBS R-B2.05023-12	Jck Run Belguim - CM	155,400.00	(100,000.00)	55,400.00	0.00	41,052.78	14,347.22	74.10
WBS R-B2.05023-12-2005	Jck Run Belguim - CM	155,400.00	(100,000.00)	55,400.00	0.00	41,052.78	14,347.22	74.10
* WBS R-B2.05023-13	Winhurst Street - CM	0.00	45,000.00	45,000.00	0.00	64,779.87	(19,779.87)	143.96
WBS R-B2.05023-13-2005	Winhurst Street - CM	0.00	45,000.00	45,000.00	0.00	64,779.87	(19,779.87)	143.96
* WBS R-B2.05023-21	Jck Run Belguim - Const	2,100,000.00	(1,425,000.00)	675,000.00	122,461.30	481,436.32	71,102.38	89.47
WBS R-B2.05023-21-2005	Jck Run Belguim - Const	2,100,000.00	(1,425,000.00)	675,000.00	122,461.30	481,436.32	71,102.38	89.47
* WBS R-B2.05023-22	Winhurst Street - Const	0.00	600,000.00	600,000.00	88,167.00	1,140,907.43	(629,074.43)	204.85
WBS R-B2.05023-22-2005	Winhurst Street - Const	0.00	600,000.00	600,000.00	88,167.00	1,140,907.43	(629,074.43)	204.85
* WBS R-B2.05023-24	Jacks Run Ross TWP Release of Retainage	0.00	88,721.39	88,721.39	0.00	88,721.39	0.00	100.00
WBS R-B2.05023-24-2005	Jacks Run Ross TWP Release of Retainage	0.00	88,721.39	88,721.39	0.00	88,721.39	0.00	100.00
** WBS R-B2.06001	COA Compliance Program Management	4,900,000.00	550,000.00	5,450,000.00	0.00	4,240,939.92	1,209,060.08	77.82
* WBS R-B2.06001-11	COA PM Contract 1	2,600,000.00	310,000.00	2,910,000.00	0.00	2,282,279.73	627,720.27	78.43
WBS R-B2.06001-11-2005	COA PM Contract 1	2,600,000.00	310,000.00	2,910,000.00	0.00	2,282,279.73	627,720.27	78.43
* WBS R-B2.06001-12	COA PM Contract 2	2,300,000.00	240,000.00	2,540,000.00	0.00	1,958,660.19	581,339.81	77.11
WBS R-B2.06001-12-2005	COA PM Contract 2	2,300,000.00	240,000.00	2,540,000.00	0.00	1,958,660.19	581,339.81	77.11
** WBS R-B2.06018	Sewer Lining Contract	750,000.00	2,500.00	752,500.00	71,353.07	563,301.55	117,845.38	84.34
* WBS R-B2.06018-21	Sewer Lining Contract - Construction	675,000.00	0.00	675,000.00	71,353.07	513,927.97	89,718.96	86.71
WBS R-B2.06018-21-2005	Sewer Lining Contract - Construction	675,000.00	0.00	675,000.00	71,353.07	513,927.97	89,718.96	86.71
* WBS R-B2.06018-12	Sewer Lining Contract - CM	75,000.00	2,500.00	77,500.00	0.00	49,373.58	28,126.42	63.71
WBS R-B2.06018-12-2005	Sewer Lining Contract - CM	75,000.00	2,500.00	77,500.00	0.00	49,373.58	28,126.42	63.71
** WBS R-B2.06020	Sewer Gunite Contract	1,000,000.00	107,595.72	1,107,595.72	132,362.00	1,015,865.87	(40,632.15)	103.67
* WBS R-B2.06020-12	Sewer Gunite Contract - CM	100,000.00	0.00	100,000.00	0.00	101,163.65	(1,163.65)	101.16
WBS R-B2.06020-12-2005	Sewer Gunite Contract - CM	100,000.00	0.00	100,000.00	0.00	101,163.65	(1,163.65)	101.16
* WBS R-B2.06020-11	Sewer Gunite Contract - Design	0.00	12,994.72	12,994.72	0.00	12,994.72	0.00	100.00

2005 BOND ISSUE — B4 SEWER - PUMP STATION ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
* WBS R-B4.05001-13	SPS Design - Sewage Pump Stations	368,975.32	74,890.00	443,865.32	0.00	267,437.93	176,427.39	60.25
WBS R-B4.05001-13-2005	SPS Design - Sewage Pump Station - 2005	368,975.32	74,890.00	443,865.32	0.00	267,437.93	176,427.39	60.25
* WBS R-B4.05001-14	SPS Imp - CM	140,600.00	(140,600.00)	0.00	0.00	0.00	0.00	●/○
WBS R-B4.05001-14-2005	SPS Imp - CM	140,600.00	(140,600.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-B4.05001-21	SPS Imp Const - Contract #1	854,700.00	(854,700.00)	0.00	0.00	0.00	0.00	●/○
WBS R-B4.05001-21-2005	SPS Imp Const - Contract #1	854,700.00	(854,700.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-B4.05001-22	SPS Imp Gen Const	850,000.00	(850,000.00)	0.00	0.00	0.00	0.00	●/○
WBS R-B4.05001-22-2005	SPS Imp Gen Const	850,000.00	(850,000.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-B4.05001-24	Rodgers & Mohrbach - Flow Monitoring	60,000.00	(56,809.08)	3,190.92	0.00	3,190.92	0.00	100.00
WBS R-B4.05001-24-2005	Rodgers & Mohrbach - Flow Monitoring	60,000.00	(56,809.08)	3,190.92	0.00	3,190.92	0.00	100.00
* WBS R-B4.05001-15	Browns Hill Pump Station Survey	0.00	7,062.92	7,062.92	0.00	7,060.92	2.00	99.97
WBS R-B4.05001-15-2005	Browns Hill Pump Station Survey	0.00	7,062.92	7,062.92	0.00	7,060.92	2.00	99.97
* WBS R-B4.05001-25	Pump Station Force Main Construction	0.00	0.00	0.00	0.00	0.00	0.00	●/○
WBS R-B4.05001-25-2005	Pump Station Force Main Construction	0.00	0.00	0.00	0.00	0.00	0.00	●/○
* WBS R-B4.05001-16	Pump Station Force Main Survey	0.00	87,504.67	87,504.67	0.00	87,504.67	0.00	100.00
WBS R-B4.05001-16-2005	Pump Station Force Main Survey	0.00	87,504.67	87,504.67	0.00	87,504.67	0.00	100.00
Result		2,274,275.32	(1,732,651.49)	541,623.83	0.00	365,194.44	176,429.39	67.43

2005 BOND ISSUE — B2 SEWER - COMBINED SEWER ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-B2.06020-11-2005	Sewer Gunite Contract - Design	0.00	12,994.72	12,994.72	0.00	12,994.72	0.00	100.00
* WBS R-B2.06020-21	Sewer Gunite Contract - Construction	900,000.00	94,601.00	994,601.00	132,362.00	901,707.50	(39,468.50)	103.97
WBS R-B2.06020-21-2005	Sewer Gunite Contract - Construction	900,000.00	94,601.00	994,601.00	132,362.00	901,707.50	(39,468.50)	103.97
** WBS R-B2.07013	COA Sewer Inspection	0.00	1,175,000.00	1,175,000.00	409,960.42	792,219.47	(27,179.89)	102.31
* WBS R-B2.07013-12	COA Sewer Inspection - CM	0.00	225,000.00	225,000.00	0.00	224,425.42	574.58	99.74
WBS R-B2.07013-12-2005	COA Sewer Inspection - CM	0.00	225,000.00	225,000.00	0.00	224,425.42	574.58	99.74
* WBS R-B2.07013-21	COA Sewer Inspection - Construction	0.00	950,000.00	950,000.00	409,960.42	567,794.05	(27,754.47)	102.92
WBS R-B2.07013-21-2005	COA Sewer Inspection - Construction	0.00	950,000.00	950,000.00	409,960.42	567,794.05	(27,754.47)	102.92
Result		19,172,833.78	1,843,734.54	21,016,568.32	1,777,345.59	18,663,016.84	576,205.89	97.26

2005 BOND ISSUE — D1 ENGINEERING ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-D1.07011-21-2005	New Building Improvements	0.00	450,000.00	450,000.00	0.00	442,903.00	7,097.00	98.42
** WBS R-D1.08028	ArcGIS Server Implementation	0.00	30,000.00	30,000.00	0.00	25,695.06	4,304.94	85.65
* WBS R-D1.08028-12	ArcGIS Server Implementation	0.00	30,000.00	30,000.00	0.00	25,695.06	4,304.94	85.65
WBS R-D1.08028-12-2005	ArcGIS Server Implementation	0.00	30,000.00	30,000.00	0.00	25,695.06	4,304.94	85.65
** WBS R-D1.08029	Majestic Star Casino Public W&S Imp	0.00	0.00	0.00	0.00	(51,180.06)	51,180.06	●/O
* WBS R-D1.08029-12	Majestic Star Casino Public W&S Imp	0.00	0.00	0.00	0.00	(51,180.06)	51,180.06	●/O
WBS R-D1.08029-12-2005	Majestic Star Casino Public W&S Imp	0.00	0.00	0.00	0.00	(51,180.06)	51,180.06	●/O
Result		701,572.51	1,474,927.26	2,176,499.77	0.00	1,982,497.61	194,002.16	91.09

2005 BOND ISSUE — C1 CITY / URA / SEA / PORT AUTHORITY ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbranc	Actuals	Balance Remaining	% Util
** WBS R-C1.06501	URA - Liberty Park	2,300,000.00	(1,160,000.00)	1,140,000.00	0.00	1,024,211.44	115,788.56	89.84
* WBS R-C1.06501-12	URA - Liberty Park - Consultant Design	180,000.00	(60,000.00)	120,000.00	0.00	116,124.89	3,875.11	96.77
WBS R-C1.06501-12-2005	URA - Liberty Park - Consultant Design	180,000.00	(60,000.00)	120,000.00	0.00	116,124.89	3,875.11	96.77
* WBS R-C1.06501-21	URA - Liberty Park - Construction	1,850,000.00	(900,000.00)	950,000.00	0.00	901,191.84	48,808.16	94.86
WBS R-C1.06501-21-2005	URA - Liberty Park - Construction	1,850,000.00	(900,000.00)	950,000.00	0.00	901,191.84	48,808.16	94.86
* WBS R-C1.06501-13	URA - Liberty Park - CM	270,000.00	(200,000.00)	70,000.00	0.00	6,894.71	63,105.29	9.85
WBS R-C1.06501-13-2005	URA - Liberty Park - CM	270,000.00	(200,000.00)	70,000.00	0.00	6,894.71	63,105.29	9.85
** WBS R-C1.07502	Federal Hill Housing	0.00	400,000.00	400,000.00	0.00	36,720.71	363,279.29	9.18
* WBS R-C1.07502-21	Federal Hill Housing	0.00	400,000.00	400,000.00	0.00	36,720.71	363,279.29	9.18
WBS R-C1.07502-21-2005	Federal Hill Housing	0.00	400,000.00	400,000.00	0.00	36,720.71	363,279.29	9.18
** WBS R-C1.07503	Homewood-Susquehanna Street	0.00	200,000.00	200,000.00	0.00	0.00	200,000.00	0.00
* WBS R-C1.07503-21	Homewood-Susquehanna Street	0.00	200,000.00	200,000.00	0.00	0.00	200,000.00	0.00
WBS R-C1.07503-21-2005	Homewood-Susquehanna Street	0.00	200,000.00	200,000.00	0.00	0.00	200,000.00	0.00
** WBS R-C1.91501-21-2005	NINE MILE RUN REDEVELOPMENT	0.00	10,000.00	10,000.00	0.00	7,085.94	2,914.06	70.86
** WBS R-C1.95501-22-2005	BEDFORD DWELLINGS	0.00	700,000.00	700,000.00	0.00	695,413.15	4,586.85	99.34
** WBS R-C1.98501-21-2005	S.S. INDUSTRIAL DEVELOPMENT	940,000.00	(203,254.47)	736,745.53	0.00	50,079.71	686,665.82	6.80
Result		3,240,000.00	(53,254.47)	3,186,745.53	0.00	1,813,510.95	1,373,234.58	56.91

2005 BOND ISSUE — D1 ENGINEERING COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS I-D1.06016	Miscellaneous Engineering Services	2,000,000.00	(2,000,000.00)	0.00	0.00	0.00	0.00	●/O
* WBS I-D1.06016-2005	Misc Engineering Services	2,000,000.00	(2,000,000.00)	0.00	0.00	0.00	0.00	●/O
** WBS R-D1.05028	Temporary Project Engineering Services	640,000.00	1,912,012.64	2,552,012.64	20,361.08	2,531,651.56	0.00	100.00
* WBS R-D1.05028-12	Temporary Staffing - ATSCE	420,000.00	843,369.11	1,263,369.11	0.00	1,263,369.11	0.00	100.00
WBS R-D1.05028-12-2005	Temporary Staffing - ATSCE	420,000.00	843,369.11	1,263,369.11	0.00	1,263,369.11	0.00	100.00
* WBS R-D1.05028-13	Temporary Staffing - Kimball	90,000.00	535,392.17	625,392.17	0.00	625,392.17	0.00	100.00
WBS R-D1.05028-13-2005	Temporary Staffing - Kimball	90,000.00	535,392.17	625,392.17	0.00	625,392.17	0.00	100.00
* WBS R-D1.05028-14	Temporary Staffing - URS	130,000.00	533,251.36	663,251.36	20,361.08	642,890.28	0.00	100.00
WBS R-D1.05028-14-2005	Temporary Staffing - URS	130,000.00	533,251.36	663,251.36	20,361.08	642,890.28	0.00	100.00
** WBS R-D1.05030	Developer Reviews	125,000.00	209,313.53	334,313.53	0.00	334,313.53	0.00	100.00
* WBS R-D1.05030-12	ATSCE Developer Reviews	125,000.00	209,313.53	334,313.53	0.00	334,313.53	0.00	100.00
WBS R-D1.05030-12-2005	ATSCE Developer Reviews - 2005	125,000.00	209,313.53	334,313.53	0.00	334,313.53	0.00	100.00
** WBS R-D1.05034	2005 Engineering Dept Reimbursement	943,605.00	0.00	943,605.00	0.00	943,605.00	0.00	100.00
* WBS R-D1.05034-12	2005 Engineering Dept Reimbursement	943,605.00	0.00	943,605.00	0.00	943,605.00	0.00	100.00
WBS R-D1.05034-12-2005	05 Engineering Dept Reimbursement - 2005	943,605.00	0.00	943,605.00	0.00	943,605.00	0.00	100.00
** WBS R-D1.06003	Additional CM Services - ATSCE	100,000.00	(7,716.83)	92,283.17	0.00	92,283.17	0.00	100.00
* WBS R-D1.06003-11	Meetings	25,000.00	(987.55)	24,012.45	0.00	24,012.45	0.00	100.00
WBS R-D1.06003-11-2005	Meetings	25,000.00	(987.55)	24,012.45	0.00	24,012.45	0.00	100.00
* WBS R-D1.06003-12	SAP Preparation	25,000.00	10,506.11	35,506.11	0.00	35,506.11	0.00	100.00
WBS R-D1.06003-12-2005	SAP Preparation	25,000.00	10,506.11	35,506.11	0.00	35,506.11	0.00	100.00
* WBS R-D1.06003-13	Miscellaneous Design	25,000.00	233.41	25,233.41	0.00	25,233.41	0.00	100.00
WBS R-D1.06003-13-2005	Miscellaneous Design	25,000.00	233.41	25,233.41	0.00	25,233.41	0.00	100.00
* WBS R-D1.06003-14	Program Management	25,000.00	(17,468.80)	7,531.20	0.00	7,531.20	0.00	100.00
WBS R-D1.06003-14-2005	Program Management	25,000.00	(17,468.80)	7,531.20	0.00	7,531.20	0.00	100.00
** WBS R-D1.06011	CM for URA Projects - ATSCE	60,000.00	240,875.02	300,875.02	0.00	300,875.02	0.00	100.00
* WBS R-D1.06011-11	LTV South Side Works	10,000.00	(695.78)	9,304.22	0.00	9,304.22	0.00	100.00
WBS R-D1.06011-11-2005	LTV South Side Works	10,000.00	(695.78)	9,304.22	0.00	9,304.22	0.00	100.00
* WBS R-D1.06011-12	Nine Mile Run	20,000.00	100,750.36	120,750.36	0.00	120,750.36	0.00	100.00
WBS R-D1.06011-12-2005	Nine Mile Run	20,000.00	100,750.36	120,750.36	0.00	120,750.36	0.00	100.00
* WBS R-D1.06011-13	South Side Riverfront Housing	10,000.00	38,398.31	48,398.31	0.00	48,398.31	0.00	100.00
WBS R-D1.06011-13-2005	South Side Riverfront Housing	10,000.00	38,398.31	48,398.31	0.00	48,398.31	0.00	100.00
* WBS R-D1.06011-14	Bedford Dwellings	10,000.00	70,366.72	80,366.72	0.00	80,366.72	0.00	100.00
WBS R-D1.06011-14-2005	Bedford Dwellings	10,000.00	70,366.72	80,366.72	0.00	80,366.72	0.00	100.00
* WBS R-D1.06011-15	Allequippa Terrace	10,000.00	(5,884.39)	4,115.61	0.00	4,115.61	0.00	100.00
WBS R-D1.06011-15-2005	Allequippa Terrace	10,000.00	(5,884.39)	4,115.61	0.00	4,115.61	0.00	100.00
* WBS R-D1.06011-16	Liberty Park	0.00	36,446.74	36,446.74	0.00	36,446.74	0.00	100.00
WBS R-D1.06011-16-2005	Liberty Park	0.00	36,446.74	36,446.74	0.00	36,446.74	0.00	100.00
* WBS R-D1.06011-17	URA Hot Metal Bridge Utility Relocation	0.00	1,493.06	1,493.06	0.00	1,493.06	0.00	100.00
WBS R-D1.06011-17-2005	URA Hot Metal Bridge Utility Relocation	0.00	1,493.06	1,493.06	0.00	1,493.06	0.00	100.00
** WBS R-D1.06031	Engineering Dept Reimbursement	0.00	2,588,644.00	2,588,644.00	0.00	2,588,644.00	0.00	100.00
* WBS R-D1.06031-21	2006 Engineering Dept Reimbursement	0.00	1,158,458.00	1,158,458.00	0.00	1,158,458.00	0.00	100.00
WBS R-D1.06031-21-2005	2006 Engineering Dept Reimbursement	0.00	1,158,458.00	1,158,458.00	0.00	1,158,458.00	0.00	100.00
* WBS R-D1.06031-22	2007 Engineering Dept Reimbursement	0.00	1,430,186.00	1,430,186.00	0.00	1,430,186.00	0.00	100.00
WBS R-D1.06031-22-2005	2007 Engineering Dept Reimbursement	0.00	1,430,186.00	1,430,186.00	0.00	1,430,186.00	0.00	100.00
Result		3,868,605.00	2,943,128.36	6,811,733.36	20,361.08	6,791,372.28	0.00	100.00

2005 BOND ISSUE — D1 ENGINEERING ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbranc	Actuals	Balance Remaining	% Util
** WBS I-D1.05029	Survey's	50,000.00	185,000.00	235,000.00	0.00	212,427.24	22,572.76	90.39
* WBS I-D1.05029-2005	Survey's - 2005	50,000.00	185,000.00	235,000.00	0.00	212,427.24	22,572.76	90.39
WBS I-D1.05029-2005-11	Site #1 - Jacob Street	0.00	0.00	0.00	0.00	2,460.12	(2,460.12)	●/O
WBS I-D1.05029-2005-12	Site #2 - Olynpia Street	0.00	0.00	0.00	0.00	8,074.88	(8,074.88)	●/O
WBS I-D1.05029-2005-13	Site #3 - South 6th Street	0.00	0.00	0.00	0.00	12,293.27	(12,293.27)	●/O
WBS I-D1.05029-2005-14	Site #4 - Fritz Street	0.00	0.00	0.00	0.00	6,640.11	(6,640.11)	●/O
WBS I-D1.05029-2005-15	Site #5 - Woodward Ave	0.00	0.00	0.00	0.00	3,558.43	(3,558.43)	●/O
WBS I-D1.05029-2005-16	Site #6 - Various Waterline Relays	0.00	0.00	0.00	0.00	1,698.00	(1,698.00)	●/O
WBS I-D1.05029-2005-17	Site #7 -Rodgers & Mohrbach Pump Station	0.00	0.00	0.00	0.00	11,890.40	(11,890.40)	●/O
WBS I-D1.05029-2005-18	Site #8 - State Route 88	0.00	0.00	0.00	0.00	5,221.42	(5,221.42)	●/O
WBS I-D1.05029-2005-19	Site #9 - Rialto Street	0.00	0.00	0.00	0.00	55.73	(55.73)	●/O
WBS I-D1.05029-2005-20	Site #10 - Verner Avenue	0.00	0.00	0.00	0.00	255.65	(255.65)	●/O
WBS I-D1.05029-2005-21	Site #11 - Kathleen Street	0.00	0.00	0.00	0.00	10,481.56	(10,481.56)	●/O
WBS I-D1.05029-2005-22	Site #12 - WTP Boundary	0.00	0.00	0.00	0.00	18,740.81	(18,740.81)	●/O
WBS I-D1.05029-2005-23	Site #13 - Manor Garage Building Survey	0.00	0.00	0.00	0.00	9,237.29	(9,237.29)	●/O
WBS I-D1.05029-2005-24	Site #14 - Berkshire-Stebbins Survey	0.00	0.00	0.00	0.00	22,140.03	(22,140.03)	●/O
WBS I-D1.05029-2005-25	Site #15 - Behrens Way Survey	0.00	0.00	0.00	0.00	5,960.10	(5,960.10)	●/O
WBS I-D1.05029-2005-26	Site #16 - Colby-Chapin	0.00	0.00	0.00	0.00	27,726.19	(27,726.19)	●/O
WBS I-D1.05029-2005-27	Site #17 - North Dithridge Street Survey	0.00	0.00	0.00	0.00	44,353.70	(44,353.70)	●/O
WBS I-D1.05029-2005-28	Site #18 - Commercial St - 9 Mile Run	0.00	0.00	0.00	0.00	13,639.55	(13,639.55)	●/O
WBS I-D1.05029-2005-29	Site #19 - Poremski (Glenbury St)	0.00	0.00	0.00	0.00	8,000.00	(8,000.00)	●/O
** WBS I-D1.05031	C. M. for Private Development	26,905.25	514,976.82	541,882.07	0.00	582,814.87	(40,932.80)	107.55
* WBS I-D1.05031-2005	C.M. for Private Development - 2005	26,905.25	514,976.82	541,882.07	0.00	582,814.87	(40,932.80)	107.55
WBS I-D1.05031-2005-11	Grant Street Transportation Center	0.00	0.00	0.00	0.00	3,709.67	(3,709.67)	●/O
WBS I-D1.05031-2005-13	Sewer Construction Cassabill Drive	0.00	0.00	0.00	0.00	44,014.88	(44,014.88)	●/O
WBS I-D1.05031-2005-14	RiteAid Noblestown Rd Sewer Reconstructi	0.00	0.00	0.00	0.00	11,752.65	(11,752.65)	●/O
WBS I-D1.05031-2005-15	PAT North Shore Connector	0.00	0.00	0.00	0.00	218,247.12	(218,247.12)	●/O
WBS I-D1.05031-2005-16	Lou Mason Apartments W&S Construction	0.00	0.00	0.00	0.00	50,553.52	(50,553.52)	●/O
WBS I-D1.05031-2005-17	North Shore HOV Lane Modifications	0.00	0.00	0.00	0.00	11,446.93	(11,446.93)	●/O
WBS I-D1.05031-2005-18	Bedford Hill Apts 2 & 3 Sewer Relining	0.00	0.00	0.00	0.00	(16,500.00)	16,500.00	●/O
WBS I-D1.05031-2005-19	Ely Road Sanitary Sewer Construction	0.00	0.00	0.00	0.00	(62.64)	62.64	●/O
WBS I-D1.05031-2005-20	PennDOT Blvd Allies over Forbes Ave	0.00	0.00	0.00	0.00	198,633.98	(198,633.98)	●/O
WBS I-D1.05031-2005-21	Sanitary Sewer Construction SR 88 PADOT	0.00	0.00	0.00	0.00	11,354.66	(11,354.66)	●/O
WBS I-D1.05031-2005-22	Oxbridge at SouthSide Waterline Relay	0.00	0.00	0.00	0.00	6,743.30	(6,743.30)	●/O
WBS I-D1.05031-2005-23	Springhill Suites LTV Site SlipLine & MH	0.00	0.00	0.00	0.00	25,949.29	(25,949.29)	●/O
WBS I-D1.05031-2005-24	Walnut Place Sanitary Sewer Reconst.	0.00	0.00	0.00	0.00	7,735.63	(7,735.63)	●/O
WBS I-D1.05031-2005-25	Magee Street Comb Sewer (SEA Pens Arena)	0.00	0.00	0.00	0.00	7,498.89	(7,498.89)	●/O
** WBS R-D1.05009	Water Audit Services	311,667.26	0.00	311,667.26	0.00	183,313.56	128,353.70	58.82
* WBS R-D1.05009-11	Water Audit Services	311,667.26	0.00	311,667.26	0.00	183,313.56	128,353.70	58.82
WBS R-D1.05009-11-2005	Water Audit Services	311,667.26	0.00	311,667.26	0.00	183,313.56	128,353.70	58.82
** WBS R-D1.05032	Miscellaneous Design Services - ATSCE	133,000.00	123,532.59	256,532.59	0.00	244,050.24	12,482.35	95.13
* WBS R-D1.05032-12	Miscellaneous Design Services	48,000.00	40,000.00	88,000.00	0.00	77,317.67	10,682.33	87.86
WBS R-D1.05032-12-2005	Miscellaneous Design Services	48,000.00	40,000.00	88,000.00	0.00	77,317.67	10,682.33	87.86
* WBS R-D1.05032-13	2005 Bond - SAP Testing & Project Setup	30,000.00	311.93	30,311.93	0.00	30,311.93	0.00	100.00
WBS R-D1.05032-13-2005	2005 Bond - SAP Testing & Project Setup	30,000.00	311.93	30,311.93	0.00	30,311.93	0.00	100.00
* WBS R-D1.05032-14	Meetings	30,000.00	21,349.62	51,349.62	0.00	51,349.62	0.00	100.00
WBS R-D1.05032-14-2005	Meetings	30,000.00	21,349.62	51,349.62	0.00	51,349.62	0.00	100.00
* WBS R-D1.05032-16	Preparation of Monthly Reports	25,000.00	41,871.04	66,871.04	0.00	66,871.04	0.00	100.00
WBS R-D1.05032-16-2005	Preparation of Monthly Reports	25,000.00	41,871.04	66,871.04	0.00	66,871.04	0.00	100.00
* WBS R-D1.05032-17	Revisions to Procedure Manual	0.00	20,000.00	20,000.00	0.00	18,199.98	1,800.02	91.00
WBS R-D1.05032-17-2005	Revisions to Procedure Manual	0.00	20,000.00	20,000.00	0.00	18,199.98	1,800.02	91.00
** WBS R-D1.06004	Water Model Update & Calibration	180,000.00	40,000.00	220,000.00	0.00	211,055.85	8,944.15	95.93
* WBS R-D1.06004-11	Water Model	180,000.00	40,000.00	220,000.00	0.00	211,055.85	8,944.15	95.93
WBS R-D1.06004-11-2005	Water Model	180,000.00	40,000.00	220,000.00	0.00	211,055.85	8,944.15	95.93
** WBS R-D1.07011	Office Relocation Architectural Services	0.00	581,417.85	581,417.85	0.00	574,320.85	7,097.00	98.78
* WBS R-D1.07011-11	Office Relocation Architectural Services	0.00	131,417.85	131,417.85	0.00	131,417.85	0.00	100.00
WBS R-D1.07011-11-2005	Office Relocation Architectural Services	0.00	131,417.85	131,417.85	0.00	131,417.85	0.00	100.00
* WBS R-D1.07011-21	New Building Improvements	0.00	450,000.00	450,000.00	0.00	442,903.00	7,097.00	98.42

2005 BOND ISSUE — F1 IT / GIS COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-F1.05010-21-2005 Installation - 2005	0.00	3,300.00	3,300.00	0.00	3,300.00	0.00	100.00
** WBS R-F1.06005 SAP Software Support	70,000.00	(70,000.00)	0.00	0.00	0.00	0.00	●/O
* WBS R-F1.06005-21 SAP Software Support	70,000.00	(70,000.00)	0.00	0.00	0.00	0.00	●/O
WBS R-F1.06005-21-2005 SAP Software Support	70,000.00	(70,000.00)	0.00	0.00	0.00	0.00	●/O
** WBS R-F1.06014 GIS Water Plat Conversion	80,000.00	(4,634.12)	75,365.88	0.00	75,365.88	0.00	100.00
* WBS R-F1.06014-21 GIS Water Plat Conversion	80,000.00	(4,634.12)	75,365.88	0.00	75,365.88	0.00	100.00
WBS R-F1.06014-21-2005 GIS Water Plat Conversion	80,000.00	(4,634.12)	75,365.88	0.00	75,365.88	0.00	100.00
** WBS R-F1.07020 PWSA Hydrant GPS Survey	0.00	139,631.00	139,631.00	0.00	139,631.00	0.00	100.00
* WBS R-F1.07020-11 PWSA Hydrant GPS Survey	0.00	139,631.00	139,631.00	0.00	139,631.00	0.00	100.00
WBS R-F1.07020-11-2005 PWSA Hydrant GPS Survey	0.00	139,631.00	139,631.00	0.00	139,631.00	0.00	100.00
** WBS R-F1.08030 LIMS System	0.00	3,300.00	3,300.00	0.00	3,300.00	0.00	100.00
* WBS R-F1.08030-21 LIMS System	0.00	3,300.00	3,300.00	0.00	3,300.00	0.00	100.00
WBS R-F1.08030-21-2005 LIMS System	0.00	3,300.00	3,300.00	0.00	3,300.00	0.00	100.00
Result	150,000.00	71,596.88	221,596.88	0.00	221,596.88	0.00	100.00

2005 BOND ISSUE — E1 TOOLS AND EQUIPMENT ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-E1.08005 Purchase Small Meters	0.00	681,281.88	681,281.88	0.00	351,572.80	329,709.08	51.60
* WBS R-E1.08005-11 Purchase Small Meters	0.00	4,072.88	4,072.88	0.00	3,674.14	398.74	90.21
WBS R-E1.08005-11-2005 Purchase Small Meters	0.00	4,072.88	4,072.88	0.00	3,674.14	398.74	90.21
* WBS R-E1.08005-21 Purchase Small Meters	0.00	677,209.00	677,209.00	0.00	347,898.66	329,310.34	51.37
WBS R-E1.08005-21-2005 Purchase Small Meters	0.00	677,209.00	677,209.00	0.00	347,898.66	329,310.34	51.37
Result	0.00	681,281.88	681,281.88	0.00	351,572.80	329,709.08	51.60

EXHIBIT H
2007 DEPOSITORY AGREEMENT FUND STATUS REPORT AS OF DECEMBER 31, 2008

2005 BOND ISSUE — E1 TOOLS AND EQUIPMENT COMPLETED PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-E1.06017 2006 Street Repaving Sewer Risers & Lids	96,610.75	0.00	96,610.75	0.00	96,610.75	0.00	100.00
* WBS R-E1.06017-21 2006 Street Repaving Sewer Risers & Lids	96,610.75	0.00	96,610.75	0.00	96,610.75	0.00	100.00
WBS R-E1.06017-21-2005 2006 Street Repaving Sewer Risers & Lids	96,610.75	0.00	96,610.75	0.00	96,610.75	0.00	100.00
** WBS R-E1.07005 Purchase Water Meters	0.00	91,712.50	91,712.50	0.00	91,712.50	0.00	100.00
* WBS R-E1.07005-21 Purchase Water Meters	0.00	91,712.50	91,712.50	0.00	91,712.50	0.00	100.00
WBS R-E1.07005-21-2005 Purchase Water Meters	0.00	91,712.50	91,712.50	0.00	91,712.50	0.00	100.00
** WBS R-E1.07015 2007 Street Repaving Sewer Riser & Lids	0.00	139,586.00	139,586.00	0.00	139,586.00	0.00	100.00
* WBS R-E1.07015-21 2007 Street Repaving Sewer Riser & Lids	0.00	139,586.00	139,586.00	0.00	139,586.00	0.00	100.00
WBS R-E1.07015-21-2005 2007 Street Repaving Sewer Riser & Lids	0.00	139,586.00	139,586.00	0.00	139,586.00	0.00	100.00
Result	96,610.75	231,298.50	327,909.25	0.00	327,909.25	0.00	100.00

2007 DEPOSITORY AGREEMENT FUND — A1 WATER - DISTRIBUTION SYSTEM ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A1.07009 Water Valve & Fire Hydrant Contract	0.00	1,128,500.00	1,128,500.00	914,338.72	70,114.86	144,046.42	87.24
* WBS R-A1.07009-11 Water Valve & Fire Hydrant - Design	0.00	3,500.00	3,500.00	0.00	3,256.80	243.20	93.05
WBS R-A1.07009-11-2007 Water Valve & Fire Hydrant - Design	0.00	3,500.00	3,500.00	0.00	3,256.80	243.20	93.05
* WBS R-A1.07009-12 Water Valve & Fire Hydrant - CM	0.00	125,000.00	125,000.00	0.00	9,936.12	115,063.88	7.95
WBS R-A1.07009-12-2007 Water Valve & Fire Hydrant - CM	0.00	125,000.00	125,000.00	0.00	9,936.12	115,063.88	7.95
* WBS R-A1.07009-21 Water Valve & Fire Hydrant - CONST	0.00	1,000,000.00	1,000,000.00	914,338.72	56,921.94	28,739.34	97.13
WBS R-A1.07009-21-2007 Water Valve & Fire Hydrant - CONST	0.00	1,000,000.00	1,000,000.00	914,338.72	56,921.94	28,739.34	97.13
** WBS R-A1.08016 Fifth Ave Waterline Relay	0.00	275,000.00	275,000.00	61,141.78	242,631.33	(28,773.11)	110.46
* WBS R-A1.08016-12 Fifth Ave Waterline Relay - CM	0.00	55,000.00	55,000.00	0.00	47,504.64	7,495.36	86.37
WBS R-A1.08016-12-2007 Fifth Ave Waterline Relay - CM	0.00	55,000.00	55,000.00	0.00	47,504.64	7,495.36	86.37
* WBS R-A1.08016-21 Fifth Ave Waterline Relay - Construction	0.00	220,000.00	220,000.00	61,141.78	195,126.69	(36,268.47)	116.49
WBS R-A1.08016-21-2007 Fifth Ave Waterline Relay - Construction	0.00	220,000.00	220,000.00	61,141.78	195,126.69	(36,268.47)	116.49
** WBS R-A1.08039 Ft Duquesne Blvd Waterline Replacement	0.00	800,000.00	800,000.00	0.00	755,004.82	44,995.18	94.38
* WBS R-A1.08039-21 Ft Duquesne Blvd Waterline Replacement	0.00	800,000.00	800,000.00	0.00	755,004.82	44,995.18	94.38
WBS R-A1.08039-21-2007 Ft Duquesne Blvd Waterline Replacement	0.00	800,000.00	800,000.00	0.00	755,004.82	44,995.18	94.38
Result	0.00	2,203,500.00	2,203,500.00	975,480.50	1,067,751.01	160,268.49	92.73

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM
2007 DEPOSITORY AGREEMENT FUND
STATUS AS OF DECEMBER 31, 2008

	AMOUNT BUDGETED	COMPLETED CONTRACTS	ACTUAL COST ACTIVE CONTRACTS	TOTAL COMPLETE AND ACTIVE	RETAINAGE HELD	REIMBURSE-MENTS	AMOUNT REQUISITIONED
WATER SYSTEM							
A1 Water - Distribution System	$ 2,203,500.00	$ -	$ 1,067,751.01	$ 1,067,751.01	$ 15,448.53	$ -	$ 1,052,302.48
A2 Water - Pumping & Storage	20,000.00	-	13,897.09	13,897.09	-	-	13,897.09
A3 Water - Treatment Plant	2,550,000.00	-	544,239.72	544,239.72	47,294.64	-	496,945.08
TOTAL WATER SYSTEM	**$ 4,773,500.00**	**$ -**	**$ 1,625,887.82**	**$ 1,625,887.82**	**$ 62,743.17**	**$ -**	**$ 1,563,144.65**
SEWER SYSTEM							
B1 Sewer - Sanitary Sewer	$ -	$ -		$ -	$ -	$ -	$ -
B2 Sewer - Combined Sewer	1,000,000.00	-	334,145.70	334,145.70	25,192.22	-	308,953.48
B4 Sewer - Pump Station	-	-	-	-	-	-	-
B5 Sewer - CSO	-	-	-	-	-	-	-
TOTAL SEWER SYSTEM	**$ 1,000,000.00**	**$ -**	**$ 334,145.70**	**$ 334,145.70**	**$ 25,192.22**	**$ -**	**$ 308,953.48**
C1 CITY/URA/SEA/PORT AUTHORITY	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
D1 ENGINEERING	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**
E1 TOOLS AND EQUIPMENT	**$ 450,000.00**	**$ -**	**$ 440,186.31**	**$ 440,186.31**	**$ -**		**$ 440,186.31**
F1 IT/GIS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Z1 CONTINGENCY	**$ 95,514.16**						
TOTAL 2007 DEPOSITORY AGREEMENT	**$ 6,319,014.16**	**$ -**	**$ 2,400,219.83**	**$ 2,400,219.83**	**$ 87,935.40**	**$ -**	**$ 2,312,284.43**

2007 DEPOSITORY AGREEMENT FUND — A2 WATER - PUMPING AND STORAGE ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
* WBS R-A2.98001-12 Highland #1 MFP - CM	0.00	20,000.00	20,000.00	0.00	13,897.09	6,102.91	69.49
WBS R-A2.98001-12-2007 Highland #1 MFP - CM	0.00	20,000.00	20,000.00	0.00	13,897.09	6,102.91	69.49
Result	0.00	20,000.00	20,000.00	0.00	13,897.09	6,102.91	69.49

Company : 1 — PWSA — Date : 12/31/2008
Program Id : ZPPSR_DRAWDOWN_BY_BOND — Drawdown Analysis by Bond — Time :
Requested By : CJORDAN — Bond 2007 — Page : 1

Month	Monthly Drawdown Amount: Bond Issue	Estimated	Actual	Cummulative Drawdown Amount: Bond Issue	Estimated	Actual	Cummulative % of Drawdown Amount: Bond Iss%	Estimated%	Actual%	24-month%	30-month%
Mar 2008			157,903			157,903					
Apr 2008			225,593			383,497					
May 2008			19,138			402,635					
Jun 2008			37,751			440,385					
Jul 2008			829,239			1,269,624					
Sep 2008			377,863			1,647,487					
Oct 2008			95,381			1,742,868					
Nov 2008			392,618			2,135,486					
Dec 2008			176,798			2,312,284					
* TOTAL			2,312,284								

*** End of Report ***

2007 DEPOSITORY AGREEMENT FUND — E1 TOOLS AND EQUIPMENT ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-E1.08022 2008 Street Repaving Sewer Risers & Lids	0.00	450,000.00	450,000.00	0.00	440,186.31	9,813.69	97.82
* WBS R-E1.08022-21 2008 St Repaving Sewer Risers & Lids-CON	0.00	450,000.00	450,000.00	0.00	440,186.31	9,813.69	97.82
WBS R-E1.08022-21-2007 2008 St Repaving Sewer Risers & Lids-CON	0.00	450,000.00	450,000.00	0.00	440,186.31	9,813.69	97.82
Result	0.00	450,000.00	450,000.00	0.00	440,186.31	9,813.69	97.82

2007 DEPOSITORY AGREEMENT FUND — A3 WATER - TREATMENT PLANT ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-A3.05006-19-2007 WTP Clarifier No. 4 Collector Equipment	0.00	80,000.00	80,000.00	0.00	5,454.55	74,545.45	6.82
WBS R-A3.05006-23-2007 WTP Clarifier No. 4 Collector Equipment	0.00	1,000,000.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
WBS R-A3.06032-11-2007 WTP Traveling Screen - Engineering	0.00	40,000.00	40,000.00	0.00	39,258.43	741.57	98.15
WBS R-A3.06032-12-2007 WTP Traveling Screen - CM	0.00	130,000.00	130,000.00	0.00	26,580.31	103,419.69	20.45
WBS R-A3.06032-21-2007 WTP Traveling Screen - General	0.00	1,200,000.00	1,200,000.00	653,237.26	446,326.43	100,436.31	91.63
WBS R-A3.06032-22-2007 WTP Traveling Screen - Electrical	0.00	100,000.00	100,000.00	59,525.00	26,620.00	13,855.00	86.15
Result	0.00	2,550,000.00	2,550,000.00	712,762.26	544,239.72	1,292,998.02	49.29

EXHIBIT I
2008 CONSTRUCTION FUND STATUS REPORT
AS OF DECEMBER 31, 2008

2007 DEPOSITORY AGREEMENT FUND — B2 SEWER - COMBINED SEWER ACTIVE PROJECTS — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-B2.08015 MH, CB & Sewer Line Point Repair	0.00	1,000,000.00	1,000,000.00	528,189.47	334,145.70	137,664.83	86.23
* WBS R-B2.08015-12 MH CB & Sewer Line Point Repair	0.00	150,000.00	150,000.00	0.00	82,223.44	67,776.56	54.82
WBS R-B2.08015-12-2007 MH CB & Sewer Line Point Repair - CM	0.00	150,000.00	150,000.00	0.00	82,223.44	67,776.56	54.82
* WBS R-B2.08015-21 MH CB & Sewer Line Point Repair - CONST	0.00	850,000.00	850,000.00	528,189.47	251,922.26	69,888.27	91.78
WBS R-B2.08015-21-2007 MH CB & Sewer Line Point Repair - CONST	0.00	850,000.00	850,000.00	528,189.47	251,922.26	69,888.27	91.78
Result	0.00	1,000,000.00	1,000,000.00	528,189.47	334,145.70	137,664.83	86.23

Company : 1
Program Id : ZPPSR_DRAWDOWN_BY_BOND
Requested By : CJORDAN

PWSA
Drawdown Analysis by Bond
Bond 2008

Date : 12/31/2008
Time : 15:32:29
Page : 2

Month	Monthly Drawdown Amount			Cummulative Drawdown Amount			Cummulative % of Drawdown Amount				
	Bond Issue	Estimated	Actual	Bond Issue	Estimated	Actual	Bond Iss%	Estimated%	Actual%	24-month%	30-month%
Apr 2012	761,444	761,444		97,169,555	95,646,667	2,274,329	99.1	97.5			
May 2012	761,444	761,444		97,931,000	96,408,111	2,274,329	99.9	98.3			
Jun 2012	119,167	761,444		98,050,167	97,169,555	2,274,329	100.0	99.1			
Jul 2012		761,444		98,050,167	97,931,000	2,274,329		99.9			
Aug 2012		119,167		98,050,167	98,050,167	2,274,329		100.0			
* TOTAL	98,050,167	98,050,167	2,274,329								

*** End of Report ***

THE PITTSBURGH WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM
2008 CONSTRUCTION FUND
STATUS AS OF DECEMBER 31, 2008

	AMOUNT BUDGETED	COMPLETED CONTRACTS	ACTUAL COST ACTIVE CONTRACTS	TOTAL COMPLETE AND ACTIVE	RETAINAGE HELD	REIMBURSE-MENTS	AMOUNT REQUISITIONED
WATER SYSTEM							
A1 Water - Distribution System	$ 17,225,000.00	$ -	$ 169,320.00	$ 169,320.00	$ -	$ -	$ 169,320.00
A2 Water - Pumping & Storage	9,300,000.00	-	14,427.64	14,427.64	-	-	14,427.64
A3 Water - Treatment Plant	34,647,000.00	-	-	-	-	-	-
TOTAL WATER SYSTEM	**$ 61,172,000.00**	**$ -**	**$ 183,747.64**	**$ 183,747.64**	**$ -**	**$ -**	**$ 183,747.64**
SEWER SYSTEM							
B1 Sewer - Sanitary Sewer	$ -	$ -		$ -	$ -	$ -	$ -
B2 Sewer - Combined Sewer	8,845,000.00	-	7,035.09	7,035.09	-	-	7,035.09
B4 Sewer - Pump Station	3,460,000.00	-	-	-	-	-	-
B5 Sewer - CSO	-	-	-	-	-	-	-
TOTAL SEWER SYSTEM	**$ 12,305,000.00**	**$ -**	**$ 7,035.09**	**$ 7,035.09**	**$ -**	**$ -**	**$ 7,035.09**
C1 CITY/URA/SEA/PORT AUTHORITY	**$ 7,800,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
D1 ENGINEERING	**$ 9,688,412.00**	**$ -**	**$ 2,083,545.99**	**$ 2,083,545.99**	**$ -**	**$ -**	**$ 2,083,545.99**
E1 TOOLS AND EQUIPMENT	**$ 5,550,000.00**	**$ -**		**$ -**	**$ -**		**$ -**
F1 IT/GIS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Z1 CONTINGENCY	**$ 1,546,771.58**						
TOTAL 2008 CONSTRUCTION FUND	**$ 98,062,183.58**	**$ -**	**$ 2,274,328.72**	**$ 2,274,328.72**	**$ -**	**$ -**	**$ 2,274,328.72**

2008 CONSTRUCTION FUND — A1 WATER - DISTRIBUTION SYSTEM — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbranc	Actuals	Balance Remaining	% Util
** WBS R-A1.02027-21-2008	AUTOMATED METER READING (AMR) PROGRAM	400,000.00	0.00	400,000.00	0.00	169,320.00	230,680.00	42.33
** WBS R-A1.08100	Water Valve & Hydrant Replacement	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
* WBS R-A1.08100-01	Water Valve & Hydrant Replacement	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
WBS R-A1.08100-01-2008	Water Valve & Hydrant Replacement	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
** WBS R-A1.08101	Small Meter Replacement Program	5,000,000.00	0.00	5,000,000.00	0.00	0.00	5,000,000.00	0.00
* WBS R-A1.08101-01	Small Meter Replacement Program	5,000,000.00	0.00	5,000,000.00	0.00	0.00	5,000,000.00	0.00
WBS R-A1.08101-01-2008	Small Meter Replacement Program	5,000,000.00	0.00	5,000,000.00	0.00	0.00	5,000,000.00	0.00
** WBS R-A1.08102	Purchase Fire Hydrants	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
* WBS R-A1.08102-01	Purchase Fire Hydrants	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
WBS R-A1.08102-01-2008	Purchase Fire Hydrants	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
** WBS R-A1.08103	Waterline Relays	1,000,000.00	1,125,000.00	2,125,000.00	0.00	0.00	2,125,000.00	0.00
* WBS R-A1.08103-01	Waterline Relays	1,000,000.00	1,125,000.00	2,125,000.00	0.00	0.00	2,125,000.00	0.00
WBS R-A1.08103-01-2008	Waterline Relays	1,000,000.00	1,125,000.00	2,125,000.00	0.00	0.00	2,125,000.00	0.00
** WBS R-A1.08104	Valve Inspections and Mapping	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
* WBS R-A1.08104-11	Valve Inspections and Mapping	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
WBS R-A1.08104-11-2008	Valve Inspections and Mapping	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
** WBS R-A1.08134	60-Inch Transmission Main Improvements	0.00	5,300,000.00	5,300,000.00	0.00	0.00	5,300,000.00	0.00
* WBS R-A1.08134-01	60" Transmission Main	0.00	5,250,000.00	5,250,000.00	0.00	0.00	5,250,000.00	0.00
WBS R-A1.08134-01-2008	60" Transmission Main	0.00	5,250,000.00	5,250,000.00	0.00	0.00	5,250,000.00	0.00
* WBS R-A1.08134-11	60" Transmission Main - Eng	0.00	50,000.00	50,000.00	0.00	0.00	50,000.00	0.00
WBS R-A1.08134-11-2008	60" Transmission Main - Eng	0.00	50,000.00	50,000.00	0.00	0.00	50,000.00	0.00
** WBS R-A1.08135	SR 28 Reconstruction - Waterline Reloc	0.00	1,500,000.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
* WBS R-A1.08135-01	SR 28 Reconstruction Waterline	0.00	1,500,000.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
WBS R-A1.08135-01-2008	SR 28 Reconstruction Waterline	0.00	1,500,000.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
Result		9,300,000.00	7,925,000.00	17,225,000.00	0.00	169,320.00	17,055,680.00	0.98

Company : 1
Program Id : ZPPSR_DRAWDOWN_BY_BOND
Requested By : CJORDAN

PWSA
Drawdown Analysis by Bond
Bond 2008

Date : 12/31/2008
Time : 15:32:29
Page : 1

Month	Monthly Drawdown Amount			Cummulative Drawdown Amount			Cummulative % of Drawdown Amount				
	Bond Issue	Estimated	Actual	Bond Issue	Estimated	Actual	Bond Iss%	Estimated%	Actual%	24-month%	30-month%
Jun 2008	743,011			743,011			0.8				
Jul 2008	833,011			1,576,022			1.6				
Aug 2008	918,011	743,011	85,465	2,494,033	743,011	85,465	2.5	0.8	0.1	4.2	3.3
Sep 2008	953,011	833,011	231,172	3,447,044	1,576,022	316,636	3.5	1.6	0.3	8.3	6.7
Oct 2008	918,011	918,011	156,621	4,365,055	2,494,033	473,257	4.5	2.5	0.5	12.5	10.0
Nov 2008	1,183,011	953,011	1,672,471	5,548,066	3,447,044	2,145,728	5.7	3.5	2.2	16.7	13.3
Dec 2008	1,913,011	918,011	128,601	7,461,077	4,365,055	2,274,329	7.6	4.5	2.3	20.8	16.7
Jan 2009	1,808,785	1,183,011		9,269,862	5,548,066	2,274,329	9.5	5.7		25.0	20.0
Feb 2009	1,698,785	1,913,011		10,968,647	7,461,077	2,274,329	11.2	7.6		29.2	23.3
Mar 2009	1,898,785	1,808,785		12,867,432	9,269,862	2,274,329	13.1	9.5		33.3	26.7
Apr 2009	2,133,785	1,698,785		15,001,217	10,968,647	2,274,329	15.3	11.2		37.5	30.0
May 2009	2,058,785	1,898,785		17,060,002	12,867,432	2,274,329	17.4	13.1		41.7	33.3
Jun 2009	5,887,729	2,133,785		22,947,731	15,001,217	2,274,329	23.4	15.3		45.8	36.7
Jul 2009	3,037,729	2,058,785		25,985,461	17,060,002	2,274,329	26.5	17.4		50.0	40.0
Aug 2009	3,027,729	5,887,729		29,013,190	22,947,731	2,274,329	29.6	23.4		54.2	43.3
Sep 2009	2,615,229	3,037,729		31,628,419	25,985,461	2,274,329	32.3	26.5		58.3	46.7
Oct 2009	2,865,229	3,027,729		34,493,649	29,013,190	2,274,329	35.2	29.6		62.5	50.0
Nov 2009	2,825,229	2,615,229		37,318,878	31,628,419	2,274,329	38.1	32.3		66.7	53.3
Dec 2009	3,890,229	2,865,229		41,209,107	34,493,649	2,274,329	42.0	35.2		70.8	56.7
Jan 2010	3,061,063	2,825,229		44,270,170	37,318,878	2,274,329	45.2	38.1		75.0	60.0
Feb 2010	2,921,063	3,890,229		47,191,233	41,209,107	2,274,329	48.1	42.0		79.2	63.3
Mar 2010	2,836,063	3,061,063		50,027,295	44,270,170	2,274,329	51.0	45.2		83.3	66.7
Apr 2010	2,521,063	2,921,063		52,548,358	47,191,233	2,274,329	53.6	48.1		87.5	70.0
May 2010	2,261,063	2,836,063		54,809,421	50,027,295	2,274,329	55.9	51.0		91.7	73.3
Jun 2010	2,436,063	2,521,063		57,245,483	52,548,358	2,274,329	58.4	53.6		95.8	76.7
Jul 2010	1,696,063	2,261,063		58,941,546	54,809,421	2,274,329	60.1	55.9		100.0	80.0
Aug 2010	1,611,063	2,436,063		60,552,608	57,245,483	2,274,329	61.8	58.4			83.3
Sep 2010	1,836,063	1,696,063		62,388,671	58,941,546	2,274,329	63.6	60.1			86.7
Oct 2010	2,096,063	1,611,063		64,484,734	60,552,608	2,274,329	65.8	61.8			90.0
Nov 2010	2,311,063	1,836,063		66,795,796	62,388,671	2,274,329	68.1	63.6			93.3
Dec 2010	3,284,396	2,096,063		70,080,192	64,484,734	2,274,329	71.5	65.8			96.7
Jan 2011	2,445,229	2,311,063		72,525,422	66,795,796	2,274,329	74.0	68.1			100.0
Feb 2011	2,350,229	3,284,396		74,875,651	70,080,192	2,274,329	76.4	71.5			
Mar 2011	2,450,229	2,445,229		77,325,880	72,525,422	2,274,329	78.9	74.0			
Apr 2011	2,190,229	2,350,229		79,516,110	74,875,651	2,274,329	81.1	76.4			
May 2011	1,950,229	2,450,229		81,466,339	77,325,880	2,274,329	83.1	78.9			
Jun 2011	2,311,063	2,190,229		83,777,402	79,516,110	2,274,329	85.4	81.1			
Jul 2011	1,776,063	1,950,229		85,553,464	81,466,339	2,274,329	87.3	83.1			
Aug 2011	1,746,063	2,311,063		87,299,527	83,777,402	2,274,329	89.0	85.4			
Sep 2011	1,481,063	1,776,063		88,780,590	85,553,464	2,274,329	90.5	87.3			
Oct 2011	1,471,063	1,746,063		90,251,652	87,299,527	2,274,329	92.0	89.0			
Nov 2011	1,436,063	1,481,063		91,687,715	88,780,590	2,274,329	93.5	90.5			
Dec 2011	2,436,063	1,471,063		94,123,778	90,251,652	2,274,329	96.0	92.0			
Jan 2012	761,444	1,436,063		94,885,222	91,687,715	2,274,329	96.8	93.5			
Feb 2012	761,444	2,436,063		95,646,667	94,123,778	2,274,329	97.5	96.0			
Mar 2012	761,444	761,444		96,408,111	94,885,222	2,274,329	98.3	96.8			

2008 CONSTRUCTION FUND — B2 SEWER - COMBINED SEWER — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-B2.08112 COA Sewer Televising and Cleaning	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
* WBS R-B2.08112-01 COA Sewer Televising and Cleaning	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
WBS R-B2.08112-01-2008 COA Sewer Televising and Cleaning	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
** WBS R-B2.08113 CSO / COA Management	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
* WBS R-B2.08113-01 CSO / COA Management	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
WBS R-B2.08113-01-2008 CSO / COA Management	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
** WBS R-B2.08114 MH CB & Sewer Line Point Repair	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
* WBS R-B2.08114-01 MH CB & Sewer Line Point Repair	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
WBS R-B2.08114-01-2008 MH CB & Sewer Line Point Repair	2,250,000.00	0.00	2,250,000.00	0.00	0.00	2,250,000.00	0.00
** WBS R-B2.08115 Sewer Rehabilitation - Gunite	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
* WBS R-B2.08115-01 Sewer Rehabilitation - Gunite	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
WBS R-B2.08115-01-2008 Sewer Rehabilitation - Gunite	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
** WBS R-B2.08116 Sewer Rehabilitation - Lining	650,000.00	0.00	650,000.00	0.00	0.00	650,000.00	0.00
* WBS R-B2.08116-01 Sewer Rehabilitation - Lining	650,000.00	0.00	650,000.00	0.00	0.00	650,000.00	0.00
WBS R-B2.08116-01-2008 Sewer Rehabilitation - Lining	650,000.00	0.00	650,000.00	0.00	0.00	650,000.00	0.00
** WBS R-B2.08117 Sewer Improvements - Planned	1,050,000.00	0.00	1,050,000.00	0.00	7,035.09	1,042,964.91	0.67
* WBS R-B2.08117-01 Sewer Improvements - Planned	1,050,000.00	(10,000.00)	1,040,000.00	0.00	0.00	1,040,000.00	0.00
WBS R-B2.08117-01-2008 Sewer Improvements - Planned	1,050,000.00	(10,000.00)	1,040,000.00	0.00	0.00	1,040,000.00	0.00
* WBS R-B2.08117-05 S 22nd St Sewer Const - Eng	0.00	10,000.00	10,000.00	0.00	7,035.09	2,964.91	70.35
WBS R-B2.08117-05-2008 S 22nd St Sewer Const - Eng	0.00	10,000.00	10,000.00	0.00	7,035.09	2,964.91	70.35
** WBS R-B2.08118 MS4 Stormwater Compliance	400,000.00	0.00	400,000.00	0.00	0.00	400,000.00	0.00
* WBS R-B2.08118-01 MS4 Stormwater Compliance	400,000.00	0.00	400,000.00	0.00	0.00	400,000.00	0.00
WBS R-B2.08118-01-2008 MS4 Stormwater Compliance	400,000.00	0.00	400,000.00	0.00	0.00	400,000.00	0.00
** WBS R-B2.08119 Sewer Flow Monitoring	45,000.00	0.00	45,000.00	0.00	0.00	45,000.00	0.00
* WBS R-B2.08119-01 Sewer Flow Monitoring	45,000.00	0.00	45,000.00	0.00	0.00	45,000.00	0.00
WBS R-B2.08119-01-2008 Sewer Flow Monitoring	45,000.00	0.00	45,000.00	0.00	0.00	45,000.00	0.00
** WBS R-B2.08120 Coby Chapin Sewer Extension	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
* WBS R-B2.08120-10 Coby Chapin Sewer Extension Easement	10,000.00	0.00	10,000.00	0.00	0.00	10,000.00	0.00
WBS R-B2.08120-10-2008 Coby Chapin Sewer Extension Easement	10,000.00	0.00	10,000.00	0.00	0.00	10,000.00	0.00
* WBS R-B2.08120-11 Coby Chapin Sewer Extension Engineering	12,000.00	0.00	12,000.00	0.00	0.00	12,000.00	0.00
WBS R-B2.08120-11-2008 Coby Chapin Sewer Extension Engineering	12,000.00	0.00	12,000.00	0.00	0.00	12,000.00	0.00
* WBS R-B2.08120-12 Coby Chapin Sewer Extension - CM	15,000.00	0.00	15,000.00	0.00	0.00	15,000.00	0.00
WBS R-B2.08120-12-2008 Coby Chapin Sewer Extension - CM	15,000.00	0.00	15,000.00	0.00	0.00	15,000.00	0.00
* WBS R-B2.08120-21 Coby Chapin Sewer Extension - CONST	163,000.00	0.00	163,000.00	0.00	0.00	163,000.00	0.00
WBS R-B2.08120-21-2008 Coby Chapin Sewer Extension - CONST	163,000.00	0.00	163,000.00	0.00	0.00	163,000.00	0.00
** WBS R-B2.08136 SR 28 Reconstruction - Sewer Reloc	0.00	500,000.00	500,000.00	0.00	0.00	500,000.00	0.00
* WBS R-B2.08136-01 SR 28 Reconstruction Sewer Reloc	0.00	500,000.00	500,000.00	0.00	0.00	500,000.00	0.00
WBS R-B2.08136-01-2008 SR 28 Reconstruction Sewer Reloc	0.00	500,000.00	500,000.00	0.00	0.00	500,000.00	0.00
Result	8,345,000.00	500,000.00	8,845,000.00	0.00	7,035.09	8,837,964.91	0.08

2008 CONSTRUCTION FUND — A2 WATER - PUMPING & STORAGE — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A2.07019-11-2008 Switchgear Upgrade - Engineering	0.00	0.00	0.00	0.00	14,427.64	(14,427.64)	●/O
** WBS R-A2.07019-12-2008 Switchgear Upgrade - CM	135,000.00	0.00	135,000.00	0.00	0.00	135,000.00	0.00
** WBS R-A2.07019-21-2008 Switchgear Upgrade - Construction	1,365,000.00	0.00	1,365,000.00	0.00	0.00	1,365,000.00	0.00
** WBS R-A2.08105 Howard and Lincoln Pump Station	900,000.00	0.00	900,000.00	0.00	0.00	900,000.00	0.00
* WBS R-A2.08105-01 Howard and Lincoln Pump Station	900,000.00	0.00	900,000.00	0.00	0.00	900,000.00	0.00
WBS R-A2.08105-01-2008 Howard and Lincoln Pump Station	900,000.00	0.00	900,000.00	0.00	0.00	900,000.00	0.00
** WBS R-A2.08106 Water System Modeling Support	150,000.00	0.00	150,000.00	0.00	0.00	150,000.00	0.00
* WBS R-A2.08106-11 Water System Modeling Support	150,000.00	0.00	150,000.00	0.00	0.00	150,000.00	0.00
WBS R-A2.08106-11-2008 Water System Modeling Support	150,000.00	0.00	150,000.00	0.00	0.00	150,000.00	0.00
** WBS R-A2.08107 Water Tank Painting and Improvements	3,000,000.00	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0.00
* WBS R-A2.08107-01 Water Tank Painting and Improvements	3,000,000.00	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0.00
WBS R-A2.08107-01-2008 Water Tank Painting and Improvements	3,000,000.00	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0.00
** WBS R-A2.08108 Highland No. 2 Cover	3,000,000.00	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0.00
* WBS R-A2.08108-11 Highland No. 2 Cover - Engineering	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
WBS R-A2.08108-11-2008 Highland No. 2 Cover - Engineering	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
* WBS R-A2.08108-12 Highland No. 2 Cover - CM	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
WBS R-A2.08108-12-2008 Highland No. 2 Cover - CM	200,000.00	0.00	200,000.00	0.00	0.00	200,000.00	0.00
* WBS R-A2.08108-21 Highland No. 2 Cover - Construction	2,600,000.00	0.00	2,600,000.00	0.00	0.00	2,600,000.00	0.00
WBS R-A2.08108-21-2008 Highland No. 2 Cover - Construction	2,600,000.00	0.00	2,600,000.00	0.00	0.00	2,600,000.00	0.00
** WBS R-A2.08109 H.H. Pump Station Main Replacement	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
* WBS R-A2.08109-11 H.H. Pump Station Main - Engineering	62,500.00	0.00	62,500.00	0.00	0.00	62,500.00	0.00
WBS R-A2.08109-11-2008 H.H. Pump Station Main - Engineering	62,500.00	0.00	62,500.00	0.00	0.00	62,500.00	0.00
* WBS R-A2.08109-12 H.H. Pump Station Main - CM	62,500.00	0.00	62,500.00	0.00	0.00	62,500.00	0.00
WBS R-A2.08109-12-2008 H.H. Pump Station Main - CM	62,500.00	0.00	62,500.00	0.00	0.00	62,500.00	0.00
* WBS R-A2.08109-21 H.H. Pump Station Main - Construction	625,000.00	0.00	625,000.00	0.00	0.00	625,000.00	0.00
WBS R-A2.08109-21-2008 H.H. Pump Station Main - Construction	625,000.00	0.00	625,000.00	0.00	0.00	625,000.00	0.00
Result	9,300,000.00	0.00	9,300,000.00	0.00	14,427.64	9,285,572.36	0.16

2008 CONSTRUCTION FUND — B4 SEWER - PUMP STATION — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-B4.05001-01-2008 Sewage Pump Station Improvements	3,360,000.00	0.00	3,360,000.00	0.00	0.00	3,360,000.00	0.00
WBS R-B4.05001-26-2008 Brown's Hill Rd Sewer Separation - CONST	90,000.00	0.00	90,000.00	0.00	0.00	90,000.00	0.00
WBS R-B4.05001-17-2008 Brown's Hill Rd Sewer Separation - CM	10,000.00	0.00	10,000.00	0.00	0.00	10,000.00	0.00
Result	3,460,000.00	0.00	3,460,000.00	0.00	0.00	3,460,000.00	0.00

2008 CONSTRUCTION FUND — A3 WATER - TREATMENT PLANT — STATUS AS OF DECEMBER 31, 2008

Object	Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-A3.05006-15-2008 Filter Backwash / Clarification ENG	127,000.00	0.00	127,000.00	0.00	0.00	127,000.00	0.00
** WBS R-A3.05006-16-2008 Filter Backwash / Clarification CM	1,095,000.00	0.00	1,095,000.00	0.00	0.00	1,095,000.00	0.00
** WBS R-A3.05006-17-2008 Filter Backwash Equalization - ENG	160,000.00	0.00	160,000.00	0.00	0.00	160,000.00	0.00
** WBS R-A3.05006-18-2008 Filter Backwash Equalization - CM	500,000.00	0.00	500,000.00	0.00	0.00	500,000.00	0.00
** WBS R-A3.05006-24-2008 Filter Backwash Equalization - CONST	18,615,000.00	0.00	18,615,000.00	0.00	0.00	18,615,000.00	0.00
** WBS R-A3.05006-25-2008 Filter Backwash / Clarification ELECTR	3,285,000.00	0.00	3,285,000.00	0.00	0.00	3,285,000.00	0.00
** WBS R-A3.06007-13-2008 SCADA - CM	190,000.00	0.00	190,000.00	0.00	0.00	190,000.00	0.00
** WBS R-A3.06007-21-2008 SCADA - Const	1,810,000.00	0.00	1,810,000.00	0.00	0.00	1,810,000.00	0.00
** WBS R-A3.08110 Bruecken Pump Station Standby Power	7,765,000.00	0.00	7,765,000.00	0.00	0.00	7,765,000.00	0.00
* WBS R-A3.08110-11 Bruecken Standby Power - Engineering	115,000.00	0.00	115,000.00	0.00	0.00	115,000.00	0.00
WBS R-A3.08110-11-2008 Bruecken Standby Power - Engineering	115,000.00	0.00	115,000.00	0.00	0.00	115,000.00	0.00
* WBS R-A3.08110-12 Bruecken Standby Power - CM	250,000.00	0.00	250,000.00	0.00	0.00	250,000.00	0.00
WBS R-A3.08110-12-2008 Bruecken Standby Power - CM	250,000.00	0.00	250,000.00	0.00	0.00	250,000.00	0.00
* WBS R-A3.08110-21 Bruecken Standby Power - Construction	7,400,000.00	0.00	7,400,000.00	0.00	0.00	7,400,000.00	0.00
WBS R-A3.08110-21-2008 Bruecken Standby Power - Construction	7,400,000.00	0.00	7,400,000.00	0.00	0.00	7,400,000.00	0.00
** WBS R-A3.08111 Highland No. 1 Reservoir MFP Expansion	1,100,000.00	0.00	1,100,000.00	0.00	0.00	1,100,000.00	0.00
* WBS R-A3.08111-12 Highland No. 1 MFP Expansion - CM	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
WBS R-A3.08111-12-2008 Highland No. 1 MFP Expansion - CM	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
* WBS R-A3.08111-21 Highland No. 1 MFP Expansion - Const.	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
WBS R-A3.08111-21-2008 Highland No. 1 MFP Expansion - Const.	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
Result	34,647,000.00	0.00	34,647,000.00	0.00	0.00	34,647,000.00	0.00

2008 CONSTRUCTION FUND — D1 WATER - ENGINEERING — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
WBS R-D1.08128-16-2008	CM - Susquehanna Street	0.00	50,000.00	50,000.00	0.00	9,869.35	40,130.65	19.74
** WBS R-D1.08129	Engineering Department Reimbursement	4,000,000.00	461,395.00	4,461,395.00	0.00	1,461,395.00	3,000,000.00	32.76
* WBS R-D1.08129-11	2008 Engineering Dept Reimbursement	1,000,000.00	461,395.00	1,461,395.00	0.00	1,461,395.00	0.00	100.00
WBS R-D1.08129-11-2008	2008 Engineering Dept Reimbursement	1,000,000.00	461,395.00	1,461,395.00	0.00	1,461,395.00	0.00	100.00
* WBS R-D1.08129-12	2009 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-12-2008	2009 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
* WBS R-D1.08129-13	2010 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-13-2008	2010 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
* WBS R-D1.08129-14	2011 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
WBS R-D1.08129-14-2008	2011 Engineering Dept Reimbursement	1,000,000.00	0.00	1,000,000.00	0.00	0.00	1,000,000.00	0.00
Result		9,215,000.00	473,412.00	9,688,412.00	0.00	2,083,545.99	7,604,866.01	21.51

2008 CONSTRUCTION FUND — C1 WATER - CITY / URA / SEA / PORT AUTHORITY — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-C1.08501	Manchester Housing	200,000.00	(200,000.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-C1.08501-01	Manchester Housing	200,000.00	(200,000.00)	0.00	0.00	0.00	0.00	●/○
WBS R-C1.08501-01-2008	Manchester Housing	200,000.00	(200,000.00)	0.00	0.00	0.00	0.00	●/○
** WBS R-C1.08502	Proposed Development Projects	875,000.00	(875,000.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-C1.08502-01	Proposed Development Projects	875,000.00	(875,000.00)	0.00	0.00	0.00	0.00	●/○
WBS R-C1.08502-01-2008	Proposed Development Projects	875,000.00	(875,000.00)	0.00	0.00	0.00	0.00	●/○
** WBS R-C1.08503	Garfield Housing	4,000,000.00	(2,000,000.00)	2,000,000.00	0.00	0.00	2,000,000.00	0.00
* WBS R-C1.08503-01	Garfield Housing	4,000,000.00	(2,000,000.00)	2,000,000.00	0.00	0.00	2,000,000.00	0.00
WBS R-C1.08503-01-2008	Garfield Housing	4,000,000.00	(2,000,000.00)	2,000,000.00	0.00	0.00	2,000,000.00	0.00
** WBS R-C1.08504	Pittsburgh Technology Center	1,350,000.00	(1,350,000.00)	0.00	0.00	0.00	0.00	●/○
* WBS R-C1.08504-01	Pittsburgh Technology Center	1,350,000.00	(1,350,000.00)	0.00	0.00	0.00	0.00	●/○
WBS R-C1.08504-01-2008	Pittsburgh Technology Center	1,350,000.00	(1,350,000.00)	0.00	0.00	0.00	0.00	●/○
** WBS R-C1.91501-21-2008	NINE MILE RUN REDEVELOPMENT	4,450,000.00	(2,000,000.00)	2,450,000.00	0.00	0.00	2,450,000.00	0.00
** WBS R-C1.96482-21-2008	ALLEQUIPPA TERRACE	3,750,000.00	(2,000,000.00)	1,750,000.00	0.00	0.00	1,750,000.00	0.00
** WBS R-C1.98501-21-2008	S.S. INDUSTRIAL DEVELOPMENT	1,600,000.00	0.00	1,600,000.00	0.00	0.00	1,600,000.00	0.00
Result		16,225,000.00	(8,425,000.00)	7,800,000.00	0.00	0.00	7,800,000.00	0.00

2008 CONSTRUCTION FUND — E1 WATER - TOOLS AND EQUIPMENT — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS R-E1.08130	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
* WBS R-E1.08130-01	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
WBS R-E1.08130-01-2008	Street Repaving Sewer Risers and Lids	1,200,000.00	0.00	1,200,000.00	0.00	0.00	1,200,000.00	0.00
** WBS R-E1.08131	Purchase Water Meters / UMEs	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
* WBS R-E1.08131-01	Purchase Water Meters / UMEs	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
WBS R-E1.08131-01-2008	Purchase Water Meters / UMEs	750,000.00	0.00	750,000.00	0.00	0.00	750,000.00	0.00
** WBS R-E1.08132	Vehicles	2,100,000.00	0.00	2,100,000.00	0.00	0.00	2,100,000.00	0.00
* WBS R-E1.08132-01	Vehicles	2,100,000.00	0.00	2,100,000.00	0.00	0.00	2,100,000.00	0.00
WBS R-E1.08132-01-2008	Vehicles	2,100,000.00	0.00	2,100,000.00	0.00	0.00	2,100,000.00	0.00
** WBS R-E1.08133	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
* WBS R-E1.08133-01	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
WBS R-E1.08133-01-2008	Warehouse / Facility Improv / Fencing	1,500,000.00	0.00	1,500,000.00	0.00	0.00	1,500,000.00	0.00
Result		5,550,000.00	0.00	5,550,000.00	0.00	0.00	5,550,000.00	0.00

2008 CONSTRUCTION FUND — D1 WATER - ENGINEERING — STATUS AS OF DECEMBER 31, 2008

Object		Original Budget	Budget Changes	Current Budget	Encumbrance	Actuals	Balance Remaining	% Util
** WBS I-D1.08123	Misc Engineering Services - 2008 CF	1,250,000.00	0.00	1,250,000.00	0.00	0.00	1,250,000.00	0.00
* WBS I-D1.08123-2008	Misc Engineering Services - 2008 CF	1,250,000.00	0.00	1,250,000.00	0.00	0.00	1,250,000.00	0.00
** WBS R-D1.08121	Surveys	175,000.00	0.00	175,000.00	0.00	0.00	175,000.00	0.00
* WBS R-D1.08121-01	Surveys	175,000.00	0.00	175,000.00	0.00	0.00	175,000.00	0.00
WBS R-D1.08121-01-2008	Surveys	175,000.00	0.00	175,000.00	0.00	0.00	175,000.00	0.00
** WBS R-D1.08122	CM for Private Development	435,000.00	12,017.00	447,017.00	0.00	9,346.10	437,670.90	2.09
* WBS R-D1.08122-01	CM for Private Development	435,000.00	(7,500.00)	427,500.00	0.00	0.00	427,500.00	0.00
WBS R-D1.08122-01-2008	CM for Private Development	435,000.00	(7,500.00)	427,500.00	0.00	0.00	427,500.00	0.00
* WBS R-D1.08122-11	Forbes 5th Relocation W&S Facilities	0.00	7,500.00	7,500.00	0.00	7,703.93	(203.93)	102.72
WBS R-D1.08122-11-2008	Forbes 5th Relocation W&S Facilities	0.00	7,500.00	7,500.00	0.00	7,703.93	(203.93)	102.72
* WBS R-D1.08122-12	N.S. Fred Rogers Memorial	0.00	1,750.00	1,750.00	0.00	1,642.17	107.83	93.84
WBS R-D1.08122-12-2008	N.S. Fred Rogers Memorial	0.00	1,750.00	1,750.00	0.00	1,642.17	107.83	93.84
* WBS R-D1.08122-14	5th Ave Waterline 3 PNC/Market Sq Pl	0.00	10,267.00	10,267.00	0.00	0.00	10,267.00	0.00
WBS R-D1.08122-14-2008	5th Ave Waterline 3 PNC/Market Sq Pl	0.00	10,267.00	10,267.00	0.00	0.00	10,267.00	0.00
** WBS R-D1.08124	2008 CF Temp Staffing	1,800,000.00	0.00	1,800,000.00	0.00	375,940.69	1,424,059.31	20.89
* WBS R-D1.08124-11	2008 CF Temp Staffing - Chester Eng	800,000.00	0.00	800,000.00	0.00	203,364.06	596,635.94	25.42
WBS R-D1.08124-11-2008	2008 CF Temp Staffing - Chester Eng	800,000.00	0.00	800,000.00	0.00	203,364.06	596,635.94	25.42
* WBS R-D1.08124-12	2008 CF Temp Staffing - Kimball	464,000.00	0.00	464,000.00	0.00	98,516.61	365,483.39	21.23
WBS R-D1.08124-12-2008	2008 CF Temp Staffing - Kimball	464,000.00	0.00	464,000.00	0.00	98,516.61	365,483.39	21.23
* WBS R-D1.08124-13	2008 CF Temp Staffing - URS	536,000.00	0.00	536,000.00	0.00	74,060.02	461,939.98	13.82
WBS R-D1.08124-13-2008	2008 CF Temp Staffing - URS	536,000.00	0.00	536,000.00	0.00	74,060.02	461,939.98	13.82
** WBS R-D1.08125	Developer Reviews	295,000.00	0.00	295,000.00	0.00	70,769.76	224,230.24	23.99
* WBS R-D1.08125-11	Developer Reviews	295,000.00	0.00	295,000.00	0.00	70,769.76	224,230.24	23.99
WBS R-D1.08125-11-2008	Developer Reviews	295,000.00	0.00	295,000.00	0.00	70,769.76	224,230.24	23.99
** WBS R-D1.08126	Consulting Engineer Additonal Services	350,000.00	0.00	350,000.00	0.00	37,867.58	312,132.42	10.82
* WBS R-D1.08126-01	Consulting Engineer Additonal Services	125,000.00	0.00	125,000.00	0.00	0.00	125,000.00	0.00
WBS R-D1.08126-01-2008	Consulting Engineer Additonal Services	125,000.00	0.00	125,000.00	0.00	0.00	125,000.00	0.00
* WBS R-D1.08126-11	CE - Miscellaneous Design	70,000.00	0.00	70,000.00	0.00	15,545.58	54,454.42	22.21
WBS R-D1.08126-11-2008	CE - Miscellaneous Design	70,000.00	0.00	70,000.00	0.00	15,545.58	54,454.42	22.21
* WBS R-D1.08126-12	CE - SAP Setup and Testing	40,000.00	0.00	40,000.00	0.00	5,356.29	34,643.71	13.39
WBS R-D1.08126-12-2008	CE - SAP Setup and Testing	40,000.00	0.00	40,000.00	0.00	5,356.29	34,643.71	13.39
* WBS R-D1.08126-13	CE - Meeting Attendance	15,000.00	0.00	15,000.00	0.00	7,504.41	7,495.59	50.03
WBS R-D1.08126-13-2008	CE - Meeting Attendance	15,000.00	0.00	15,000.00	0.00	7,504.41	7,495.59	50.03
* WBS R-D1.08126-14	CE - Preparation of Monthly Reports	100,000.00	0.00	100,000.00	0.00	9,461.30	90,538.70	9.46
WBS R-D1.08126-14-2008	CE - Preparation of Monthly Reports	100,000.00	0.00	100,000.00	0.00	9,461.30	90,538.70	9.46
** WBS R-D1.08127	Construction Manager Additional Services	210,000.00	0.00	210,000.00	0.00	9,090.31	200,909.69	4.33
* WBS R-D1.08127-01	Construction Manager Additional Services	85,000.00	0.00	85,000.00	0.00	0.00	85,000.00	0.00
WBS R-D1.08127-01-2008	Construction Manager Additional Services	85,000.00	0.00	85,000.00	0.00	0.00	85,000.00	0.00
* WBS R-D1.08127-11	CM - Meetings	25,000.00	0.00	25,000.00	0.00	2,414.97	22,585.03	9.66
WBS R-D1.08127-11-2008	CM - Meetings	25,000.00	0.00	25,000.00	0.00	2,414.97	22,585.03	9.66
* WBS R-D1.08127-12	CM-SAP Purchase Requisition Preparation	50,000.00	0.00	50,000.00	0.00	5,436.88	44,563.12	10.87
WBS R-D1.08127-12-2008	CM-SAP Purchase Requisition Preparation	50,000.00	0.00	50,000.00	0.00	5,436.88	44,563.12	10.87
* WBS R-D1.08127-13	CM - Miscellaneous Design	50,000.00	0.00	50,000.00	0.00	1,238.46	48,761.54	2.48
WBS R-D1.08127-13-2008	CM - Miscellaneous Design	50,000.00	0.00	50,000.00	0.00	1,238.46	48,761.54	2.48
** WBS R-D1.08128	Construction Management for URA Projects	700,000.00	0.00	700,000.00	0.00	119,136.55	580,863.45	17.02
* WBS R-D1.08128-01	Construction Management for URA Projects	340,000.00	(50,000.00)	290,000.00	0.00	0.00	290,000.00	0.00
WBS R-D1.08128-01-2008	Construction Management for URA Projects	340,000.00	(50,000.00)	290,000.00	0.00	0.00	290,000.00	0.00
* WBS R-D1.08128-11	CM - S.S. Industrial Development	100,000.00	0.00	100,000.00	0.00	49,356.79	50,643.21	49.36
WBS R-D1.08128-11-2008	CM - S.S. Industrial Development	100,000.00	0.00	100,000.00	0.00	49,356.79	50,643.21	49.36
* WBS R-D1.08128-12	CM - Nine Mile Run Development	100,000.00	0.00	100,000.00	0.00	823.46	99,176.54	0.82
WBS R-D1.08128-12-2008	CM - Nine Mile Run Development	100,000.00	0.00	100,000.00	0.00	823.46	99,176.54	0.82
* WBS R-D1.08128-13	CM - Bedford Dwellings	10,000.00	0.00	10,000.00	0.00	6,923.09	3,076.91	69.23
WBS R-D1.08128-13-2008	CM - Bedford Dwellings	10,000.00	0.00	10,000.00	0.00	6,923.09	3,076.91	69.23
* WBS R-D1.08128-14	CM - Allequippa Terrace	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
WBS R-D1.08128-14-2008	CM - Allequippa Terrace	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
* WBS R-D1.08128-15	CM - Pittsburgh Technology Center	50,000.00	0.00	50,000.00	0.00	52,163.86	(2,163.86)	104.33
WBS R-D1.08128-15-2008	CM - Pittsburgh Technology Center	50,000.00	0.00	50,000.00	0.00	52,163.86	(2,163.86)	104.33
* WBS R-D1.08128-16	CM - Susquehanna Street	0.00	50,000.00	50,000.00	0.00	9,869.35	40,130.65	19.74

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
WATER SYSTEM IMPROVEMENTS - PHASE I														
PVA-1	1	- - -	WATER SYSTEM - PHASE I	6-01	6-01	N/A	PWSA	PWSA	$ -					
PVA-1	1A	- - -	ADMINISTRATION	6-01	6-01	N/A	PWSA	PWSA/CHESTER	-	3,000.00	(3,000.00)	-	-	0.0%
PVA-1	1B	- - -	INEREST DURING CONSTRUCTION	6-01	6-01	N/A	PWSA	PWSA	24,057.48	35,000.00	(10,942.52)	24,057.48	24,057.48	100.0%
PVA-1	1C	- - -	ENGINEERING DESIGN	6-01	6-01	N/A	PWSA	PWSA	-	200,000.00	(200,000.00)	-	-	0.0%
PVA-1	1D	- - -	CONSTRUCTION MANAGEMENT	6-01	6-01	N/A	PWSA	CHESTER ENG.	329,651.04	156,600.00	173,460.96	330,060.96	330,060.96	100.0%
PVA-1	1E	- - -	G & S / ADMINISTRATION	6-01	6-01	N/A	PWSA	PWSA/CHESTER	12,139.01	156,600.00	(143,938.69)	12,661.31	12,661.31	100.0%
PVA-1	1F	00021	CHARTIERS AVENUE 12" WATERLINE RELAY	6-01	6-01	91-01	PWSA	INDEPENDENT ENT	1,263,291.50	837,719.00	425,572.50	1,263,291.50	1,263,291.50	100.0%
PVA-1	1G	00022	MARLBOROUGH AVE, BEACON ST, DARLINGTON RD, WIGHTMAN STREET & BARTLETT ST	6-01	6-01	92-01	PWSA	TOMKO & SONS	1,043,433.55	855,865.00	187,568.55	1,043,433.55	1,043,433.55	100.0%
PVA-1	1H	01002	NORTH MURTLAND AVE, KEDRON ST & LYRIC ST	6-01	6-01	93-01	PWSA	INDEPENDENT ENT	865,921.05	742,922.00	122,999.05	865,921.05	865,921.05	100.0%
PVA-1	1I	00020	PLYMOUTH ST, BASIL WAY,	6-01	6-01	90-01	PWSA	TEDESCO & SON	858,282.47	879,800.00	(21,517.53)	858,282.47	858,282.47	100.0%
PVA-1	1J	- - -	LEGAL SERVICES	6-01	6-01	N/A	PWSA	GEORGE W. JACOB	5,884.54	5,884.54	-	5,884.54	5,884.54	100.0%
								TOTALS	$ 4,402,660.64	$ 3,873,390.54	$ 530,202.32	$ 4,403,592.86	$ 4,403,592.86	100.0%
WATER SYSTEM IMPROVEMENT PROJECT PHASE II														
PVA-1	2	- - -	WATER SYSTEM IMPROVEMENTS PROJECT				PWSA		$ -	$ -	$ -	$ -	$ -	
PVA-1	2A	- - -	ADMINISTRATION & LEGAL				PWSA	PWSA	6,471.88	13,000.00	(6,528.12)	6,471.88	6,471.88	100.0%
PVA-1	2B	- - -	INTEREST DURING CONSTRUCTION				PWSA	- - -	977.90	-	-	-	977.90	
PVA-1	2C	- - -	ENGINEERING DESIGN				PWSA	PWSA	-	-	-	-	-	
PVA-1	2D	- - -	CONSTRUCTION MANAGEMENT				PWSA	CHESTER ENG.	406,985.04	341,633.58	65,345.08	406,978.66	406,985.04	100.0%
PVA-1	2E	- - -	G & S / ADMINISTRATION				PWSA	CHESTER ENG.	11,988.11	6,630.26	5,357.85	11,988.11	11,988.11	100.0%
PVA-1	2F	01022	GREENFIELD FIRE PROTECTION IMPROVEMENT		54-02	32-03	PWSA	W.G. TOMKO, INC.	2,085,974.23	1,823,430.00	262,544.45	2,085,974.45	2,085,974.23	100.0%
PVA-1	2G	01019-04	SWISSHELM PRESSURE DISTRICT		54-02	33-03	PWSA	INDEPENDENT ENT	3,413,764.18	2,793,240.00	620,497.16	3,413,737.16	3,413,764.18	100.0%
								TOTAL	$ 5,926,161.34	$ 4,977,933.84	$ 947,216.42	$ 5,925,150.26	$ 5,926,161.34	100.0%

EXHIBIT J
PENNVEST STATUS REPORT
AS OF DECEMBER 31, 2008

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - DISTRIBUTION

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
WATER SYSTEM IMPROVEMENT PROJECT PHASE III														
PVA-1	3	- - -	WATER SYSTEM IMPROVEMENTS PROJECT				PWSA		$ -	$ -	$ -	$ -	$ -	
PVA-1	3A	- - -	ADMINISTRATION & LEGAL				PWSA	PWSA	8,993.10	-	-	-	8,993.10	
PVA-1	3B	- - -	INTEREST DURING CONSTRUCTION				PWSA	- - -	-	-	-	-		
PVA-1	3C	- - -	ENGINEERING DESIGN				PWSA	PWSA	-	-	-	-	-	
PVA-1	3D	- - -	CONSTRUCTION MANAGEMENT				PWSA	CHESTER ENG.	368,128.46	328,496.73	39,631.72	368,128.45	368,128.46	100.0%
PVA-1	3E	- - -	G & S / ADMINISTRATION				PWSA	CHESTER ENG.	15,411.97	-	-	-	15,411.97	
PVA-1	3F	01023	WESTWOOD FIRE PROTECTION IMPROVEMENT		89-03	102-03	PWSA	W.G. TOMKO, INC.	2,313,110.48	1,972,250.00	340,860.48	2,313,110.48	2,313,110.48	100.0%
PVA-1	3G	01024	SQUIRREL HILL FIRE PROTECTION IMPROVEMENT		89-03	103-03	PWSA	W.G. TOMKO, INC.	2,661,598.36	2,466,895.00	194,703.35	2,661,598.35	2,661,598.36	100.0%
								TOTAL	$ 5,367,242.37	$ 4,767,641.73	$ 575,195.55	$ 5,342,837.28	$ 5,367,242.37	0.0%
								TOTAL COMPLETED PROJECTS	$ 15,696,064.35	$ 13,618,966.11	$ 2,052,614.29	$ 15,671,580.40	$ 15,696,996.57	

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

	AMOUNT BUDGETED	COMPLETED CONTRACTS	ACTIVE CONTRACTS	AUTHORIZED FOR BIDDING	TOTAL	AMOUNT PAID TO DATE
WATER SYSTEM						
PHASE I	$ 4,402,660.64	$ 4,403,592.86	$ -	$ -	$ 4,403,592.86	$ 4,403,592.86
PHASE II	5,926,161.34	5,926,161.34	-	-	5,926,161.34	5,926,161.34
PHASE III	5,367,242.37	5,367,242.37	-	-	5,367,242.37	5,367,242.37
TOTAL WATER SYSTEM	$ 15,696,064.35	$ 15,696,996.57	$ -	$ -	$ 15,696,996.57	$ 15,696,996.57
SEWER SYSTEM						
RAILSIDE STREET SEWER	$ 160,884.69	$ 160,884.69		$ -	$ 160,884.69	$ 160,884.69
STREETS RUN INTERCEPTOR	3,812,045.32	1,955,727.53	-	-	1,955,727.53	1,955,727.53
TOTAL SEWER SYSTEM	$ 3,972,930.01	$ 2,116,612.22	$ -	$ -	$ 2,116,612.22	$ 2,116,612.22
STORM SEWER SYSTEM						
OLLIE AND OVERBROOK	$ 854,352.01	$ 854,352.01	$ -	$ -	$ 854,352.01	$ 854,352.01
TOTAL STORM SEWER SYSTEM	854,352.01	854,352.01	-	-	854,352.01	854,352.01
TOTAL PENNVEST PROJECTS	**$ 20,523,346.37**	**$ 18,667,960.80**	**$ -**	**$ -**	**$ 18,667,960.80**	**$ 18,667,960.80**
PERCENT OF BUDGET		91%	0%	0%	91%	91%

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - SEWER SYSTEM

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
OVERBROOK-OLLIE ST. STORM SEWER PROJECT														
PVB-1	1	- - -	OVERBROOK-OLLIE ST. STORM SEWER				PWSA	- - -	$ -	$ -	$ -	$ -	$ -	
PVB-1	1A	- - -	ADMINISTRATION											
			LEGAL				PWSA	G. JACOBY	3,498.08	3,498.08	-	3,498.08	3,498.08	100.0%
			IN-HOUSE				PWSA	PWSA	2,391.45	2,391.45		2,391.45	2,391.45	100.0%
PVB-1	1B	- - -	INTEREST DURING CONSTRUCTION				PWSA	PENNVEST	2,550.39	2,550.39	-	2,550.39	2,550.39	100.0%
PVB-1	1C	- - -	ENGINEERING DESIGN				PWSA	PWSA	-	-	-	-	-	0.0%
PVB-1	1D	- - -	CONSTRUCTION MANAGEMENT				PWSA	CHESTER	80,093.30	80,093.30	-	80,093.30	80,093.30	100.0%
PVB-1	1E	- - -	G & S / ADMINISTRATION				PWSA	CHESTER	10,508.71	10,508.71	-	10,508.71	10,508.71	100.0%
PVB-1	1F	97004	OLLIE STREET STORM SEWER	N/A	39-98	33-01	PWSA	INDEPENDENT ENT	162,796.68	185,283.00	(22,486.32)	162,796.68	162,796.68	100.0%
PVB-1	1G	00016	OVERBROOK STORM SEWER	N/A	18-01	34-01	PWSA	OSIRIS ENTERPRISI	592,513.40	558,555.00	33,958.40	592,513.40	592,513.40	100.0%
								TOTAL	$854,352.01	$842,879.93	$11,472.08	$854,352.01	$854,352.01	100.0%
RAILSIDE STREET SEWER PROJECT														
PVB-2	2	- - -	RAILSIDE STREET SEWER PROJECT				PWSA	- - -	$ -	$ -	$ -	$ -	$ -	
PVB-2	2A	- - -	ADMINISTRATION											
			LEGAL				PWSA	G. JACOBY	3,498.08	3,498.08	-	3,498.08	3,498.08	100.0%
			IN-HOUSE				PWSA	PWSA	829.25	829.25	-	829.25	829.25	100.0%
PVB-2	2B	- - -	INTEREST DURING CONSTRUCTION				PWSA	PENNVEST	248.68	248.68	-	248.68	248.68	100.0%
PVB-2	2C	- - -	ENGINEERING DESIGN				PWSA	PWSA	-	-	-	-	-	0.0%
PVB-2	2D	- - -	CONSTRUCTION MANAGEMENT				PWSA	CHESTER	16,969.17	16,969.17	-	16,969.17	16,969.17	100.0%
PVB-2	2E	- - -	G & S / ADMINISTRATION				PWSA	CHESTER	7,816.18	7,816.18	-	7,816.18	7,816.18	100.0%
PVB-1	2F	99012	RAILSIDE STREET SANITARY SEWER	N/A	111-99	21-01	PWSA	INDEPENDENT ENT	131,523.33	129,993.00	1,530.33	131,523.33	131,523.33	100.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - PUMPING AND STORAGE

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
								TOTALS	$ -	$ -	$ -	$ -	$ -	

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - SEWER SYSTEM

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
PVB-3	3	- - -	STREETS RUN TRUNK SEWER PROJECT				PWSA		$ 313,600.00	$ -	$ -	$ -	$ -	0.0%
PVB-3	3A	- - -	ADMINISTRATION & LEGAL				PWSA	PWSA	10,000.00	10,000.00	(2,054.68)	7,945.32	7,945.32	79.5%
PVB-3	3B	- - -	INTEREST DURING CONSTRUCTION				PWSA	- - -	35,000.00	35,000.00	(34,767.92)	232.08	232.08	0.7%
PVB-3	3C	- - -	ENGINEERING DESIGN				PWSA	PWSA	152,000.00	152,000.00	(152,000.00)	-	-	0.0%
PVB-3	3D	- - -	CONSTRUCTION MANAGEMENT				PWSA	CHESTER	158,000.00	114,870.94	17,859.50	132,730.44	132,730.44	100.0%
PVB-3	3E	- - -	G & S / ADMINISTRATION				PWSA	CHESTER	-	-	21,165.05	21,165.05	21,165.05	
PVB-3	3F	01003	STREETS RUN TRUNK SEWER REHABILITATION			133-03	PWSA	OAKDALE	3,136,500.00	1,552,310.00	241,344.64	1,793,654.64	1,793,654.64	100.0%
PVB-3	3G	- - -	LAND				PWSA	PWSA	9,000.00	9,000.00	(9,000.00)	-	-	0.0%
								TOTAL	$ 3,814,100.00	$ 1,873,180.94	$ 82,546.59	$ 1,955,727.53	$ 1,955,727.53	0.0%

THE PITTSBURGH WATER AND SEWER AUTHORITY
PENNVEST PROJECTS
CAPITAL IMPROVEMENT PROGRAM
STATUS REPORT AS OF DECEMBER 31, 2008

COMPLETED PROJECTS

WATER SYSTEM - TREATMENT PLANT

EXH. NO.	LINE	PWSA NO.	DESCRIPTION	DESIGN RES.	BID RES.	CONSTR. RES.	DESIGN ENGINEER	CONTRACTOR	BUDGET	ORIGINAL CONTRACT AMOUNT	CHANGE ORDERS TO DATE	CONTRACT TO DATE	PAYMENTS TO DATE	% COMPL.
								TOTALS	$ -	$ -	$ -	$ -	$ -	

EXHIBIT K
FACILITIES INSPECTION REPORTS

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Allentown Tanks

Condition:

Interior Tank – KTA-Tator conducted a detailed inspection last year of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report. Deficiencies will be corrected in a future project.

Exterior Tank and Appurtenances – See above. Undermined area at Tank No. 1 pad/foundation was filled in.

Access Road and Pavements – Road was upgraded with the Chlorination project; however a section of the road toward the entrance gate may need to be paved to insure proper traction for access of the chlorine delivery truck.

Site Fencing – Vegetation is being removed from fencing around site. Posts and wire fabric are badly rusted. Fabric has been patched numerous times.

Site Building (Exterior Structural/Architectural) – Soffit and fascia on wooden utility building and the door are in very poor condition.

Instrumentation and SCADA System – Replacement of the SCADA system is being evaluated.

Chlorination Facilities – By way of a CIP contract, BissNuss along with PWSA and the Emergency Sewer Contract have provided a new building on site to house new Booster Chlorination Facilities to reduce THM's in the Distribution system. The facilities are installed except for the final electrical connections. Pending testing and startup services, these facilities will be placed on line. Required taps in the water lines will be completed by PWSA.

Recommendations:

Address recommendations from KTA-Tator relative to the tanks and appurtenances.

Pave a section of the access road with asphalt to insure proper traction for access of the chlorine delivery truck.

Continue removal of vegetation and make necessary repairs or replace site fencing.

Repair/repaint soffit and fascia on utility building.

Replace SCADA system in future CIP project.

Complete installation and start-up of Booster Chlorination Facilities.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Aspinwall Pump Station (Including Fox Chapel Pump Station)

Condition:

Pumping Equipment – All four pumps in good condition.

Interior Valves and Piping (includes pump isolation, control and surge valves) – One of isolation valve on the surge piping on the west discharge header is broken. The other isolation gate valve on surge piping on west discharge header line is difficult to operate. The main shut-off valve on east discharge header leaks water through valve packing. Main shut-off valve on west discharge header constantly leaks water through the seat. All four surge valves were piped in a manner that requires them to be removed from the piping in order to service them. One of the two surge valves on each discharge header is mounted in an inverted position whereby the operation may be compromised. Piping is rusted in the basement mainly due to the lack of heat and ventilation, causing damp and humid conditions.

Exterior Valves and Pits – The cover plates on the pits on the north, west and east valve pits are in poor condition.

Instrumentation and SCADA System (includes flow meters and suction/discharge pressure transmitters) – Abandoned flow indicating meters and the electronic pressure indicating meters and flow chart recorder in the basement should be removed. The bearing sensor devices at the pumps are old and do not include a local readout temperature. Replacement of the total SCADA System will be evaluated in an upcoming project.

Access Road and Pavements – See "Site and Grounds"

Pump Station Building Interior (Structural/Architectural) – Paint is peeling on basement walls and ceiling support beams. Plaster walls and ceiling in vestibule is in need of repair/repainting. Front door glass and corrugated glass around station are broken. Ceiling insulation in shop area and bathroom ceiling tiles have been damaged by previous roof leaks. Water is leaking into the basement at the 8" water line pipe penetration at the northeast corner. The concrete on the floor on the west half of the Workshop area is deteriorating badly and progressively getting worse. This is probably from salt exposure from the vehicles entering the building. East overhead door in Workshop was replaced.

Pump Station Building Exterior (Structural/Architectural) – Vines/vegetation are growing on walls of station. An abandoned basement access pit on the northwest corner is presently open, as the cover plate is badly deteriorated.

Electrical System (includes lighting and battery backup systems) – Battery backup system is in good condition. Switchgear system needs to be evaluated. Lighting fixtures in pump area are old mercury vapor type and several lighting ballasts are inoperable. Pump Basement and Pipe Tunnel lighting is in poor condition. Some of the lights in Shop Basement area are not functioning properly. Emergency generator and transfer switch (serving the station lighting) in Workshop area are inoperable. The cover is off the telephone terminal panel at the northwest corner of pump area. The cover was reinstalled on lighting panel on the north wall of the pump area.

HVAC & Plumbing Systems — The Condensate pumps in the basement were replaced. Two heating units in basement are inoperable, whereby there is no heat in the basement, resulting in humid, damp conditions with lots of formed condensation. Two of the four heating units on first floor are inoperable. The abandoned flue pipe from a removed gas heater in basement should be capped to reduce heat loss out of the building. All (6) ventilation fans on the roof are inoperable and currently electrically tagged off. The vent hood was replaced on one of the roof mounted vent fans. Leak noted in plumbing lines inside the wall at the slop sink in Workshop.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing – The upper flat section of roofing was repaired to address leaking problems. Vegetation growing inside the abandoned chimney was removed. Some deficiencies were noted in the vestibule roof and the chimney needs to be removed from the roof and adjacent gutter.

Drainage System and Sump Pumps – Two main sump pumps are old and unreliable. All platform grating and support system over sump is in poor condition. Check valve on discharge of backup vertical sump pump is in poor condition.

Miscellaneous – Materials and old equipment scattered throughout the pump station basement, workshop area and outside the station. Overhead crane in pump area needs to be inspected. Soffit and fascia and door on storage building south of pump station are in poor condition.

Fox Chapel Pump Station – Packing at Pump No. 3 noted to be leaking excessively and not contained or conveyed to the nearest drain. A cover is off of an electrical junction box with wires hanging out at southwest corner of station.

Recommendations:

Repair/replace isolation valves on the surge piping on the west discharge header.

Repair/service main shut-off gate valves on the west and east discharge headers.

Resolve malfunctions of all four surge valves on the two discharge headers and evaluate possible re-orientation of two of them.

Remove abandoned flow chart recorders/instrumentation.

Evaluate operation of bearing sensor devices and consider replacing with a digital type unit that would include a local readout temperature.

Evaluate SCADA system and rehabilitate or upgrade as necessary.

Repaint or replace valve pit cover plates.

Repaint basement walls and structural steel.

Repair/repaint vestibule walls.

Replace glass in front door and broken corrugated glass around station.

Repair/replace damaged ceiling insulation and bathroom ceiling tiles in Workshop area.

Resolve leaking water problem at northwest corner of basement.

Repair concrete on the floor on the west half of the shop area and apply seal coating to eliminate further damage.

Remove vegetation/vines from building.

Cover the open pit at the northwest corner of pump station.

Evaluate switchgear system.

Replace mercury vapor lights in pump station with high-pressure sodium or metal halide fixtures.

Replace, repair or relamp lights in basement of pump and shop areas and Pipe Tunnel area.

Replace emergency generator and transfer switch in maintenance area (if operation is required or remove equipment otherwise).

Reinstall cover on telephone terminal panel at northwest corner of pump area.

Service/repair two heating units on first floor of pump station and two units in basement.

Cap abandoned gas flue pipe in basement.

Replace (6) ventilation fans on roof.

Repair leak in plumbing line inside the wall at the slop sink in Workshop.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

Address deficiencies in the Vestibule roof and the chimney area.

Replace two main sump pumps with submersible type pumps and replace all associated isolation and check valves.

Replace all platform grating and support system over the sump.

Replace check valve on the discharge of backup vertical sump pump.

Consolidate and store usable materials scattered inside and outside pump station and discard unusable equipment and materials.

Inspect, test, recondition overhead crane in pump area.

Cover soffit and fascia on storage building behind the pump station with aluminum and replace the door with aluminum, maintenance-free door.

Resolve packing problem at Fox Chapel Pump No. 3 (possibly other pumps as necessary) and convey to the nearest drain.

Reinstall cover on electrical junction box at southwest corner of Fox Chapel Station.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Bedford Tank

Condition: Interior Tank – KTA-Tator conducted a detailed inspection last year of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report. Deficiencies will be corrected in an upcoming project.

Exterior Tank and Appurtenances – See above.

Site Fencing – Barbed wire missing from portion of gate at west side. There are vines growing on the fence.

Site Building Exterior (Structural/Architectural) – Plaster walls are in poor condition.

Site Building Exterior (Structural/Architectural) – Concrete around some handrail posts is cracked.

Chlorination Facilities – The Operations Division completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. Two new Prominent pumps have been installed and are pumping reliably. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future. Ventilation fan and intake damper work well.

Valve Vaults – Good Condition.

Miscellaneous – There is an active leak to the east side of the valve vault (possibly from a chlorine solution line).

Recommendations: Address recommendations from KTA-Tator relative to the tanks and appurtenances.

Install missing barbed wire on gate at west side of site and remove vines from fencing.

Repair plaster walls inside site building and paint them.

Repair/reset and seal concrete around handrail posts.

Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the Chlorine Room.

Investigate leak in the underground and resolve as required.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Brashear Tanks

Condition: Interior Tank – URS has prepared contract documents to address the recoating of the interior and exterior surfaces of both tanks and address deficiencies with tank appurtenances as recommended in KTA-Tator's inspection report. This contract is in the procurement stage.

Exterior Tank and Appurtenances – Tank Level indicator is inoperable. Overflow chamber grating cover is missing at both tanks. Also see above.

Site and Fencing – South fencing next to chlorine building is missing barbed wire and is insufficient height for adequate security. Trees growing along this fence promote easier entry over the fence. Vegetation is growing on and around fencing at Chlorine Building and around North Tank. A tree is growing into the building and utility wires. There is a heavy accumulation of leaves around the reservoirs. Chlorine Building sidewalk is in poor condition. Abandoned reservoir wall is in fair condition.

Site Building Interior (Structural/Architectural) – Wall plaster cracked on upper floor. Surface paint of basement walls is badly peeled. Ventilation fan and intake louver work well. The chlorine room door is in poor condition.

Site Building Exterior (Structural/Architectural) – Handrail sections missing and other sections unsupported in front of building.

Chlorination Facilities - The Operations Division completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. The old W&T feed pumps are still in place, but one is out of service. Both will be replaced with the Prominent pumps in the near future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future. Abandoned gas feed type chlorination equipment is still in place.

Miscellaneous - Emergency light fixture on upper floor is not operable. There is no water service in the upper floor restroom, as one of the water booster pumps is partially removed and out of service and the second pump does not operate.

Recommendations: Finalize contract documents to address recoating of the interior and exterior surfaces of both tanks and tank appurtenances as recommended by KTA-Tator in their detailed inspection report.

Repair or replace level indicator.

Provide and install grating cover for overflow chamber on both tanks.

Extend fencing vertically on south side of building where it abuts concrete retaining wall and replace missing barbed wire sections. Remove trees along fence in this area.

Remove vegetation on and around fencing at Chlorine Building and North Tank.

Remove tree growing next to building.

Remove accumulated leaves from around the reservoirs.

Replace sidewalk in front of Chlorine Building.

Repair and paint cracked wall plaster cracked on upper floor.

Replace door at the Chlorine Room.

Waterproof coat and repaint walls in basement.

Provide and install missing sections and re-support loose sections of hand railing in front of building.

Replace both chlorination pumps.

Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.

Remove old abandoned chlorination equipment from site building.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the Chlorine Room.

Resolve malfunction of emergency lighting fixture(s).

Restore operation of water booster pumps.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Brilliant Warehouse

Condition: Building Interior (Structural/Architectural) – Kitchen, including sink and counter area, and all appliances in poor condition. Vinyl flooring badly deteriorated in the lunchroom, south hallway and main vestibule. Flooring was removed in lunchroom and main vestibule. Many of ceiling tiles throughout first floor have been discolored, caused from toilet overflowing from second floor and rain infiltration in the window curtain wall. Drywall that is covering pilasters in lunchroom is damaged.

Building Exterior (Structural/Architectural) – Building siding was damaged at the northeast corner and southeast corner (three places) of building. Both of the two glass roof panels at vestibule entrance are badly fogged and one is cracked. Rainwater enters the building through the window wall on the north side of the building when it is wind driven, possibly via a top window ledge or siding flashing. Water runoff from the entrance sidewalk enters the vestibule from underneath the door threshold.

Doors and Hardware – Both man-doors at southeast corner of vehicle area and one in the Mechanical Room are damaged and/or missing hardware. Windows are broken on the man door at the southwest corner of building. Weather seals on overhead doors are torn or missing. The hood was removed from the overhead door at the northeast corner of building.

Auxiliary Building Systems - Intrusion alarm system is inoperable. Many of man-door switches have been disconnected. Proper operation of fire alarm system needs to be evaluated.

Lighting Systems – One additional fixture is planned to be installed to enhance the yard lighting. Damaged conduits serving light fixtures on south inside wall of the vehicle area had been removed but wiring was left exposed. First floor hallway light fixtures are in poor condition.

Heating and Ventilation Systems – All HVAC ductwork, diffusers, grills and intake louver screens are very dirty and need to be cleaned. The ventilation system in vehicle area needs to be improved in order to exhaust vehicle fumes more effectively due to heavy usage of facility. Insulation on two heating lines in main vestibule is damaged.

Plumbing System – Some fixture components and (1) toilet and (1) urinal were replaced recently. The hot water tank was replaced. Women's locker room shower is damaged from prior water leaks, but is usable. The pressure washer unit in the Mechanical Room was partially removed and is planned to be replaced soon. Potable water backflow preventer in Mechanical Room is leaking.

Roofing – Roof is in good condition. Gutter drains are presently clogged with leaves around the building. The gutter at the southwest corners has been damaged. It has dropped from the weight of water backing up in it and overflows water down the face of the building siding during rain events. The joints in the gutter leak at this area.

Drainage System and Sumps – The Operations Staff recently vacuum-cleaned the wash bay sump and the grease pit. They removed a bypass trap from the grease pit, which has improved the problems related to odor and low flow problem conditions

Fencing – Southeast corner of building is not secure by fencing. Two front gates at entrance to Old and New Warehouses and one to the Equalization Chamber access road are in poor condition and warrant replacement. Fencing along east property line has been damaged. Also see "Fencing" under Bruecken Pump Station, which adjoins this facility. Manager requested a motorized gate with security card access and remote activation at the southwest corner and main gates. The above fencing issues are being planned to be addressed in an upcoming project.

Site – Earth material has been continuing to slide off the hillside to the south of the access roadway. PWSA has installed some more Jersey barriers along the roadway to contain this material. There is inadequate signage (old outdated type signs) at the railroad crossing. Pavement around catch basin on east side of building is undermined.

Miscellaneous – Fire extinguisher is missing in the Mechanical Room.

Old Warehouse Building - Ceiling in shower needs to be replaced. Lighting fixtures are old and provide inadequate lighting. Supporting steel at roof parapet at outside building is rusted. Intake ventilation grills on north and south wall are damaged or missing and some are boarded up. The utility air compressor in the shop is unreliable and is undersized to suit shop needs. One of two urinals was removed, although this area has been converted to a storage area. The two man doors are in very poor condition and need to be replaced. Missing thresholds are enabling rodents to enter the building. Electrical breaker panel is in poor condition, with breakers routinely tripping.

Recommendations: Replace kitchen sink, counter, and all appliances.

Install new flooring in the lunchroom, south hallway and main vestibule (epoxy system recommended).

Replace water-stained and discolored ceiling tiles throughout first floor.

Repair and paint drywall in lunchroom.

Replace two glass roof panels at vestibule entrance.

Investigate and eliminate leaks in the north window wall.

Provide watertight seal underneath the main entrance door threshold in the vestibule.

Repair building siding at northeast, including overhead door hood, and southeast corners of building.

Replace man-doors and hardware and broken glass panes where needed.

Renew weather seals on overhead doors and install hood where removed.

Upgrade or replace intrusion alarm system and all field devices.

Inspect and test operation of fire alarm system and correct malfunctions as necessary.

Replace removed conduit to conceal wiring, which serves light fixtures on south inside wall of building.

Replace and/or relamp first floor hallway light fixtures.

Clean entire HVAC duct system, diffusers, grills and intake louver screen.

Improve/upgrade ventilation system in vehicle area.

Repair insulation on heating lines in main vestibule.

Repair or replace shower stall in the women's locker room.

Replace pressure washer unit in the Mechanical Room.

Resolve leak at potable water backflow preventer in Mechanical Room.

Unclog roof gutter drains and repair the "dropped" section of gutter at the southwest corner.

Install new fencing along east side and at southeast corner, including a motorized gate with security card access and remote activation.

Replace two front gates with motorized slide gates and security card access and remote activation. Install new manual slide gate to equalization chamber.

Investigate resolution of earth material sliding off hillside to the south of access roadway.

Install new updated-style railroad crossing signs at the track crossing.

Address undermining of pavement at catch basin on east side of building by installing a new riser section.

Install fire extinguisher in Mechanical Room.

Old warehouse-

- Replace ceiling in shower.
- Replace lighting fixtures.
- Paint supporting steel at roof parapet at outside walls.
- Replace intake ventilation grills on north and south walls.
- Replace utility compressor.
- Replace man doors.
- Replace electrical breaker panel.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2007

Description: Bruecken Pump Station

Condition: Pumping Equipment – Pump No. 2 has been rebuilt and is presently in service, but it is planned to be reinspected in the upcoming pump repair contract. The motor was rebuilt on Pump No. 5 and is in full service. Pump No. 6 is out of service with bearing problems. Pump No. 3 has had bearing and realignment work performed, although additional bearing work is still required. Pump No.'s 3 & 6 along with their motors, will be inspected and addressed in an upcoming pump repair contract. The installation of a new pump (No.1) was evaluated by CDM.

Interior Valves and Piping (includes pump isolation, control and surge valves) – The pump control valves require a high degree of maintenance but are being rebuilt as needed by Operations Staff. Operations Staff recently rebuilt pump control valve No.'s 2 and 4. Suction gate valve No. 7 packing is leaking. Pump control valve No. 7 is leaking a lot of water. Water leaking from the pumps on the first floor is discharging onto some of the suction valve actuators in the basement.

Instrumentation and SCADA System (includes flowmeters and suction/discharge pressure transmitters) – Replacement of entire SCADA System is being evaluated. The bearing sensor devices at the pumps are old and do not include a local readout temperature.

Access Road and Pavements – Areas of the asphalt around station are in poor condition. Vegetation is growing out of the joints in the tie gate vaults.

Site and Fencing – The perimeter fencing around the building is in poor condition with numerous holes and some sections missing. A section of fencing was removed when the gas line was replaced and never reinstalled. Heavy vegetation noted inside the outdoor transformer area.

Pump Station Building Exterior (Structural/Architectural) – Fair to poor. Joints in walls are in need of repointing, numerous window panes are broken and doors and windows are in poor condition. Replacement of the windows has been evaluated and may be included in an upcoming project.

Pump Station Building Interior (Structural/Architectural) – The ceiling in the electrical room and adjacent office and bathroom areas is damaged, including badly peeling paint.

Electrical System (includes lighting and battery back-up systems) – Electrical switchgear requires servicing and cleaning. Most of outside lighting fixtures are old mercury vapor type and unreliable. Lighting fixtures in basement and boiler room are incandescent type and unreliable. Emergency light fixtures are inoperable in many areas of the station. There is no lighting in one of the stairwells. The boiler Room is subject to poor lighting. The electrical panel cover is off of the panel on the north balcony wall. Battery backup system operation is unreliable. Emergency

generators to run the water pumps were evaluated by CDM. The junction box cover is off at pump control valve No. 4.

Heating and Ventilation Systems – The boilers are in good operating condition. One of the recirculation pumps is inoperable, but is planned to be replaced soon. Pump area ventilation damper is held in an open position even though the fan is off.

Mechanical Systems (water, plumbing, sanitary) – First floor water fountain is in poor condition. Water serving the toilets, sinks and showers in the locker room has been shut off, as these facilities are no longer used. The sewage ejector station, to where these fixtures would drain, is not operable.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing, Gutters, and Downspouts – Main composite sloped roof was reflashed along the lower edge and leaking areas were patched. The lower flat rubber covered roof was replaced. Gutters and roof drains were cleaned. Two of the interior roof drains lines inside the building leak and one of the lines is badly deteriorated.

Drainage System and Sump Pumps – Emergency Flood Pumps operate well. The amount of pump seal water, pump priming water, bearing cooling water, and control valve seal leakage water is presently so great that the south half of the basement is constantly flooded as this water is not being contained in the drainage system piping and/or adequately handled by the sump pumps. Operating condition of the sump pump(s) at the south end of the basement can not be evaluated due to this flooded condition.

Discharge and Distribution Valves - The discharge gate valve on Pump No. 4 and the adjacent tie gate (with actuators) will be replaced soon under a repair contract. Restoration of the concrete vault is included. Shutoff of some pump discharge and tie valves in front of station are not tight. Some valves have malfunctioning Limitorque actuators/controls, whereby operation of these valves may not be reliable, probably related to incidences of past flooding in the vaults. Packing in some of these valves leaks. The existing surge valve on the discharge header at Rising Main No. 1 does not operate and is valved off (out of service).

Equalization Chamber – West and East Chambers are in good condition, however both are flooded with several feet of water. Minor settlement noted around chamber. Fence access gate is out of alignment, due to a displaced post, and the latch can not be closed.

Miscellaneous – Overhead crane rail system and hoist are old, although in working condition. It is scheduled to be evaluated in the near future. There are a lot of old parts and other materials, scattered throughout pump station, inside and outside.

Recommendations: Complete inspection and servicing work for Pump No.'s 2, 3 and 6.

Rebuild leaking seals on control valves with seal kits as necessary.

Resolve leaking packing at Suction Gate Valve No. 7 and Pump Control Valve No. 7.

Replace SCADA system in upcoming project.

Evaluate operation of bearing sensor devices and consider replacing with a digital type unit that would include a local readout temperature.

Restore deteriorated sections of concrete and asphalt pavement around pump station where necessary.

Remove vegetation that is growing out of the joints in the tie gate vaults.

Repair/replace perimeter fencing and gates as necessary.

Remove vegetation inside the outdoor transformer area.

Repair or replace deteriorated areas of the asphalt around station.

Replace broken window panes and frames, repoint joints on stone facing, and repaint and/or replace doors in pump station building exterior.

Address repair and repainting of the ceiling in the electrical room and adjacent office and bathroom areas, now that the roof leaks have been resolved.

Inspect, clean, and evaluate need for renovation of switchgear.

Replace exterior mercury vapor lights with high-pressure sodium or metal halide.

Replace lighting fixtures in basement and Boiler Room.

Address malfunctions of the emergency light fixtures in many areas of the station.

Re-lamp and/or address malfunctions of the stairwell lighting fixtures.

Reinstall cover on electrical panel on the North Balcony wall.

Repair/replace Battery backup system.

Install cover on electrical junction box at Pump Control Valve No. 4.

Service pump area ventilation damper.

Replace first floor water fountain.

Restore operation of sewage ejector station if locker room facilities are placed back into service.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

Repair leaking roof drain lines.

Evaluate and modify station drain system to handle flow and address any malfunction of the sump pumps as necessary. Resolve excessive leaking problems with pump packing and control valves. Consider piping control valve vent lines directly to the sumps.

Repair Limitorque actuators and tie valves.

Repair or replace the malfunctioning surge valve on the discharge header at Rising Main No. 1.

Pump water out of Equalization Chamber vaults.

Address minor settlement around Equalization Chamber.

Repair/realign fence access gate at Equalization Chamber.

Evaluate crane operation and address deficiencies noted.

Consolidate and organize usable materials scattered in pump station and discard unusable materials.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Garfield Tank

Condition: Interior Tank – KTA-Tator is planning to conduct a detailed inspection in the near future of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report when issued by them.

Exterior Tank and Appurtenances – See above.

Site Fencing – Good to fair condition.

Instrumentation – No problems noted.

Chlorination Facilities – See Highland Pump Station for chlorination facilities that serve this storage site.

Recommendations: Address recommendations from KTA-Tator relative to the tanks and appurtenances after their inspection is conducted.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Herron Hill Pump Station

Condition: Pumping Equipment – Four of the five pumps are in good running condition. Pump No. 5 is in process of being rebuilt by Operations Staff.

Interior Valves and Piping (includes pump isolation, control and surge valves) - Willamette ball-type control valves at all the pumps leak but are in good operating condition. Control valve at Pump No. 4 was recently rebuilt. The pilot valve on Pump No. 2 check valve is leaking. A large volume of water is being discharged into the basement sump from the pumps and check valves.

Instrumentation and SCADA System (includes flow meters, suction/discharge pressure transmitters) – Minco brand RTD devices at pumps are failing. Replacement of entire SCADA System is being evaluated.

Pump Station Building Interior (Structural/Architectural) – Plaster damage on bathroom ceiling from leaking roof. Paint on basement walls is badly peeled and wall surface material is deteriorated from water infiltration. The paint is peeling on the floor around the pumps. The structural concrete roof support beams in Pump No. 5 Room are showing signs of being overstressed, as evidenced from cracks noted in the concrete beams. The beam next to the door of the adjacent storage room has deflected, such that the door can not be opened. Water is also leaking into the ceiling of Pump No. 5 Room and adjoining wall in the main pump room basement, possibly caused by poor drainage of water off the asphalt pavement above. See Roofing, Gutters and Downspouts.

Pump Station Building Exterior (Structural/Architectural) – Stone face on south wall is badly deteriorated due to weathering. Mortar joints in poor condition where downspout was previously missing at boiler room addition. Soffit and fascia are in poor condition and a section is missing on the west side of station. Vines and trees are growing along the east wall of the station. One of the front doors, including the threshold, is deteriorated and misaligned.

Site Conditions – There is settlement in the lawn area in front of the station next to the driveway and along the side of the front steps. Surface drain in the driveway pavement, which presently discharges into the storage room next to Pump No. 5 Room, should be redirected or eliminated and the pavement re-sloped to effect proper drainage.

Electrical System (includes lighting and Battery Backup systems) – Switchgear system is in poor condition. The battery backup system is old and unreliable and needs replaced. Lighting in basement is fair.

Mechanical Systems (water, plumbing, sanitary) – The hot water tank has deteriorated due to water previously leaking through the roof. Drain lines were cut and left open in basement (three places) that may discharge water onto the floor if surcharged.

Heating and Ventilation Systems – Inadequate ventilation in summer. Ventilation damper in Pump No. 5 pit is bent and stuck in an open position and the fan does not operate. Boiler No. 2 is tagged "out of service".

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing, Gutters and Downspouts – Rubber-covered roofing on boiler room addition was replaced. Downspout on southwest corner of boiler room was replaced and the gutters around the station were inspected, cleaned and repaired as needed. Downspout is missing on the north side of the East Garage and causing damage to the brick wall. The downspout at the north side of the Testing Lab is split and leaks water. The downspout to the east of the front door may be partially blocked, which may be causing run-off water to leak through the asphalt driveway and enter into the ceiling of Pump No. 5 Room and adjacent main basement area.

Recommendations: Resolve malfunctions and leaking problems at the pump control valves. Convey leakage water to drains or sump.

Replace digital-type RTD devices at pumps with a new retrofit digital type.

Replacement of SCADA System in upcoming project.

Repair damaged bathroom ceiling and repair and waterproof/coat basement walls.

Repaint the floor in the station.

Evaluate and address any concerns of overstressed structural concrete roof support beams in Pump No. 5 Room.

Resolve leaks in the ceiling in Pump No. 5 Room and adjoining basement wall.

Repair, re-point and apply protective coating to exterior south wall.

Repoint/restore mortar joints at southeast corner of Boiler Room.

Repaint soffit and fascia or cover with aluminum.

Remove vines and trees that are growing along the east wall of the station.

Replace front door, threshold and hardware.

Fill settlement in the lawn area in front of the station next to the driveway and along the side of the front steps.

Redirect the surface drain in the driveway pavement or remove it and re-slope the pavement to effect proper drainage of the pavement.

Inspect, clean, test and renovate switchgear system.

Replace Battery Backup system with UPS type system.

Cap open drain lines in basement (three places).

Replace and/or supplement existing ventilation system.

Address problems with ventilation fan and damper in Pump No. 5 Room.

Restore operation of Boiler No. 2.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

Replace missing downspout on the north side of the garage and replace the split downspout at Testing Lab.

Evaluate and resolve any blockage of the downspout to the east of the front door.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Herron Hill Reservoir

Condition: Floating Cover – In the South Cell the influent pipe vacuum breaker has become submerged whereby the cover has become flooded with potable water passing from the reservoir through the vent. A project has been initiated to have Layfield Corp. install a larger float to support the vent in order to minimize the likelihood of this flooding condition to reoccur. In order to perform this work the reservoir needs to be drained. This work has been postponed due to the present wintry weather conditions. Ideally there should be a second backup cover dewatering pump installed in each cell, although close monitoring of the failsafe operation of the cover pumps would minimize the chance of reoccurrence of this flooding condition.

Reservoir Cover Appurtenances (Dewatering Pumps, ladders, vents, hatchways, barriers/railings) – Cover dewatering pump in the North Cell has been replaced with a temporary sump pump, as the installed cover pump was not operating properly. The float control serving the North Cell cover dewatering pump needs to be adjusted to raise the shut off level and to keep it from hanging up.

Chlorine Building - Shingled roof is in very poor condition. The door has been replaced and includes a bottom seal. The ventilation fan and damper work well.

Chlorination Facilities - The Operations Staff completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. One new Prominent pump has been installed and is pumping reliably. There is an old W&T pump, now out of service, and an LMI test pump also installed, which are planned to be replaced in the future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future. The old abandoned chlorine gas feed equipment is still in place. Pump support stand and all pipe supports are badly corroded.

Miscellaneous – Posts supporting entrance fence gate to chlorine building need to be re-supported or replaced.

Recommendations: Resolve flooded cover condition in the South Cell by draining reservoir and replacing the vacuum vent support float.

Resolve problem with the North Cell cover dewatering pump.

Replace shingled roofing on Chlorine Building.

Replace the second and third chlorination pumps.

Install chlorine analyzer(s) and sample line to enhance control of chlorine dosing if warranted.

Remove the old abandoned gas chlorination equipment.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the chlorine room.

Paint and/or replace (with fiberglass) the pipe and pump support stands.

Re-support or replace posts at entrance gate to chlorine building.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Herron Hill Tank

Condition: Interior Tank – KTA-Tator is planning to conduct a detailed inspection in the near future of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances.

Exterior Tank and Appurtenances – See above.

Site Lighting – Air travel clearance light on top of tank requires frequent bulb change and is unsafe to access.

Recommendations: Address recommendations from KTA-Tator relative to the tanks and appurtenances after their inspection is conducted.

Replace air travel clearance light on top of tank with a strobe style light.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Herron Hill Tank Pump Station

Condition: Pumping Equipment – Both pumps in good operating condition

Interior Valves and Piping (includes pump isolation, control and surge valves) – Dresser couplings on the suction and discharge lines of Pump No. 2 are leaking badly. Piping is badly rusted in the trenches beneath the pump floor, probably due to the constant leakage of water from the above pipes.

Site and Fencing – Heavy vegetation was removed from the fencing around the electrical substation.

Instrumentation and SCADA System (includes flowmeters and suction/discharge pressure transmitters) – SCADA system will be evaluated in an upcoming project.

Electrical System (includes lighting and battery backup systems) – Switchgear system needs to be evaluated.

Recommendations: Repair leaks at Dresser couplings on the suction and discharge lines of Pump No. 2.

Repaint interior station piping.

Replacement of SCADA system in upcoming project.

Evaluate switchgear system.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Highland No. 1 Reservoir - Including Membrane Filtration Plant Facilities

Condition: Reservoir Conditions – Badly deteriorated sections of the concrete parapet wall around the reservoir were repaired; however large areas are in need of replacement, which should be addressed when a renovation project is planned. There is an accumulation of leaves in the reservoir which presents problems in the operation of the Membrane Filtration process in the spring period when the temperature related inversion occurs.

Site Building (Old Chlorine Building) – This building is currently not being used; however the building needs to remain heated to protect water lines inside. The power panel in the basement operates the heating units, the reservoir lighting and power to the Rest Building. Exterior is in good condition. Abandoned chlorination equipment should be removed. Ceiling paint is peeling badly. The heaters do not operate on the first floor. There are open core drilled openings in the basement wall to enable entry of rodents. Fire extinguisher in basement is outdated. The first floor door and hardware is on poor condition. The basement door is jammed tight. Heavy vegetation noted around the building inside the fence.

Site Conditions – Site lighting had recently been restored to full operation; however the system is in need of replacement, which includes installation of underground wiring, which should be addressed when a renovation project is planned.

Instrumentation and SCADA System – The reservoir level probe has recently been replaced. The present SCADA system is not operational, however there is presently no data needed from this system, since the Old Chlorine Building is no longer in service and the reservoir level signal is now transmitted to the Membrane Filtration Plant.

Membrane Filtration Plant – Expansion of the plant from 20 MGD to 26 MGD is currently being planned. All filtering valve and membrane module rack piping will be replaced with HDPE material in coordination with the expansion of the plant. All original modules, which have not already been replaced, will be replaced with the new replacement rack piping. Expansion proposal includes replacement of the computer control system and process/instrument air system, upgrade of the feed pumps, and modification of some of the chemical cleaning processes. The above project work will be completed by early summer.

The CIP and Neutralization tanks vent inside the building. The check valve at the connection of the chemical waste line to the sewer outside the building allows chemical and sewage fumes to back-up into the building.

Recommendations: Replace deteriorated sections of the concrete parapet wall around the reservoir, which should be addressed when a renovation project is planned.

Remove leaves from reservoir.

Old Chlorine building – Restore operation of heaters on first floor. Seal open core drilled openings in basement wall. Update charge in fire extinguisher in basement. Replace and/or repair doors and hardware as required. Remove vegetation noted around the building inside the fence.

Replace reservoir site lighting which includes installation of underground wiring, which should be addressed when a renovation project is planned.

Continue coordination with Pall in expanding the flow capacity of the plant and replacement of valve and module rack piping.

MFP - Vent CIP and Neutralization tanks outside the building. Replace the check valve or modify the connection of the chemical waste line to the sewer outside the building.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

***Description*:** Highland No. 2 Reservoir

***Condition*:**

Cover Conditions - The cover is prematurely deteriorating from ultraviolet radiation, a condition, which was confirmed to be covered under a warranty issued by the cover manufacturer. Plans and specifications are being prepared to replace this floating cover. There is an accumulation of leaves on the cover. There is signifigant ponded water on the south corner, probably due to the Cover Dewatering Pump No. 4 ibeing out of service and the need for installation of a dewatering pump at this location. A new pump should be installed at this south corner when the cover is replaced.

Appurtenances (cover dewatering pumps, ladders, vents, hatchways, barriers, railings) – Cover Dewatering Pump No. 1 constantly trips the Motor Saver controller on "contact failure". Pump No. 2 and No. 3 are pumping at a low flow rate. Pump No. 4 is out of service, as the power supply is shorted out. Pump No. 5 is currently operating, but problems have been noted with its Motor Saver controller. Pump No. 6 is pumping well.

Chlorination Facilities - *The Operations Staff completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. One new Prominent pump has been installed and is pumping reliably. The second pump is a W&T brand, which will be replaced in the near future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future.* A vent from a sodium hypochlorite storage tank in the station is vented inside the building. The pump support stand and metal pipe supports in the chlorine room are badly rusted.

Site Building Interior (Structural/Architectural) – The front window is badly deteriorated and can not be fully closed, allowing rain and cold air to enter the building. A window pane is out of another window. Damaged plaster and peeling paint noted in the main area of the building due to leaking roof. The damaged ceiling in the electrical room had been replaced temporarily with plywood. The heating unit in the main area of the building is inoperable. One of the two heaters in the Chlorine Room is inoperable. The hatch cover inside the station, which is heavy, rusted steel, has been replaced with a plywood cover temporarily. The doors are rusted, but operate. Ventilation fan in Chlorine Room works but the intake damper is stuck in a partially open position whereby outside air continuously enters the building.

Site (Including Lighting and Fencing – *Vegetation has been removed from the fence along the perimeter access road.* Settlement and/or movement of the slope are noted on the roadway on the east side of the reservoir; possibly resulting from the construction of a Slurry Wall around the reservoir in the past.

Roofing – Leaking condition at or near the roof-mounted vent fan.

Instrumentation and SCADA System – *Replacement of entire SCADA System is being evaluated in an upcoming project.*

***Recommendations*:**

Leaves should be removed from the reservoir cover.

Replace the floating cover and appurtenances as necessary in upcoming project.

Install a cover dewatering pump at the south corner and replace the pump Motor Savers at all pumps to maintain more reliable operations.

Inspect and clean the pumps and canisters where the pumping flow rates are low.

Replace the second chlorination pump.

Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.

Extend vent from sodium hypochlorite storage tank to outside of building.

Paint and/or replace (with fiberglass) the pipe and pump support stands.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the chlorine room.

Replace all windows in building.

Repair and repaint damaged plaster inside building.

Repair or replace defective heaters.

Replace the hatch cover with a light weight hinged door.

Resolve problem with chlorine room air intake damper.

Monitor settlement or movement of reservoir slope.

Repair leak in roof at the vent fan.

Address replacement of SCADA System in an upcoming project.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Highland Pump Station

Condition:

Pumping Equipment – All pumps are presently in service, although since the present single stage pumps were installed several years ago there has been an increase in maintenance requirements. The Operations Staff is routinely rebuilding these pumps to address replacement of worn or failed parts. Pump No. 1 and No. 2 were rebuilt recently.

Interior Valves and Piping (includes pump isolation, control and surge valves) – Golden Anderson hydraulic-actuated piston-type control valves have numerous maintenance problems resulting in failures. Operations Staff reported that the present horizontal alignment of valves is not ideal. The condition of the piping in the pipe trenches beneath floor level should be evaluated, as pump seal water is discharged into these trenches.

Instrumentation and SCADA System (includes flow meters and suction/discharge pressure transmitters) – Replacement of entire SCADA System is being evaluated in an upcoming project.

Pump Station Building Exterior (Structural Architectural) – Chlorine Room door, handrail, window screen, and exhaust louver are badly rusted. Half of the handrail in front of building is missing. Paint is deteriorated on soffit/eaves. Graffiti noted on back and side exterior walls and overhead door.

Pump Station Building Interior (Structural Architectural) – Pump bases and pipe trench floor plates are badly rusted. The paint is peeling on the floor around the pumps.

Roofing – Good condition.

Electrical System (includes lighting and battery backup systems) – A reduced voltage starting transformer at Pump No.3 is presently being rebuilt. The switchgear starting equipment at Pump No.1 is unreliable. When the pumps were replaced several years ago the horsepower ratings were increased, resulting in overload (overheating) conditions with the equipment in the MCC. Switchgear system needs to be upgraded or replaced. Battery Backup system is in good condition. Emergency lighting units appear to be inoperable.

Heating and Ventilation Systems – Heating system in pump area is in good operating condition. The exhaust vent fan had been removed from the front of the building leaving the damper exposed, as it was replaced with a fan at the back of the building. The ventilation exhaust fan and intake damper serving the chlorine room do not operate. Heater in Chlorine Room does not operate.

Chlorination Facilities - The Operations Division completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. One new Prominent pump has been installed and is pumping reliably. It is being planned that the second pump, now out of service, will be replaced in the near future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future. The chlorination system is presently out of service for the season.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Recommendations:

Evaluate operation and maintenance needs of the present single stage (3500 rpm) pumps for potential replacement.

Replace all three pump control valves with cone-type valves with actuator as manufactured by Williamette with proper orientation in a vertical position.

Evaluate the condition of the piping in the pipe trenches beneath floor level.

Replace SCADA system in upcoming project.

Repair/replace exterior door, window screen, exhaust louver, and handrail at Chlorine Room.

Replace handrail and repaint soffit/eaves on pump station building.

Remove graffiti from building walls.

Paint pumps and trench floor plates.

Repaint the floor in the station.

Resolve switchgear problems at Pump No.1 for the near term and upgrade/replace all station switchgear equipment.

Install a louver on front of building where an exhaust fan had been removed.

Resolve operational problem with ventilation exhaust fan and intake damper serving the Chlorine Room.

Restore operation of heater in Chlorine Room.

Replace the second chlorination pump.

Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the chlorine room.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Howard Pump Station - Including Sewer Division Facility

Condition: Pumping Equipment – Pump No. 7 is not operational and out of service and Pump No. 6 does not operate reliably. A contract is being prepared by PWSA to replace these two pumps in the very near future. Pump No. 4 is off line due to the inoperation of its pump control valve.

Interior Valves and Piping (includes pump isolation, control and surge valves - Pump control valves at Pump No.'s 6 and 7 will be replaced with the pumps. Willamette ball-type control valves at Pumps No. 3 and No. 4 will be replaced with cone-type valves in the upcoming pump replacement project. Valves at other pumps require a lot of maintenance, but Operations Staff addresses maintenance needs as needed. Valve No. 5 is leaking badly. Packing on discharge valve at Pump No. 2 is leaking. Surge valve S-2 serving McNaugher/Spring Hill is nonfunctional and out of service. The isolation valve for this surge valve is leaking and water is constantly leaking through the surge valve to drain.

Instrumentation and SCADA System (includes flow meters, suction/discharge pressure transmitters) – Analog-type RTD devices are failing. Some have been removed and others are not functional. New devices will be installed at Pump No.'s 6 and 7. Replacement of entire SCADA System is being evaluated.

Pump Station Building Interior (Structural/Architectural) – Station walls were not repainted following repointing work in the last upgrade contract. Structural steel, columns/bases and piping in basement are badly rusted, especially where water is leaking from the pumps overhead from the first floor. Rear access door does not latch.

Pump Station Building Exterior (Structural/Architectural) – Main double door is misaligned. Vines noted on north wall.

Site (Including Fencing) – Sidewalk at rear of the station is in poor condition and vegetation is growing out of the joints.

Electrical System (includes lighting and battery backup systems) – Switchgear system needs to be evaluated ASAP according to the Operations Staff. Battery backup system is inoperable and needs to be replaced with a UPS type. Lighting in the basement is poor. Most of emergency light fixtures are inoperable. Telephone terminal box cover is off. Cover on electrical device box next to rear door is open with wires hanging out of it.

Mechanical Systems (water, plumbing, sanitary) – Presently there is no hot water in the station bathrooms (hot water tank was previously removed). Water leaking from packing at Pump No. 5 is being discharged directly into the basement. Toilet in station office area is nonfunctional.

Heating and Ventilation – The boiler is in good running condition. The fan/motor in the unit heater on the north wall has been removed. Drive belt on east ventilation fan is loose and one of two belts is missing and the damper does not open. The ventilation fan on the north wall does not operate.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing, Gutters and Downspouts – Pump Station roof is in good condition. Also see "Sewer Division Facility".

Miscellaneous - Overhead crane rail system and hoist are old, although in working condition. It is scheduled to be evaluated in the near future.

Sewer Services Division Facility - Offices and locker area facilities are in good condition. Walls in the vehicle storage area are in poor condition and need to be painted. Manager requested that the material storage area south of the station be enclosed with an 8' high security fencing (with privacy slats) and include a security card access sliding gate. Two of three radiant heaters in vehicle storage area are inoperable. Gutters around the Sewer Division section of building are clogged with leaves. Minor leaks noted in vehicle storage area roof. There may be a leaking gutter along the south wall, where water is entering the vehicle storage area.

Recommendations: Replace Pump No. 6 and No. 7 and check valves (including valves at Pump No.'s 3 and 4 in upcoming project.

Address maintenance needs of pump control valves as required, especially at Pump No. 5.

Resolve problem with leaking packing on discharge valve at Pump No. 2.

Rebuild one of surge valves in basement serving pumping line to McNaugher/Spring Hill.

Replace analog-type RTD devices with digital type.

Replace SCADA system in upcoming project.

Paint interior walls of pump room.

Repaint structural steel, columns/bases and piping in basement.

Repair rear door latch.

Realign/repair main double door to pump station building.

Remove vines from north wall.

Replace sidewalk at the rear of the station and remove vegetation growing out of the joints if/where not being replaced.

Evaluate switchgear system.

Replace battery backup system, which provides backup power for pump and valve status to the OC Center.

Install telephone terminal box cover.

Reinstall cover on electrical device box next to rear door.

Install hot water tank to serve the station.

Pipe water leaking from packing at Pump No. 5 to the sump in basement.

Repair toilet in station office area.

Replace heating unit on north wall.

Service both ventilation fans.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

Evaluate crane operation and address deficiencies noted.

Sewer Services Division Facility –

- Repair minor leaks on vehicle storage area roof.
- Paint walls in the vehicle storage area.
- Install 8' high security fencing (with privacy slats) around material storage area south of the station. Include a security card access sliding gate.
- Replace defective radiant heaters in vehicle storage area.
- Repair minor leaks in vehicle storage area roof.
- Remove leaves from the gutters around the Sewer Division section of building.
- Inspect gutter at vehicle storage area at the south wall and/or resolve leaking situation.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Inline Pump Station at Coral & Pacific

Condition: Pumping Equipment – Both pumps are operating well.

Interior Valves and Piping (includes pump isolation, control and surge valves) – Control valve operation is reliable.

Pump Station Building Interior (Structural/Architectural) – Hatch cover and hardware are very badly rusted/deteriorated. Access into the station is not possible without a hoist lifting device, due to the heavy weight of the hatch cover. Floor and lower portion of station are badly rusted causing water infiltration.

Ventilation System – Underground vent line has shifted causing a joint to open and leak groundwater into the station.

Recommendations: Replace hatch cover with lighter weight cover, but heavy duty for traffic loading, including spring-assist shocks for easier lifting.

Repair station shell by lining the floor and lower portion of the walls with welded steel plate.

Repair underground vent line.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Lanpher Reservoir

Condition: Cover Conditions – The cover is in good condition.

Reservoir Appurtenances (cover dewatering pumps, ladders, vents, hatchways, barriers/railings) – Five of the (8) cover pumps are working well. The southeast pump on the East cell is pumping slowly. The northeast pump on the East Cell was tripped on "under current" and restarted. The southwest pump in the East Cell was tripped on "single phasing" and was restarted. Much of handrail and swing gates along the center wall of the reservoir are in need of repair. Most of this hand railing is loose where it is anchored into the concrete.

Site Building Interior (Structural/Architectural) – There is presently no heat inside the building, which is causing heavy condensation and high humidity conditions. Basement stairs and pipe supports are rusting, probably due to humid conditions. The electrical distribution panels are rusting and corroding.

Site Building Exterior (Structural/Architectural) – Soffit and fascia around building is in poor condition. Section of downspout on the west side is damaged and a tree is growing inside of it. The joints in the rain gutters are leaking. All four exterior doors and hardware are badly rusted and deteriorated. Vines are growing on the building.

Chlorination Facilities – The Operations Staff completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. The old W&T feed pumps are still in place, but will be replaced with Prominent pumps in the near future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future. Pump support stand and all pipe supports are badly corroded.

Site Building Heating, Ventilation & Plumbing – All heaters in the building first floor, basement and the Chlorine Room do not operate, whereby there is no heat in this facility. Both of the two vent fans on first floor are inoperable. All humidistat and thermostat controls are corroded and not functional. The vent fan in the basement does not operate and the associated intake damper will not close fully, whereby cold air constantly enters the building. The water booster pumps are not operable, whereby there is presently no water service inside this facility, including a water supply to the toilet and lavatory in the basement. Ventilation fan and intake damper in the Chlorine Room work well.

Miscellaneous - Concrete patches at some of the joints in the retaining wall next to Friday Road are deteriorated and material is loose, thereby posing a potential risk of falling patch material in damaging the cover.

Recommendations:

- Repair handrail and swing gates and re-anchor all railing on the center walkway.
- Paint basement stairs, valve stands and pipe supports.
- Repair and repaint soffit and fascia on site building.
- Repair or replace damaged section of downspout on the west side and remove tree growing inside of it. Seal gutter joints or replace the gutters.
- Replace all exterior doors using a corrosion resistant finish/material.
- Remove vines from building exterior.
- Replace the two chlorination pumps.
- Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.
- Paint or replace (with fiberglass) corroded steel pump stands and piping supports in chlorine room.
- Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the chlorine room.
- Restore heating to first floor, basement and Chlorine Room by repairing or replacing inoperable heating units and controls as necessary.
- Repair or replace inoperable vent fans, dampers and controls as necessary.
- Restore operation of the water booster pumps.
- Repair or replace the deteriorated joint repair patches in the concrete retaining wall.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Lincoln Pump Station

Condition: Pumping Equipment – Pump No. 2 is out of service, as it is inoperable. A contract is being prepared by PWSA to replace this pump.

Interior Valves and Piping (includes pump isolation, control and surge valves) – The pump control valves have had many operational failures. Controls were recently replaced at Pump No.'s 2 and 3. Operation Staff have requested that these be replaced as they are old and unreliable. Control valve at Pump No. 2 will be replaced with the pump. There is a lot of water leaking through the valve seals to the sump or through penetrations in the floor. Pump discharge piping in the basement will be painted soon under a current contract. The discharge butterfly valves were replaced at all three pumps.

Pump Station Building Exterior (Structural/Architectural) – Vines are growing on the north and east building walls and on the fencing around the electrical service security fencing. Fallen tree and yard debris noted in station yard.

Pump Station Building Interior (Structural/Architectural) – Main door is in good condition, except door closer is broken. Storage room door in basement is deteriorated.

Instrumentation and SCADA System (includes flow meters and suction/discharge pressure transmitters) – The bearing sensor devices at the pumps are old and do not include a local readout temperature. Replacement of entire SCADA System is being evaluated.

Electrical System (includes lighting and battery backup systems) – Switchgear system needs to be evaluated and deficiencies addressed. Battery backup system needs to be replaced. A receptacle was removed from the east wall with wires left hanging out of the device box. A smoke detector was removed from the ceiling in the basement and wires left hanging out of the device box. An instrumentation device was removed from the basement and wiring left hanging out of the junction box. Several electrical junction box covers are off at the pump valve controls.

Heating and Ventilation – The boiler is in good operating condition. One of the recirculation pumps were replaced recently. The hot water tank needs to be replaced.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing – Vegetation and accumulation of silt noted on roof.

Miscellaneous – Water is being discharged into the basement from Pump No. 2 and should be contained in the drainage system. There is a very large volume of water being discharged into the sump from the pumps and check valves. Old test piping, including drain lines routed across floor (posing a tripping hazard) in basement has been abandoned.

Recommendations:

- Replace Pump No. 2 and pump control check valve in upcoming contract.
- Replace pump control valves at Pump No.'s 2 and 3.
- Remove vines from north and east building walls and vegetation on fencing on east side and around the electrical service area.
- Remove fallen tree and debris in station yard.
- Replace/repair door closer.
- Remove or replace deteriorated door in basement.
- Evaluate operation of bearing sensor devices and consider replacing with a digital type unit that would include a local readout temperature.
- Replacement of SCADA System in upcoming project.
- Evaluate switchgear system and address deficiencies as required.
- Replace battery backup system for SCADA system.
- Address disconnected wiring as noted and replace electrical box covers where noted.
- Replace hot water tank.
- Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.
- Clean and inspect rubber-covered roofing and address deficiencies as required.
- Contain drainage water being discharged from Pump No. 2 and resolve excessive leaking problems with pump packing and/or control valves at Pump No.'s 1 and 3.
- Remove old abandoned test piping including drain lines routed across floor in basement.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Lincoln Tank

Condition:

Interior Tank – KTA-Tator recently conducted a detailed inspection of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report. Deficiencies will be corrected as noted and recommended.

Exterior Tank and Appurtenances – See above.

Site Fencing – Fabric deteriorated and patched in select areas. Vegetation has been removed from the fencing. The tree that was growing inside the electrical panel fenced area was removed. The site fencing was extended to enclose the plot of land next to the tank that was recently acquired from the City by PWSA to accommodate the new Chlorination Facilities Building.

Valve Vaults – Good.

Tank Valves – Good.

Instrumentation and SCADA System – Replacement of the entire SCADA System is being evaluated.

Chlorination Facilities – By way of a contract presently in place, BissNuss along with PWSA and the Emergency Sewer Contract have provided a new building on site to house new Booster Chlorination Facilities to reduce THM's in the Distribution system. The facilities are installed except for the final electrical connections. Pending testing and startup services, soon to be scheduled, these facilities will be placed on line. Required taps in the water lines will be completed by PWSA as planned.

Recommendations:

Address recommendations from KTA-Tator relative to the tanks and appurtenances as noted and required in their inspection report.

Address repair or replacement of fencing.

Replacement of SCADA System in an upcoming project.

Complete installation of Booster Chlorination Facilities and put into operation.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: McNaugher Reservoir

Condition:

Reservoirs – Concrete chamber on east side of larger reservoir is deteriorating.

Access Road and Pavements – Section of stairs in front of Chlorine Building are deteriorated. One of steps on newer portion of stairs damaged where handrail post is embedded. The joint between the concrete drainage troughs around the reservoirs need to be recaulked.

Site and Fencing – There is a heavy accumulation of leaves around both reservoirs, which is also plugging the bee hive drains, causing the water to back up in the drain troughs. North half of fencing along Biggs Street is badly rusted. There is vegetation and trees growing on the fencing around the reservoirs.

Site Building Interior (Structural/Architectural) - Good condition. The fire extinguisher cabinet needs to be remounted on the wall.

Site Building Exterior (Structural/Architectural) – Soffit and fascia paint badly peeled. A section of handrail in front of building needs to be repaired or resecured. The panic hardware is coming off the Chlorine Room door.

Mechanical Systems (water, plumbing, sanitary, ventilation, electrical) – Hot water tank is inoperable. Fan in basement does not work. Emergency lights do not test light. The water runs constantly in the toilet. The outdoor key-type light switch is broken. The Chlorine Room ventilation fan and intake damper are not functional.

Chlorination Facilities – The Operations Staff completed their pilot testing of different brands of pumps to consider using to replace the existing pumps and concluded that the "Prominent" pump is the desired unit. One new Prominent pump has been installed and is pumping reliably. It is being planned that the second pump will be replaced in the near future. Aside from replacing the feed pumps to satisfy operational and maintenance requirements of the system, a secondary project may be planned to enhance dosing control by the addition of a chlorine analyzer and sample line in the future.

Roofing, Gutters and Downspouts – Shingled roofing in poor condition. Downspout on southeast corner of building is missing.

Miscellaneous – Water leaking from the hillside behind the Chlorine Building; may be from a water line on Biggs St.

Recommendations:

Repair/restore concrete chamber on east side of larger reservoir.

Repair/replace damaged section of stairs in front of building.

Repair/replace step on newer portion of stairs where handrail is embedded.

Recaulk/seal the concrete drainage trough.

Replace or coat rusted sections of fencing along Biggs Street.

Remove leaves from the drainage troughs and site.

Remount fire extinguisher cabinet on the wall.

Paint soffit and fascia on building.

Repair/secure hand railing.

Secure hardware on Chlorine Room door.

Replace hot water tank.

Restore operation of fan in basement.

Restore operation of emergency lights.

Replace flapper valve in toilet.

Replace light key-switch and resolve operational problem with ventilation fan and damper.

Replace the second chlorine pump.

Install a chlorine analyzer and sample line to enhance control of chlorine dosing if warranted.

Provide timer control operation for the vent fan to reduce the corrosive air conditions inside the chlorine room.

Replace shingled roof.

Install downspout where missing.

Investigate source of and resolve underground water leak in embankment behind the Chlorine Building.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Millvale Pump Station

Condition:

General - Station constructed several years ago but never placed in operation, as water line piping in Millvale's distribution system failed in the test runs of the station. The use of this pump station in the future is not known at this time. If operation of the station is planned in the future then the deficiencies noted below would need to be addressed.

Pumping Equipment – Pumps and motors have been flooded in the past. Their present operating condition is not known as they have not been run since the flooding condition several years ago.

Instrumentation and SCADA System (includes flowmeters, suction/discharge pressure transmitters) – System is out of service, as parts were taken from the RTU to use elsewhere. System upgrade is planned in the near future (if station operation is implemented).

Pump Station Building Interior (Structural/Architectural) – Areas on floor and sidewalls are rusted. The access hatch cover has been damaged and jammed by traffic loading, whereby it is very difficult to open.

Electrical System (includes lighting and battery backup systems) – Battery in UPS system will need to be replaced. Switchgear/pump control panel, heater and dehumidifier were flooded in the past. The present operating condition of the switchgear is not known as the pumps have not been operated since the test runs prior to the flooding condition several years ago.

Recommendations:

Inspect all components of station, which may have been affected from flooding.

Remove, bake-dry, and test two pump motors.

Replace SCADA system components (if station operation is implemented).

Touch-up paint rusted parts of floor and sidewalls in pump station.

Address problems with the hatch cover.

Replace battery in UPS system.

Replace dehumidifier and heater.

Inspect electrical controls and replace any damaged or defective components.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Mission Pump Station - Including Mission Distribution Division Facilities

Condition: Pumping Equipment – All five pumps are in good running condition.

Interior Valves and Piping (includes pump isolation, control and surge valves) – Pump Check Valve No. 2 was rebuilt and No. 3 is currently being rebuilt. This has eliminated a lot of the water that was discharging onto the floor and into the basement. One surge valve on discharge header line has a pinhole in casing. Leaking surge valve on suction header line was repaired. Piping, including flange bolts, in the discharge valve vaults is badly rusted. A leak is suspected on the suction line in the center suction valve vault where it enters the basement, as water is leaking through the pipe wall penetration. The two suction valves inside the valve pits on northwest area of station lack operating nuts, gears and/or handwheels. Ground water is leaking into Discharge Valve Vault No. 4 where it abuts to the building.

Instrumentation and SCADA System (includes flow meters and suction/discharge pressure transmitters) – Poor condition. Replacement of the total SCADA System will be evaluated. The bearing sensor devices at the pumps are old and do not include a local readout temperature.

Site and Fencing – Fencing and entrance gate was replaced around the station on the north and west sides and part of the east side of the station. Manager requested that security cameras be installed to provide better site security. He also requested that a change of the gate key be considered to prohibit unauthorized access during nonworking hours. One of suction vaults has been covered over by sand/gravel stockpiles preventing operating the valve in the vault through the valve operator cover in the lid. The concrete jumper walk on the east side of the building is improperly sloped and has no handrail, which poses a safety concern.

Pump Station Building Interior (Structural/Architectural) – The ceiling was replaced in the first floor bathroom. The pump station has been cleaned up inside and all stored materials organized on shelving. All the lockers have been removed from the locker room. Plaster ceiling in north office is badly damaged from previous roof leaks. Walls, ceiling and drain line piping in men's locker room are in poor condition, also affected from roof leaks (now resolved) and water penetrating through the vehicle area floor above. Structural steel, piping, and conduit beneath the pumps are rusted from water, which had leaked from the pumps and valves through the floor openings. Flooring in the vehicle storage area is badly damaged and lifted in most areas. Manager requested that the room next to the first floor bathroom be converted to a women's bathroom and the present bathroom be designated as a men's room. Paint on walls of upstairs bathroom is peeling. Sand and gravel that entered the northwest vault needs to be removed. Paint on walls of the discharge valve vaults is badly peeled. Some of the concrete in the southeast valve pit is deteriorated. The boiler room door does not close completely to maintain 100% outside intake air as required.

Pump Station Building Exterior (Structural/Architectural) – Windows (Lexan material) in pump station area are badly weathered and can't be viewed through. Mortar joints in lower stone facing and much of brick around station are in poor condition. Water appears to be leaking into the soffit at northeast corner of building. Leaking was noted at the crenellation ledge at the north end of east wall where it abuts brick wall. Evidence of dampness noted on interior wall at this location. Sections of seam flashing on fascia on west wall are detached. Man door on east side of the building basement level is in poor condition and is not usable. The overhead door at the east side of building needs to be repaired. The door at the north penthouse is jammed in the frame and difficult to open/close. Material handling equipment for stockpiles against the building has damaged brick and stone. A roof drain downspout on the south wall is buried in the gravel stock piles.

Electrical System (includes lighting and battery backup systems) – The lighting fixtures in vehicle storage area were recently relamped. Switchgear system needs to be evaluated. All lighting in pump station is in poor condition. Battery backup system (inverter type) works but should be replaced with a stand alone UPS type unit to minimize the possibility of surges. Many of the exterior light fixtures do not work and should be replaced as requested by the Manager. Lighting in the north penthouse does not function. A 480 volt control transformer that serves the boiler was replaced. Exposed wires noted in a conduit at northeast corner of basement. Cover missing and exposed wires noted in a junction box next to lighting panel in vehicle storage area.

Heating and Ventilation Systems – Presently there is no ventilation in the office on north side of pump area. One unit heater in the pump area was repaired and two of the heaters in the basement were replaced. One of the three unit heaters in the pump area and one of the heaters in the basement are inoperable. One of four heaters in the vehicle storage area is inoperable. The first floor offices have no radiators for heat, only uninsulated piping, which poses a burning hazard and inability to control the heat. Pressure relief valve on the heating unit outside the Boiler Room is constantly leaking water onto the floor.

Plumbing System – Lavatory, shower, toilet fixtures and partitions in the men's basement locker room and the first floor bathroom are in poor condition and in need of replacement. Shower area in locker room needs to be upgraded. A hot water tank at the east end of the basement is not operational, as the gas supply has been disconnected. The drains in the upstairs bathroom clog readily and the slop sink drain is presently clogged.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Roofing, Gutters and Downspouts – The upper sloped, tiled roof on northeast corner appears to be leaking into the soffit area. The persistent leak on the roof on the north side has been resolved. Leak noted at the northwest roof drain line in the vehicle storage area. PVC roof downspout on the north side is split. A downspout at north east corner of building is damaged.

Miscellaneous – Crane hoist will be inspected again in the near future. Deficiencies have been noted and reported in the past. Wooden storage enclosure in the vehicle area is in poor condition and lighting in this room is nonfunctional due to roof leaks in the past. Manager requested that the wooden storage enclosure be removed and a security fence be installed around this storage area.

Recommendations:

Repair/replace surge valve on discharge header line.

Replace rusted flange bolts and paint the flange and surrounding piping in valve vaults.

Perform exploratory excavation on suction line outside basement.

Provide/install operating nuts on two suction valves inside valve pits on north side of station.

Seal the leak at Discharge Valve Vault No. 4 next to the building foundation.

Replacement of SCADA system in upcoming project.

Evaluate operation of bearing sensor devices and consider replacing with a digital type unit that would include a local readout temperature.

Evaluate installation of security cameras and change of the gate access key as requested.

Move sand and gravel stockpiles away from building, including the downspout on the south wall and remove materials from inside the northwest valve vault.

Reconstruct the concrete jumper walk on the east side of the building and install hand railing.

Replace plaster ceiling in office area of pump station.

Repair/repaint walls, ceiling, and drain line in men's locker room.

Prepare and coat the rusted structural steel, piping and conduit in basement area beneath the pumps.

Recoat the floor in the vehicle storage area to prevent water migration into the locker room in the basement.

Evaluate conversion of the first floor bathroom to a women's bathroom.

Repaint walls of upstairs bathroom.

Remove sand and gravel from inside northwest vault.

Paint walls of the discharge valve vaults and repair deteriorated concrete in the southeast valve pit.

Replace dulled Lexan window panes in pump station building.

Adjust or repair the door in the boiler room.

Repoint mortar joints in lower stone facing and brick around station.

Inspect/resolve leaking condition at soffit at northeast corner of building.

Inspect and reseal crenellation ledge around pump station.

Reattach seam flashing on fascia on pump station building.

Resolve problem with south penthouse door.

Replace man door and hardware on east side of building.

Repair overhead door at the east side of building.

Evaluate switchgear system.

Replace light fixtures in many areas of the station including the exterior fixtures and in the north penthouse.

Address exposed wires in a conduit at northeast corner of basement.

Address missing cover and exposed wires noted in a junction box next to lighting panel in vehicle storage area.

Replace battery backup system (inverter type) with a stand alone UPS type unit.

Install exhaust vent fan and intake louver in the office on north side of pump area.

Repair/replace inoperable unit heaters in pump area, basement, and vehicle storage area.

Install radiators in office areas and insulate the steam piping.

Replace leaking pressure relief valve on the heating unit outside the boiler room.

Replace plumbing fixtures in first floor bathroom.

Replace plumbing fixtures and the shower in the basement locker area.

Remove abandoned water heater in pump basement.

Clean drains or replace drain piping in the upstairs bathroom.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

Inspect gutters on leaking upper sloped, tiled roof in northeast corner for blockages.

Investigate leak at the northwest roof drain line in the vehicle storage area.

Replace PVC downspout with metal one and confirm that drain boot is not clogged.

Repair or replace downspout at north east corner of building.

Address deficiencies with the Crane Hoist.

Replace wooden storage enclosure with fencing installed around storage area.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Saline Pump Station

Condition: Pumping Equipment – All pumps are in good operating condition. Pump No. 1 was rebuilt.

Interior Valves and Piping (includes pump isolation, control and surge valves) – All three Willamette ball-type control have been replaced with cone-type valves by Operations Staff. Piping in the subfloor trenches is rusted and/or paint peeling.

Instrumentation and SCADA System (includes flowmeters, suction/discharge pressure transmitters) – Analog-type RTD Bearing sensor devices are failing. Some have been removed and others are not functional. Replacement of entire SCADA System is being evaluated. Operational problems with the SCADA equipment were recently resolved.

Access Road and Pavements – Sidewalk in front of pump station is badly deteriorated.

Site Fencing – Vegetation is growing on fencing at rear of the station.

Pump Station Building Interior (Structural/Architectural) – Ceiling paint peeled where automatic air vents failed open in the past.

Electrical System (includes lighting and battery backup systems) – Switchgear system needs to be evaluated. The battery backup system is no longer operable and needs to be replaced.

Heating and Ventilation Systems – Bird screen on ventilation air intake is damaged and the damper is presently blocked open.

Roofing – Holes were noted in the roofing membrane at the base of the perimeter flashing. Soft spots noted in the roofing insulation, indicating that the roof membrane may be leaking.

Drainage System – Copper drain lines piped from pump base plates are too small to handle drainage water from pump seals.

Auxiliary Systems – The fire alarm system is not in service. Its operation should be evaluated and the system upgraded as necessary to restore trouble-free service.

Recommendations: Paint piping in the subfloor trenches.

Replace SCADA system in upcoming project.

Replace analog-type RTD devices with digital type.

Replace sidewalk in front of pump station.

Remove vines and vegetation from fence at rear of site.

Repaint ceiling in pump station after any roof leaks are resolved.

Inspect/clean switchgear system and address deficiencies as needed.

Replace battery backup system with UPS type system.

Repair/replace bird screen and damper at ventilation air intake louver.

Resolve/repair leaking roofing.

Replace copper drain lines from pump bases and pump control valve vents with larger 2-inch diameter drain piping.

Evaluate fire alarm system and upgrade as necessary to restore trouble-free service.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Spring Hill Tanks

Condition: Interior Tank – KTA-Tator conducted a detailed inspection last year of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report. Deficiencies will be corrected in an upcoming contract.

Exterior Tank and Appurtenances – See above.

Tank Appurtenances (ladders, hatchways, overflows, drains) – See above.

Instrumentation and SCADA System – SCADA System is not functional, whereby the PLC needs to be replaced as soon as possible. Replacement of the entire SCADA System is being evaluated.

Site Fencing – Poor condition with sections collapsing. Heavy vegetation is growing on many sections.

Recommendations: Address recommendations from KTA-Tator relative to the tanks and appurtenances.

Replace SCADA system PLC to restore communication with the OC Center in the interim period until the SCADA system is replaced.

Replace fencing.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Squirrel Hill Water Storage Tank

Condition: Interior Tank – KTA-Tator recently conducted a detailed inspection of the tank interior, tank exterior, exposed portion of the tank foundation, corrosion protection systems (if present) and all tank appurtenances. See the associated report. Deficiencies will be corrected in the future as noted and recommended.

Exterior Tank and Appurtenances – See above.

Site Fencing – Vegetation growing on fencing around site. Barbed wire missing from sections.

Site Lighting – Air travel clearance light on top of tank requires frequent bulb change and is unsafe to access.

Site Building Exterior (Structural/Architectural) – Metal shed, which is housing the level and telemetry equipment, is in poor condition.

Chlorination Facilities – By way of a contract presently in place, BissNuss along with PWSA and the Emergency Sewer Contract have provided a new building on site to house new Booster Chlorination Facilities to reduce THM's in the Distribution system. The facilities are installed except for the final electrical connections. Pending testing and startup services, soon to be scheduled, these facilities will be placed on line. Required taps in the water lines will be completed by PWSA as planned.

Recommendations: Address recommendations from KTA-Tator relative to the tanks and appurtenances as noted and required in their inspection report.

Remove vegetation and replace missing barbed wire on site fencing.

Replace air travel clearance light on top of tank with a strobe style light.

Replace site building; including electrical, lighting, heating and ventilation equipment, to protect level and telemetry equipment.

Complete installation of Booster Chlorination Facilities and put into operation.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Clarifiers and Residual Sludge Distribution Chamber

Condition: Clarifier Building Exterior (Structural/Architectural) – Expansion joints in tank walls continue to leak despite having been resealed in the past. Leaks in the exterior clarifier walls still persist in (10) of the (14) joints, (4) of which, are substantial leaks. Leak at (N-5) on north side of clarifiers is causing major icing problems on the access roadway. These joint leaking problems are being addressed in an upcoming project.

Clarifier Building Interior (Structural/Architectural) – The clarifier expansion joints on the interior walls, which are common to the influent and effluent flumes, have major leaks. The common horizontal joint between the influent and effluent flumes also leaks. This condition makes it very difficult to isolate the screening facilities from the clarifier influent flume and to perform maintenance activities in a drained basin. These leaking problems are being addressed in an upcoming project. The monorail door has been replaced.

Electrical and Controls – The covers are off of I/O Racks 15 and 16. The Motor Control equipment is being replaced in an upcoming project involving replacement of equipment in Clarifier No's 1-3. The electrical room will be climate controlled. Conduit with exposed wires noted lying on the ground at northeast corner of clarifiers. Cover panel was removed from one of MCC cabinet sections.

Heating and Ventilation Equipment – (5) of the (8) vent fans on the clarifier roof do not appear to be operational. Although (3) fans are running, the intake louvers are closed. The heating system air handlers on the Screen Room roof are not running, whereby there is presently no heat being delivered to the Clarifier Building. See report for Screen Room, where the heating units are located.

Roofing, Gutters and Downspouts – Metal roof is badly rusted over the entire area, being more concentrated along the edges of all panels. Several rain gutters and downspouts are rusted and leaking. Vent flashing boots at the east end of roof are deteriorated and leaking water through the roofing.

Mechanical Systems (water, plumbing, sanitary) - Sections of the insulation and jacketing on the steam piping in the exterior trench along the south side of the clarifiers have been damaged.

Clarifier Equipment – Sludge collecting drive units, chain and flights and screw conveyors in Clarifier No. 4 are being replaced in a current project. Some of the sludge collection equipment is not operational in Clarifier No. 1 and 2. Sludge collecting drive units, chain and flights and screw conveyors in Clarifier No.'s 1, 2 & 3 will be replaced in an upcoming project in the near future.

Many of the effluent troughs leak in the clarifiers whereby maintenance activities in a drained basin are hampered. This problem is being addressed in the upcoming project relating to the repair of the Clarifier joints. The grating had broken at the center sludge collecting pit at Clarifier No. 2 and been removed.

Valves and Gates – Sludge valve No. 1 has been replaced. Operations Staff will replace Valve No. 3 in the near future. All other valves and gates are in good operating condition.

Residual Sludge Distribution Chamber – Sluice gates, valves and instrumentation are in good working condition.

Exterior - Site - Accumulated silt material in the steam-piping trench should be removed to reduce the growth of the vegetation. Concrete sidewalk near carbon unloading area is deteriorated.

Miscellaneous - The fire extinguisher was installed at the MCC area.

Recommendations: Resolve leaks in the interior and exterior clarifier joints, in the slab between the influent and effluent flumes, and in the effluent troughs. Leakage water from Clarifier No. 5 should be conveyed to the nearest storm sewer until the joint leaks are resolved.

Reinstall covers on I/O Racks 15 and 16.

Address conduit with exposed wires lying on the ground at northeast corner of clarifiers.

Reinstall cover of MCC cabinet section.

Resolve malfunctions and/or insure that all vent fans and intake louvers are operational.

Prepare and paint rusted areas on metal clarifier roof.

Repair/replace leaking gutters and downspouts.

Replace damaged sections of steam piping insulation and jacketing in the exterior trench along the south side of the clarifiers.

Replace sludge collecting equipment including, drives, sprockets, chains and flights in the upcoming projects.

Replace damaged grating at the center sludge collecting pit at Clarifier No. 2.

Replace Sludge Valve No. 3.

Remove accumulated silt material from the exterior steam piping trench at the south side of the clarifiers.

Replace deteriorated concrete sidewalk near carbon unloading area.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Gatehouses, Fluoride Building, and Clearwell

Condition: Inlet Gatehouse - Vegetation is growing on walls of building. The supply fan or humidistat controls and air louver actuator are inoperable. Lighting and heating unit are good. Electrical starter cabinets are badly corroded. Noted open conduit that passes through the front of the building, thereby enabling rodents to enter the building. The open tee section on the heater flue pipe should be closed with a metal cap in lieu of the plastic cover. Fire extinguisher is outdated. Minor rust noted on roof. Clearwell level instrumentation does not function.

Outlet Gatehouse - Vegetation is growing on walls of the building. The exhaust fan operates, but the supply air louver is in poor condition and the actuator is inoperable. Lighting and heating unit are in good condition. The coating on the roof is peeling. Paint on soffit and fascia is peeling. The roof downspout at the northeast corner has been disconnected. Wiring is exposed at the unit heater. Handwheel is off of the stand of one of the flume drain valves.

Fluoride Building – Second feed pump has been replaced. The corrosive environment inside this building is deteriorating everything inside of it, including equipment, controls, heaters, exhaust ducts, thermostats, wall paint etc. One of the two vent fans operates only in the "manual" mode and the second one can not be operated due to deteriorated controls. The two supply air louver actuators are inoperable with one in an open position. Because chemical fumes accumulate inside the building, the method of control of ventilation should be evaluated. See "Recommendations". Two of four unit heaters are not functional. The other two unit heaters are presently being replaced. A control thermostat is hanging off west wall with exposed wiring. Lighting fixtures are in poor condition and some fixtures have fallen off the ceiling due inadequate supports. Proper operation of the emergency lighting system needs to be verified. The fire extinguisher is outdated. Vegetation is growing on walls of building and around the south and west sides of building. A tree is growing very close to the building and should be removed. Rusted areas of roof have been touch-up painted and vent pipe penetrations reflashed. Soffit and fascia on west side needs to be painted. The safety shower is very old and in poor condition. The hatch covers over the exterior chemical piping and electrical conduit access pits are badly deteriorated. One of the two tank level indicators does not function. The two abandoned air compressors and electrical disconnect switch should be removed from the building. Door on east side of building has a broken closer device.

Filtered Water Reservoir (Clearwell) - The outside lighting is in poor condition and/or nonfunctional. A project study has been conducted and report completed by HDR and Malcolm Pirney regarding the Upgrading of the Clearwell. It addresses the cleaning, renovation of the Clearwell, installation of a dividing wall and structural and mechanical deficiencies of it. Funding for this project is being sought.

Recommendations: Inlet Gatehouse

Remove vegetation from the walls of building.

Resolve operational problems with vent fan and replace supply air louvers and actuators.

Ventilation fans should be tied into the light circuit and also be activated using a timer and an overriding thermostat.

Replace heating units or remove abandoned units if not needed.

Coat electrical starter cabinets.

Seal open conduit that passes through the front of the building.

Cap the open tee section on the heater flue pipe.

Update charge for fire extinguisher.

Restore functioning of Clearwell level instrumentation.

Outlet Gatehouse

Remove vegetation on building.

Replace supply air louver actuator.

Recoat the roof.

Repaint the soffit and fascia.

Reconnect roof downspout at the northeast.

Conceal exposed wiring at the unit heater.

Install handwheel on stand of one of flume drain valves.

Fluoride Building

Ventilation fans should be tied into the light circuit and be activated otherwise using a timer and an overriding thermostat.

Replace deteriorated and/or malfunctioning controls for HV equipment.

Resecure control thermostat on west wall.

Prepare and repaint walls.

Replace supply air louver actuators.

Replace lighting fixtures with a chemical-resistant sealed type fixture. Provide adequate supporting.

Resolve operational problems with emergency lights.

Update charge in fire extinguisher.

Remove vegetation from the walls of building, tree next to building and around the south and west sides of building.

Repair or replace deteriorated sections of soffit and fascia and repaint on the west side of building.

Replace safety shower.

Replace hatch covers over the chemical piping and electrical conduit access pits with corrosion resistant material.

Restore operation of tank level indicator.

Remove abandoned air compressors and electrical disconnect switch.

Repair/replace closer device on east door.

Filtered Water Reservoir (Clearwell)

Continue planning for restoration of the clearwell in a pending project.

Replace outside lighting.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant

Operations Building, Operations Control Center, and Laboratory

Condition: Building Exterior (Structural/Architectural) – Cracked concrete and exposed rebar on wall corner at loading dock. Both Dock Levelers are inoperable. Operations Staff recommends removal of both units, replacing one of them and plating over the second one. The concrete pad at the air conditioning unit is undermined.

Building Interior (Structural/Architectural) – Old wood grid ceilings, along with lighting fixtures and ventilation diffusers, are planned to be replaced in all areas, where present, under the Laboratory Renovation project.

Water leaches through cracks in the floor of the basement. If necessary a sump pump may be warranted to reduce ground water pressure and/or cracks should be pressure-grout sealed. There is an open pipe core in Mechanical Room wall that would enable entry of rodents. The sub-basement pipe trench is flooded with three feet of water, whereby it can not be accessed.

Heating and Ventilation – Flexible connector at the "General Lab" roof ventilation fan is cracked. One of instrument air compressor cylinders in Mechanical Room is out of service due to a broken belt. Water leaking from condensate unit in Mechanical Room is not contained and floods the floor. Some of air damper controls in the building are unreliable and need to be replaced. Unit heater in walkway to Filter Building is not operational. The heat and ventilation duct system needs to be cleaned for the entire building. Ventilation grills above the toilet area on first floor are missing.

Electrical Systems – Various emergency lighting units throughout the building do not appear to be operable. A receptacle cover is missing on the exterior south wall in the basement access area. Lighting in the Mechanical Room is poor. Covers were removed from two electrical junction boxes with exposed wiring at northeast corner of basement.

Roofing – Roof is in good condition.

Operations Control Center SCADA System – Upgrade/replacement of SCADA system is planned in the near future. It was reported that there are few spare parts available to service and to maintain operations of SCADA system with minimal interruption when equipment failures occur.

Laboratory - The laboratory furniture and equipment is being replaced under the current Laboratory Renovation project.

Miscellaneous – The Chromalox pavement heat control unit at the loading dock has detached from the supporting conduit and is hanging from its electrical power wire. Settlement of the concrete ramp, for which this controller serves has probably damaged the heating elements, therefore repair of the system may not be warranted. The unsupported control unit should be removed. Fire extinguisher is missing in the Mechanical Room. Cover is off water fountain in the hallway toward the filters.

Recommendations: Repair cracked concrete and exposed rebar on the wall corner at loading dock.

Remove both inoperable dock levelers; replace one unit and plate over the second one.

Install stone fill at concrete pad at the air conditioning unit.

Address problem with water infiltration through the basement floor.

Seal open pipe core in the wall of Mechanical Room wall.

Pump water out of and resolve flooding problem in sub-basement pipe trench, possibly installing permanent sump pumps.

Repair/replace flexible connector at the "General Lab" roof ventilation fan.

Restore full operation of instrument air compressor in Mechanical Room.

Rebuild condensate pumps in Mechanical Room and collect and convey any seal water leakage from the condensate unit to drain.

Replace HV air damper controls as necessary.

Replace unit heater in walkway to Filter Building.

Clean heat and ventilation duct system serving the building.

Replace missing ventilation grills above the toilet area on first floor.

Upgrade lighting in Mechanical Room.

Restore operation of emergency lighting units in building.

Replace receptacle cover on south exterior wall in the basement door access area.

Reinstall covers on two electrical junction boxes at northeast corner of basement.

Upgrade/replace SCADA system in upcoming project.

Procure spare parts as needed to service and to maintain reliable operations of SCADA system in the interim period until the system is replaced.

Remove the pavement heat control unit at the loading dock.

Provide fire extinguisher in the Mechanical Room.

Reinstall cover on water fountain in the hallway toward the filters.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant

Rapid Sand Filters

Condition: Filters – Filtering system, including the underdrains, filtering media, and backwash/air manifold piping, is being replaced under a project currently under design by CDM. Operations Staff is presently installing filter media in many of the filters where it is low in order to maintain effective filtering operations. All filters are presently in service, except where filtering media is being placed.

Interior Valves – The 84-inch control valve from the Sedimentation Basins is propped open due to a nonfunctional hydraulic actuator and related controls. Many of the filters are experiencing numerous mechanical problems with the effluent and backwashing valves, resulting in cumbersome manual backwashing operations. Some of the hydraulic valve actuators in the piping gallery are leaking. Backwash valve actuator at Filter No. 5 is leaking badly. Valve actuators will be rebuilt and/or replaced in the upcoming renovation project.

Interior Piping – Operations Staff is working to paint the piping in the Pipe Gallery. The backwash piping at the northwest area of the Pipe Gallery is badly corroded. The coupling on this line at the west end of the Pipe Gallery is leaking. Many of the air scour lines piped into the underside of the filters are leaking through the pipe penetrations in the concrete ceiling in the North and South Garages, especially at Filter No. 6.

Filter Control System (Electronic and Hydraulic systems) – Noted leaking utility water control lines at many of the Leopold Valve Packs, including packing at many of the isolation valves. System components will be replaced/upgraded in the upcoming rehabilitation project.

Backwash Pump and System – The pressure regulating valve in the Backwash valve pit is leaking water through a disconnected control line pipe. Backwash Pump, including the spare unit, will be rebuilt under the upcoming filter renovation project.

Filter System Auxiliary Systems - Some of fiberglass backwash troughs in the filters have been damaged in the past, resulting from failure of their support at the wall. The integrity of the trough supports should be evaluated.

Air Scour Blower Room - Air Scour Blower No. 2 is off and out of service. Heater is not operable. Damper was removed on the air supply duct.

Backwash Wastewater – Design and construction of a backwash water holding tank with pumping facilities and dedicated force main are being proposed in the upcoming filter renovation project to provide more efficient recycling of backwash

water to the head of the plant. This tank will supplement the present holding tank, which is located next to the West Intake Structure.

Instrumentation - Many of the turbidity meter taps are leaking and turbidity sample line at Filter No. 4 is cracked and leaking. Abandoned BIF instrumentation at west end of South Garage should be removed.

Building Interior (Structural/Architectural) – Some of the cracks in the ceiling of the North and South Garage (beneath the filters) leak water from the filters. The grating over the piping/valve pits at the west end of the North and South Garages and Pipe Gallery is badly rusted and deteriorated. Water discharging from a pipe penetration at the pipe/valve pit at the west end of the South Garage was identified as coming from a sheared drain line pipe from the South Effluent Water conduit. The concrete floor has settled in the Pipe Gallery adjacent to this drain line. This pipe/valve pit remains flooded due to overloading of the sump pump until the sheared pipe is repaired, with the excess water overflowing to the river. A project is being planned to address repair of this sheared pipe and grouting of the voids under the floor. The valve pit at the west end of the North Garage is filled with water, which is backed up from the flooded pit in the South Garage. The frame of the access door from Pipe Gallery to the west end of South Garage was knocked out of alignment. Exterior door at east end of North Garage is jammed and hard to open. Leak noted in the wall common to the Effluent Water Conduit in the North Garage at Filter No. 14. The roll up housing was removed from the overhead door at the west end of the South Garage.

Building Exterior (Structural/Architectural) – Areas of spalling and deterioration of concrete walls at the west half of the south side of the building exterior. Some minor deterioration also noted on the north side of the filters.

Electrical System (includes lighting) - The lighting at the filters and in the pipe gallery has been improved with placement of new lamps. Many of the lights in the garage areas are not lit or are not operational. Some light fixtures have been removed in the North Garage and wiring left exposed. Many of the emergency lighting fixtures do not operate throughout the Filter Building. Electrical junction box covers are off, with wiring hanging out at the sewage sump in South Garage and at the heating unit at the east end of North Garage. Receptacles and covers were removed in North Garage at Filters No.'s 2, 4 and 8. Cover was removed from the control panel at the overhead door at west end of North Garage.

Heating and Ventilation – Leaks noted in the condensate line at east end of North Garage. Presently there is no heat being delivered into the North Garage, resulting in conditions of high humidity and formation of heavy condensation. The heating system condensate pumps on the east end of North Garage area are leaking. One of the pumps is out of service due to an electrical malfunction. Air handling-type heating unit at east end of South Garage has been abandoned, as it has been replaced with an overhead steam unit heater. The heating units at the west and east ends of the North Garage are not operable. Condensate unit at the east end of South Garage is leaking water. Some of the unit heaters in the Filter and Pipe Galleries are not operable. The two heat/ventilation fans between the Pipe Gallery and the two garages are off or not operational. The vent fan at the exterior southwest corner of building has been removed. Vent fan next to sewage sump in South Garage is not operational. The motor operators on the louvers at all four corners of the Filter Building have been removed, rendering the automatic louvers non-functional. Steam-flash hammering is present in the steam piping system at the east end of the North and South Garages.

Plumbing – The toilet at the east end of the South Garage is out of service.

Roofing – Good condition.

Drainage System and Sump Pumps – Water noted in valve pit at east end of the North Garage. Sump pump is not operational, as motor has been removed. One of sewage sump pumps in the south garage is nonfunctional and the other one is in poor condition and unreliable.

Distribution Yard Valves - Operating condition is not known, as they have not been operated for several years.

Chemical Storage and Feed Systems – Tanks and pumps have been installed at the east end of the North Garage to serve the Prefilter Chlorination process. Tanks have been installed at the west end of the North Garage to serve as a backup for the Disinfection Chlorination process that is normally served from the Sodium Hypochlorite Building. Construction of containment walls around both sets of storage tanks are being planned under a project in the near future. See Ross Pump Station and Chemical Facilities; Chemical Conveying/Piping Systems.

Miscellaneous – Weather hood on airline at the south end of the exterior west wall is turned sideways. The top is missing from the fire extinguisher cabinet at the gasoline pump. Noted that there are no fire extinguishers in the Filter Gallery. The Chromalox pavement heat control unit at the east door has detached from the supporting conduit and is hanging from its feed wire. Metal lid on chemical line vault on north side of filters is broken (section missing). Noted core-drilled opening in exterior wall at Filter No. 10, which would enable entry of rodents.

Recommendations: Renew filter media as necessary to maintain effective and efficient filtering operations until upcoming renovation project.

Repair or replace the actuator and related controls on control valve from Sedimentation Basins.

Address malfunctions with filter backwash and effluent valve operations by repairing or replacing faulty hydraulic valve actuators and/or hydraulic system control devices, especially at Filter No. 5 (As required until upcoming filter renovation project). Maintain a supply of spare parts and components on hand, including complete actuators as needed.

Continue to repaint piping in Pipe Gallery.

Resolve leaks in corroded piping and at coupling on backwash line at the west end of Pipe Gallery.

Repair leaks in air scour lines piped into the underside of filters in the North and South Garages, especially at Filter No. 6.

Resolve leaks in utility and hydraulic water lines and valves at filter valve control station racks in Pipe Gallery.

Reconnect control line on pressure regulating valve in the Backwash Valve pit.

Rebuild Backwash Pump, including the spare unit under the upcoming filter renovation project.

Evaluate integrity of fiberglass backwash trough supports at the filter walls.

Restore operation of Air Scour Blower No. 2 and heater in Blower Room. Reinstall operable damper on the air supply duct.

Eliminate leaks at turbidity meter taps and repair turbidity sample line at Filter No. 4.

Remove abandoned BIF instrumentation at west end of South Garage.

Reseal major leaking cracks in ceiling of the North and South Garages, beneath filters.

Replace grating over the piping/valve pits in west end of North and South Garages and Pipe Gallery.

Address repair of the sheared Effluent Water Conduit drain line and grout filling of voids under the concrete floor at the west end of the Pipe Gallery under upcoming planned project.

Realign and re-anchor door frame at southwest area of Pipe Gallery.

Resolve problem with exterior door at east end of North Garage.

Resolve leak in wall common to the Effluent Water Conduit in the North Garage at Filter No. 14.

Reinstall roll up cover on overhead door at the west end of the South Garage.

Repair deteriorated areas of concrete walls at the south side and north side of the building exterior.

Re-lamp and/or replace nonfunctional or missing light fixtures in the garage areas.

Restore operation of emergency lighting fixtures throughout the Filter Building.

Reinstall electrical junction box covers at the sewage sump in South Garage and at the heating unit at the east end of North Garage.

Reinstall receptacles and covers where removed in North Garage at Filters Nos. 2, 4 and 8.

Reinstall cover on control panel at the overhead door at west end of North Garage.

Repair and/or replace piping in the condensate line at east end of North Garage.

Repair leaks in heating system condensate pumps on the west end of North Garage and/or collect and convey water to drain.

Restore operation of second condensate pump at east end of North Garage area.

Repair heating unit at west end of the North Garage or replace it with an overhead steam unit heater and remove the abandoned heating unit.

Remove abandoned air handler system at east end of the South Garage or restore its operation.

Replace the vent fan at the southwest corner of building that has been removed.

Repair the unit heaters in the Filter and Pipe Galleries.

Restore operation of the two heat/ventilation fans between the Pipe Gallery and the North and South garages.

Install new vent fan at the exterior southwest corner of building and restore operation of vent fan next to sewage sump in South Garage.

Install actuator devices to automate the operation of the air intake louvers at corners of Filter Building.

Resolve steam-flash hammering in the piping system at east end of the North and South Garages. Operations Staff suggests placing heaters on the condensate line.

Restore operation of toilet at the east end of the South Garage.

Restore operations of sump pump in valve pit at east end of North Garage or replace with submersible type. Remove old sump pump if replaced.

Replace both sewage sump pumps with submersible type pumps.

Install containment around newly installed sodium hypochlorite tanks at both locations in the North Garage as planned in upcoming project.

Rotate weather hood on the air line at south end of the west exterior wall.

Replace the top of the fire extinguisher cabinet at the gasoline pump.

Provide fire extinguishers in the Filter Gallery.

Resupport or remove the pavement heat control units at the east overhead door.

Replace metal lid on chemical line vault on north side of filters.

Seal core-drilled opening in exterior wall at Filter No. 10.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Raw Water Intakes – East and West Intake Facilities and Backwash Retention Basin

Condition: East Intake Building – The entrance door and hardware are in poor condition. Fire extinguisher is missing and cabinet door glass is broken. Vegetation noted on building. Sample pump is in good operating condition.

East Intake Sluice Gates Screens - Sluice gates are in working condition. The two bar screens are in poor condition and in need of replacement. There is much debris and river sediment in front of the screens.

West Intake Building - The entrance door and hardware is in poor and inoperable condition. Entrance access sidewalk in front of building is badly settled and/or missing. The soffit and fascia is deteriorated. Lighting is poor and should be upgraded to Metal Halide or HPS.

West Intake Gates - The down-river sluice gate gear operator is out of service and needs to be rebuilt. The second gate is very hard to operate. The eight sluice gates outside the building are totally inoperable; however restoration of their operation is not warranted at this time.

Backwash Retention Basin – Accumulation of filter media coal was recently removed from the basin. Mixer in this basin does not operate. The isolation / control valve on the effluent discharge line has been removed and needs to be replaced. The usage of this basin will be supplemented by installation of a new storage tank in the upcoming filter renovation project. It will be utilized as an overflow structure to back up the operation of the new recycle pump station. See "Rapid Sand Filters". The mixer will be removed and the above control valve replaced in this project. The concrete at the outside face of the south wall noted to be in poor condition.

Recommendations: East Intake Building, Sluice Gates and Screens
Replace the entrance door and hardware.
Repair fire extinguisher cabinet and provide an extinguisher.
Remove vegetation from outside of building.
Replace the bar screens; remove sediment from front of screens.

West Intake Building and Sluice Gates
Replace the entrance door and hardware.
Replace sidewalk.
Repair/replace and paint the soffit and fascia.
Upgrade Lighting to Metal Halide or HPS.
Refurbish the sluice gates and operators as required.

Backwash Retention Basin
Replace isolation / control valve on effluent discharge line.
Remove mixer in the basin.
Repair/restore concrete at the outside face of the south wall of basin.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Ross Pump Station and Chemical Facilities

Condition: Pumps – Pump No. 1 was rebuilt and is currently in service. Pump No.'s 2 and 3 are in full service although it is planned to have these pumps and the motor and pump check valve control at Pump No. 2 inspected and needed repairs addressed in an upcoming pump repair contract. Pump No.'s 3, 4 and 5 have electrical switchgear problems.

Interior Valves and Piping (includes pump isolation, control and surge valves) – Present hydraulic controls at pump control valves at Pump No.'s 1, 2 (noted above) and 5 are problematic, requiring a lot of maintenance.

Outside Valves and Piping - A leak is present in one of the distribution valve manholes in front of the pump station which discharges water into the emergency access tunnel area, and in turn discharged into the main building sump.

Instrumentation and SCADA System – The bearing sensor devices at the pumps are old and do not include a local readout temperature. Upgrade/replacement of the entire SCADA system is being evaluated.

Pump Station Building Interior (Structural/Architectural) – Rusting and deterioration of the electrical conduits, hand railing and piping and peeling paint on the walls noted at the northeast corner of the pump area. Interior wall between the chemical area and Boiler Room, constructed of drywall, is badly damaged, especially near the loading dock. Door and frame were removed from the west door of the Electrical Room in the Chemical area. Floor in the lime handling area is deteriorated. Some of wall control joints in pump area and in suction valve pit at Water Pump No. 2 leak ground water and should be grout sealed. Noted and reported that chemical dust migrates from the handling area to the control/office areas. Noted obsolete and unusable materials and parts stocked on the third floor.

Pump Station Building Exterior (Structural/Architectural) – Stone on the lower portion of the south wall of station is badly deteriorated. Areas of stone facing around the station need to be repointed or recaulked. The pipe penetration on the east brick wall needs to be patched or sealed. Vegetation is growing on the front and sides of the station.

Electrical System (includes lighting and battery back-up systems) – Many light bulbs in the pump area are out. The light fixtures are old mercury vapor type which warrant replacement. Lighting fixtures on the second floor (including the air handler equipment room) and third floor chemical areas are in poor condition with many lamps out. The Motor Control equipment is outdated and unreliable. Replacement of the MCC equipment is being addressed in an upcoming project in the near future. Electrical exciter at Pump No. 3 motor is malfunctioning. Emergency light fixtures throughout station do not operate. Cover is off of electrical junction box and wiring hanging out near the Deaerator Unit on third floor.

Heating and Ventilation – Two roof-mounted belt driven ventilation fans on third floor are not operable (drive belts are off). There appears to be no ventilation in the chemical feed area. Leak noted in steam line in overhead walkway to Screen Room, causing icing problem at walkway steps at the east end of the Screen Room. Vent fan in ceiling of overhead walkway is not operable.

Plumbing System – Packing leaking badly at valve on 6" water line at northwest corner of station at the lower mezzanine platform.

Dehumidifying System in Valve Vault at Pump No.'s 1 and 2 – Dehumidifier is not operational. Piping and grating in the East Valve Pit is badly rusted and needs to be painted. Water noted to be constantly flowing from Discharge Valve No. 1 in this pit should be investigated. The metal roofing is rusted over the entire pit. The top of the concrete valve vault next to the Dehumidifier enclosure is deteriorated, probably due to missing roof downspout in this area.

Roofing, Gutters and Downspouts – Metal roof rusted in areas mainly at the pipe penetrations. Roof drain downspout missing on the northeast corner of station and lower portion of downspout is missing on southeast corner.

Drainage System and Sump Pumps – Turbine type drainage pump in pump area is in poor condition and out of service. The gas-driven stand-by pump in pump area is inoperable, probably intended to handle flooding waters. Both of submersible sump pumps are in good operating condition; however it's reported that these pumps have many maintenance issues, requiring replacement often. Sump pump at Water Pump No. 3 is out of service and been temporarily replaced with a portable submersible pump. Sewage sump pit cover is open and the vent fan in this area is not functional. Also see "Outside Valves and Piping".

Gas Building on the east side of station - Door is in poor condition and lower panel is missing.

Chemical Storage and Feed Equipment and Systems – Existing Lime Feed equipment has been replaced with new equipment installed by Operations Staff. A new lime conveying system was installed between the two lime bins by BissNuss. The Bindicator level devices for dry chemicals are not functional. The Bindicator liquid tank level devices are not functional. The Potassium Permanganate Feeder equipment does not provide reliable operation and does not adequately contain chemical dust. Bin dust-collectors on third floor have not been inspected or serviced for an extended period of time to verify effective and efficient operation. The soda ash product is delivered at times with solid clumps, whereby the feeders readily clog. To address this, a screen may be installed at the chemical fill line inside the two bins in the near future. The soda ash pump at Bin No. 4 was operating noisily, and reported to routinely have couplings fail. Vibrator at Bin No. 7 is inoperable. Ferric Chloride pumps are old and in need of replacement to maintain reliable service. There is a lot of chemical dust on the floor on the third floor including the tops of the

bins resulting from a lime unloading system leak. The dry chemical feeder totalizers do not work at Bin No.'s 4, 7 and 9.

Sodium Hypochlorite Building – Good condition, however, sections of roofing counter flashing are dislodged and need to be recaulked. Operations Staff recently replaced failed vertical sump pump. The Sodium Hypochlorite tank that is presently serving as a caustic soda tank has not been relabeled as such. Leaking noted at pressure gauge tap, level instrument piping and outlet shut-off valve at above tank. Numerous leaks noted in caustic soda piping system. East safety shower pedal actuator is broken. Both vent fans do not operate. Steam leak or discharge noted next to air handler system.

Chemical Conveying/Piping Systems - The lime piping to the Screen Room is clogging often and being "pigged out" routinely. Operations Staff suggests that the lines need to be jet cleaned. The sodium hypochlorite feed piping throughout the plant has been a continued maintenance problem whereby it readily clogs, especially at valves and fittings due to the deposition of minerals in the dilution water. The possibility of feeding the chemical without the dilution water is being evaluated. The Operations Staff has installed storage tanks at the east and west end of the North Garage beneath the Rapid Sand Filters in order to be closer to the dosing points, eliminating the need to be conveyed through the clogging-prone piping system. This chemical is presently being fed exclusively from this location. Also see "Rapid Sand Filters" where these tanks are installed.

PWSA replaced underground soda ash piping system for a second time from Ross Pump Station to the discharge point in the Inlet Gatehouse, due to total blockage from chemical deposition. The line inside the station also needs to be replaced for a second time. Operations Staff are evaluating utilization of a package boiler system to heat the chemical solution without having to utilize the main boilers in the pre and post-heating seasons. Relocation of the storage and feed equipment is also being evaluated.

Miscellaneous – Overhead crane rail system and hoist are old, although in working condition. It is scheduled to be evaluated in the near future.

Recommendations: Inspect and address needed repairs for Pump No.'s 2 and 3 and the motor and check valve controls at Pump No. 2 in an upcoming pump repair contract.

Repair or replace the present hydraulic controls for pump control valves at Pump No.'s 1, 2 (noted above) and 5 with a Rodney Hunt controller, same as installed at Pump No. 3.

Resolve leak in one of distribution valve manholes in front of the pump station.

Upgrade/replace SCADA system, including all computer equipment.

Coat and/or replace rusted deteriorated conduits, hand railing and piping and paint walls at the northeast corner of pump area.

Replace damaged areas of drywall in chemical area with a more durable building material.

Reinstall door on Electrical Room.

Coat floor in the lime handling area.

Grout-seal leaking wall control joints in pump area.

Evaluate construction of a partition wall with access door and viewing windows between chemical handling area and control/office area.

Remove obsolete and unusable materials and parts from third floor.

Repair/restore stone on the lower portion of south wall.

Repoint and/or recaulk areas of the stone facing around station.

Patch/seal pipe penetration on the east wall.

Remove vegetation from the building.

In the pump area replace mercury vapor type light with metal halide or high-pressure sodium type.

Replace lighting fixtures on the second floor (including the air handler equipment room) and third floor chemical areas with chemically resistant sealed type of fixtures.

Replace MCC equipment in an upcoming project.

Resolve malfunctions with electrical exciter at Pump No. 3 motor.

Restore operation of emergency light fixtures throughout station.

Reinstall cover on electrical junction box near the Deaerator Unit on third floor.

Replace drive belts on roof vent fans and/or evaluate replacement with direct driven fans. Confirm and/or restore operation of related motorized intake dampers.

Provide ventilation facilities in the chemical feed area including exhaust fan(s) and motorized air intake damper(s).

Restore operation of vent fan in ceiling of overhead walkway.

Resolve problem with leaking packing at valve on 6" water line at northwest corner of station at lower Mezzanine platform.

Restore operation of dehumidifier in outside valve pit.

Paint piping and replace grating (with fiberglass) in east valve pit in Dehumidifier enclosure. Resolve water leakage at Valve No. 1 in Dehumidifier enclosure.

Repair and/or recoat rusted areas of the Dehumidifier enclosure roof.

Repair or reconstruct top of the concrete valve vault next to the Dehumidifier enclosure.

Coated rusted areas of metal roof at pipe penetrations on pump station.

Replace missing roof drain downspouts.

Restore operation of turbine type drainage pump or replace with a submersible type pump.

Restore operation of gas driven stand-by flood water drainage pump.

Restore operation of sump pump at Water Pump No. 3.

Close/seal sewage sump pit cover and restore operation of vent fan.

Replace the door on the Gas Building.

Replace Bindicator level equipment for dry chemicals and repair or replace the level devices at the liquid bins.

Replace potassium permanganate feed equipment, including provisions for a dust contained operation.

Inspect and service chemical bin dust-collectors on third floor to verify effective and efficient operation.

Install screen at chemical fill line inside two soda ash bins.

Resolve mechanical problems with soda ash pump at Bin No. 4.

Repair or replace vibrator at Bin No. 7.

Replace Ferric Chloride pumps.

Remove chemical dust from floor and tops of bins on third floor.

Restore operation of dry chemical feeder totalizers at Bin No.'s 4, 7 and 9.

Sodium Hypochlorite Building.

- Resecure and recaulk roofing counter flashing.
- Relabel Sodium Hypochlorite tank that is presently serving to store caustic soda.
- Cap pressure gauge tap and resolve leak outlet valve and level instrument piping at large converted caustic soda storage tank.
- Resolve leaks in caustic soda piping system.
- Repair east safety shower pedal actuator.
- Restore operation of both vent fans.
- Eliminate steam leak or discharge noted next to air handler system.

Jet clean lime feed piping from the feeders to the Screen Room.

Evaluate alternatives to resolve clogging problem of the sodium hypochlorite lines, including pumping without adding carrier water and/or alter piping to facilitate its cleaning.

Address potential incorporation of package boiler system to heat soda ash chemical solution or relocation of the storage and feed facilities.

Replace soda ash piping inside pump station chemical area.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Screen Room, Flash Mix Tanks and Carbon Facilities

Condition: Traveling Screens and Sluice Gates – The two traveling screens are presently being replaced, a new debris compactor unit installed, and the four isolation sluice gates are being rebuilt.

Screen Room Exterior (Structural/Architectural – Good condition, although the man door on the east side is in poor condition and the overhead door and controls in the lower level are in poor condition.

Screen Room Interior (Structural/Architectural – The flash mix tank "sight pipe" openings in the floor should have a cap installed over it (two places in Screen Room and one in the Electrical Room). Water continuously leaks through the construction joint next to the lower Carbon Slurry Transfer pit, causing water damage to equipment and piping systems. This water was confirmed to be treated water, thereby indicating that there is an underground leak in a utility water line. Panic hardware on one of the Electrical Room doors has been removed and the handle is missing on the other one.

Carbon Feed Equipment – The two Carbon Slurry Transfer pumps are in poor condition and unreliable. One of the three Carbon Transfer pumps was recently replaced. A second pump is planned to be replaced in the near future. One of the three Rotodip Carbon Feeders and two of the feeder mixers do not operate. The mixer motors are planned to be replaced in the near future. The carbon unloading system is old, leaks carbon dust and provides inefficient operation. It was reported that one of the carbon storage tanks fills with water as noted when this tank is taken out of service.

Flash Mix Tanks – Flash Mixer No. 1 and No. 2 are presently out of service due to mechanical problems. All four mixers are scheduled to be replaced soon by Operations Staff, as the new units have been delivered.

Instrumentation and SCADA System - Bindicator level equipment at carbon feeders is not operational and one unit is missing. Upgrade/replacement of SCADA system is anticipated in the near future.

Electrical System (includes lighting) – Many light bulbs are burned out in all areas. There are no working lights in the Electrical Room. Lights in the Screen Room will be relamped and lenses cleaned under the Traveling Screen Replacement project. Light fixture at stair landing has the globe/cover off and broken bulb in socket.

Heating and Ventilation – Condensate tank and associated piping in Carbon Slurry Transfer pit area is badly deteriorated. The electric heater in the Carbon Transfer

Pump area and the heater in the Carbon Slurry Transfer pit are totally inoperable. Wiring had been pulled out of the conduit at the heater in the Carbon Transfer pit. Ventilation fan serving the Carbon Slurry Transfer pit area is not operational. Abandoned wiring at removed heating unit in flash tank area is exposed. The flexible duct connector at the north rooftop air handler is deteriorated, thereby allowing rainwater to enter the unit and leak through the roof. Both rooftop air handling units are out of service presently with leaking coils. The condensate unit in the Screen Room has been taken out of service and the condensate directed back to Ross PS by gravity. Abandoned equipment could be removed. The two ventilation fans in the Electrical Room and the fan in the bathroom are off and/or not operational. A recessed wall-mounted heater had been removed in the Screen Room, leaving an opening in the wall.

Roofing – Leaks in the roof, probably attributed to the deteriorated duct connector at the rooftop air handler unit. Moss is growing along the edges of the roof. A hole was noted in the rubber flashing at the northwest corner. Curb caps at the air handler units are rusting. Water leakage noted at the roof hatch.

Mechanical Systems (water, plumbing, sanitary) – Lavatory is missing in bathroom. Some of the floor drains in the Screen Room are clogged, to be addressed in the near future.

Vault for 48" Influent Valve – Piping is rusted and needs painted. Access door is jammed and frame is loose. Flowmeter and valve work well.

Miscellaneous – Piping insulation is damaged on water and steam lines. Sample pump in the Mushroom area was replaced with a submersible pump.

Recommendations: Replace overhead door and controls.

Repair or replace man door.

Cover Flash Mix tank "sight" holes in the floor (three places).

Investigate and/or resolve problem with probable leaking underground water line next to Carbon Slurry Transfer pit.

Reinstall panic hardware and handle on doors of the electrical room.

Replace two Carbon Slurry Transfer pumps, one Carbon Transfer pump, one Carbon Feeder, and two feeder mixer motors.

Upgrade the carbon unloading equipment to a more efficient system.

Replace Flash Tank Mixers as planned.

Service or replace Bindicator level equipment at carbon feeders.

Upgrade SCADA system.

Re-lamp lighting fixtures, especially in the Electrical Room.

Replace light fixture at stair landing or refurbish present fixture.

Replace condensate tank, heating unit and associated piping in the lower Carbon Slurry Transfer pit area. Restore wiring at the heating unit.

Replace electrical heater in the Carbon Transfer Pump area.

Service or replace the ceiling-mounted ventilation fan serving the Carbon Slurry Transfer pit area.

Remove heater wiring back to junction box at Flash Mix Tank area heater.

Replace flex duct connector at both rooftop air handler units and restore operation to both units.

Remove abandoned condensate unit in the Screen Room.

Restore operation of two ventilation fans in the Electrical Room and the fan in the bathroom.

Close/trim opening in wall where recessed wall-mounted heater had been removed.

Closely inspect condition of roofing; remove moss on roof, repair holes in rubber flashing and coat the rusted curb caps.

Provide a lavatory in bathroom.

Unclog floor drains in the Screen Room as planned.

Prepare and paint piping in 48" Valve Vault.

Resolve problems with access door at 48" Valve Vault.

Repair and/or replace piping insulation on damaged water and steam lines.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Sedimentation Basins

Condition: Access Road and Pavements – Poor condition.

Site – Drainage problems on the north side of site with water ponding. Surface runoff water entering the basins along the north side.

Fencing – Fencing is in poor condition with many patches noted and sections partially collapsed on the north and east sides of site.

Gate chamber sluice gates - Operating condition is not known, as they have not been operated for several years.

Old Administration Building – Plywood window closures and soffit and fascia need painted. More than half of the roof gutters and downspouts are missing. Vines growing on walls of building.

Instrumentation and SCADA System (includes level pressure transmitter) – Upgrade/replacement of system is planned in the near future. The level instrument is no longer being received at the OC Center.

Miscellaneous – Yard hydrants are very old and may not be operable. One unit at the East Gate Chamber was torn out of the ground. Two manholes at the east side of the building are missing castings and lids, posing a safety hazard.

Recommendations:

Pave the roadway from the shopping center to the Old Administration Building.

Grade the area immediately adjacent to the basins to drain surface water away from the basins on the north side.

Replace damaged sections of fencing and posts as needed.

Paint plywood window panels and soffit and fascia.

Install new gutters and downspouts where missing.

Remove vines from building walls.

Evaluate instrumentation and SCADA requirements.

Restore operation of basin level instrumentation.

Replace yard hydrants.

Install lids on open manholes.

PITTSBURGH WATER AND SEWER AUTHORITY
Facilities Evaluation

December 2008

Description: Water Treatment Plant
Site and Grounds

Condition: Access Road and Pavements – Access road to Inlet Gatehouse is in very poor condition. Sections of pavement at the north side of Aspinwall Pump Station are in poor condition. Many potholes noted throughout the roadways within plant site.

Fencing – The fence on the east and south sides of Ross Pump Station is deteriorated and collapsing. Heavy vegetation is also growing on both sides of this fence northwest of the pump station and on the east side (outside) of fence. Fencing at northeast corner of the Clarifiers has vegetation growing on it and fencing posts are unsupported and collapsing.

Emergency Access Tunnel – Tunnel is flooded with water, probably due to clogged drain(s) from leaves.

Miscellaneous – The railroad tracks were recently regauged.

Recommendations: Repair or replace deteriorated sections of concrete pavement as noted above, seal cracks and patch potholes.

Remove vegetation from the fencing at Ross Pump Station and East Gate Chamber and repair or replace as necessary.

Remove leaves from clogged drain(s) at Emergency Access Tunnel.

Resecure fencing at the clarifiers and remove vegetation.

APPENDIX F

INFORMATION REGARDING THE LETTER OF CREDIT BANKS

[THIS PAGE INTENTIONALLY LEFT BLANK]

Bank of America, N.A.

BOA is a national banking association organized under the laws of the United States, with its principal executive offices located in Charlotte, North Carolina. BOA is a wholly-owned indirect subsidiary of Bank of America Corporation (the "Corporation") and is engaged in a general consumer banking, commercial banking and trust business, offering a wide range of commercial, corporate, international, financial market, retail and fiduciary banking services. As of June 30, 2009, BOA had consolidated assets of $1.45 trillion, consolidated deposits of $1 trillion and stockholder's equity of $150 billion based on regulatory accounting principles.

The Corporation is a bank holding company and a financial holding company, with its principal executive offices located in Charlotte, North Carolina. Additional information regarding the Corporation is set forth in its Annual Report on Form 10-K for the fiscal year ended December 31, 2008, together with its subsequent periodic and current reports filed with the Securities and Exchange Commission (the "SEC").

Filings can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549, United States, at prescribed rates. In addition, the SEC maintains a website at http://www.sec.gov, which contains reports, proxy statements and other information regarding registrants that file such information electronically with the SEC.

The information concerning the Corporation and BOA is furnished solely to provide limited introductory information and does not purport to be comprehensive. Such information is qualified in its entirety by the detailed information appearing in the documents and financial statements referenced herein.

The Series 2008B-1 Letter of Credit shall be issued by BOA. Moody's Investors Services, Inc. ("Moody's") currently rates BOA's long-term debt as "Aa3" and short-term debt as "P-1." The outlook is stable. Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc. ("S&P") currently rates BOA's long-term debt as "A+" and its short-term debt as "A-1." The outlook is stable. Fitch Ratings, Inc. ("Fitch") currently rates long-term debt of BOA as "A+" and short-term debt as "F1+." The outlook is stable. Further information with respect to such ratings may be obtained from Moody's, S&P and Fitch, respectively. No assurances can be given that the current ratings of BOA's instruments will be maintained.

BOA will provide copies of the most recent Bank of America Corporation Annual Report on Form 10-K, any subsequent reports on Form 10-Q, and any required reports on Form 8-K (in each case as filed with the SEC pursuant to the Exchange Act), and the publicly available portions of the most recent quarterly call report of BOA delivered to the Comptroller of the Currency, without charge, to each person to whom this document is delivered, on the written request of such person. Written requests should be directed to:

Bank of America Corporate Communications
100 North Tryon Street, 18th Floor
Charlotte, North Carolina 28255
Attention: Corporate Communication

PAYMENTS OF PRINCIPAL AND INTEREST ON THE SERIES 2008B-1 BONDS WILL BE MADE FROM DRAWINGS UNDER THE SERIES 2008B-1 LETTER OF CREDIT. PAYMENTS OF THE PURCHASE PRICE OF THE SERIES 2008B-1 BONDS WILL BE MADE FROM DRAWINGS UNDER THE SERIES 2008B-1 LETTER OF CREDIT IF REMARKETING PROCEEDS ARE NOT AVAILABLE. ALTHOUGH THE SERIES 2008B-1 LETTER OF CREDIT IS A BINDING OBLIGATION OF BOA, THE SERIES 2008B-1 BONDS ARE NOT DEPOSITS OR OBLIGATIONS OF THE CORPORATION OR ANY OF ITS AFFILIATED BANKS AND ARE NOT GUARANTEED BY ANY OF THESE ENTITIES. THE SERIES 2008B-1 BONDS ARE NOT INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENTAL AGENCY AND ARE SUBJECT TO CERTAIN INVESTMENT RISKS, INCLUDING POSSIBLE LOSS OF THE PRINCIPAL AMOUNT INVESTED.

The delivery hereof shall not create any implication that there has been no change in the affairs of the Corporation or BOA since the date hereof, or that the information contained or referred to in this APPENDIX F is correct as of any time subsequent to its date.

[THIS PAGE INTENTIONALLY LEFT BLANK]

August 12, 2009

PNC BANK, NATIONAL ASSOCIATION

This summary incorporates by reference certain Call Reports of PNC Bank, National Association ("PNC Bank") filed with the Office of the Comptroller of the Currency ("OCC"), and certain reports of its parent, The PNC Financial Services Group, Inc. ("PNC Financial"), filed with the Securities and Exchange Commission ("SEC"). You should read those reports and the information set forth below under the headings "PNC Bank and PNC Financial" and "Supervision and Regulation." You should also understand that, except to the limited extent described herein, this summary does not describe the business or analyze the condition, financial or otherwise, of PNC Bank or otherwise describe any risks associated with PNC Bank or the Letter of Credit. You must rely on your own knowledge, investigation and examination of PNC Bank and PNC Bank's creditworthiness. Neither PNC Bank nor PNC Financial makes any representation regarding the Bonds or the advisability of investing in the Bonds, nor do they make any representation regarding, nor has PNC Bank or PNC Financial participated in the preparation of, any document of which this summary is a part other than the information supplied by PNC Bank or PNC Financial and presented in this summary headed "PNC Bank, National Association."

PNC Bank and PNC Financial

PNC Bank is a national banking association with its principal office in Pittsburgh, Pennsylvania. PNC Bank is a wholly-owned indirect subsidiary of PNC Financial. PNC Bank's origins as a national bank date to 1865. PNC Bank and its subsidiaries offer a wide range of commercial banking, retail banking, and trust and wealth management services to their customers. PNC Bank's business is subject to examination and regulation by federal banking authorities. Its primary federal bank regulator is the OCC and its deposits are insured by the Federal Deposit Insurance Corporation ("FDIC").

At June 30, 2009, PNC Bank had total assets of $136.4 billion, total loans (net of unearned income) and loans held for sale of $72.3 billion, total deposits of $90.4 billion, and total equity capital of $14.8 billion. The comparable amounts at December 31, 2008 were $140.8 billion, $75.9 billion, $94.4 billion, and $10.2 billion, respectively.

PNC Financial, the parent company of PNC Bank, is one of the largest diversified financial services companies in the United States and is headquartered in Pittsburgh, Pennsylvania. PNC Financial acquired National City Corporation ("National City") on December 31, 2008, nearly doubling PNC Financial's assets and expanding total consolidated deposits. PNC Financial's consolidated balance sheet includes the impact of the acquisition of National City beginning as of December 31, 2008. At June 30, 2009, PNC Financial had consolidated total assets, total deposits, and total equity of $279.8 billion, $190.4 billion, and $29.5 billion, respectively. At December 31, 2008, the comparable amounts were $291.1 billion, $192.9 billion, and $27.6 billion, respectively.

PNC Financial was incorporated under the laws of the Commonwealth of Pennsylvania in 1983 with the consolidation of Pittsburgh National Corporation and Provident National Corporation. Since 1983, PNC Financial has diversified its geographic presence, business mix and product capabilities through internal growth, strategic bank and non-bank acquisitions and equity investments, and the formation of various non-banking subsidiaries.

PNC Financial has businesses engaged in retail banking, corporate and institutional banking, asset management, residential mortgage banking, and global investment servicing. PNC Financial provides many of its products and services nationally and others in PNC Financial's primary geographic markets located in Pennsylvania, Ohio, New Jersey, Michigan, Maryland, Illinois, Indiana, Kentucky, Florida, Missouri, Virginia, Delaware, Washington, D.C., and Wisconsin. PNC Financial also provides certain investment servicing internationally.

PNC Financial is in the process of integrating the businesses and operations of National City with those of PNC Financial. PNC Financial expects to merge the former National City's bank subsidiary, National City Bank, into PNC Bank in the fourth quarter of 2009. Also, PNC Bank, Delaware, another bank subsidiary of PNC Financial, is scheduled to merge into PNC Bank on August 21, 2009. At that time, the main office of PNC Bank will become Wilmington, Delaware, although PNC Bank's headquarters will remain in Pittsburgh, Pennsylvania.

THE LETTER OF CREDIT IS SOLELY AN OBLIGATION OF PNC BANK AND IS NEITHER AN OBLIGATION OF NOR GUARANTEED BY PNC FINANCIAL OR ANY OF ITS OTHER AFFILIATES.

Supervision and Regulation

PNC Financial, the parent company of PNC Bank, is a bank and financial holding company and is subject to numerous governmental regulations involving both its business and organization. Its businesses are subject to regulation by multiple bank regulatory bodies as well as multiple securities industry regulators. Applicable laws and regulations restrict PNC Financial's ability to repurchase stock or to receive dividends from subsidiaries that operate in the banking and securities business and impose capital adequacy requirements. They also restrict permissible activities and investments and require compliance with protections for loan, deposit, brokerage, fiduciary, mutual fund and other customers, and for the protection of customer information, among other things. The consequences of noncompliance can include substantial monetary and nonmonetary sanctions as well as damage to the company's reputation and businesses.

In addition, PNC Financial and its bank subsidiaries are subject to comprehensive examination and supervision by banking and other regulatory bodies. Examination reports and ratings (which often are not publicly available) and other aspects of this supervisory framework can materially impact the conduct, growth, and profitability of the company's businesses. Over the last several years, there has been an increasing regulatory focus on compliance with anti-money laundering laws and regulations, resulting in, among other things, several significant publicly-announced enforcement actions. There has also been a heightened focus recently, by customers and the media as well as by regulators, on the protection of confidential customer information. A failure to have adequate procedures to comply with anti-money laundering laws and regulations or to protect the confidentiality of customer information could expose the company to damages, fines and regulatory penalties, which could be significant, and could also injure the company's reputation with customers and others with whom it does business.

Due to the current economic environment and issues facing the financial services industry, as well as the effect of the change in administration, new legislative and regulatory initiatives are likely over the next several years, including many focused specifically on banking and other financial services in which PNC Financial is engaged. Developments to date have had, and those as well as developments that come in the future are likely to continue to have, an impact on the conduct of the business of PNC Financial and its bank subsidiaries.

You will find a general discussion of some of the elements of the regulatory framework affecting PNC Financial and its bank subsidiaries as well as a discussion of the key risk factors that affect PNC Financial in the following sections of PNC Financial's 2008 Annual Report on Form 10-K: the Supervision and Regulation section included in Item 1 -- Business; Item 1A – Risk Factors; and Note 23 Regulatory Matters of the Notes To Consolidated Financial Statements included in Item 8 of that Report.

Incorporation of Certain Documents by Reference

PNC Bank submits certain unaudited reports called "Consolidated Reports of Condition and Income" ("Call Reports") to the OCC, its primary regulator, quarterly. Each Call Report consists of a balance sheet, income statement, changes in equity capital and other supporting schedules as of the end of or for the period to which the report relates. The Call Reports are prepared in accordance with regulatory instructions issued by the Federal Financial Institutions Examination Council. Because of the special supervisory, regulatory and economic policy needs served by the Call Reports, those regulatory instructions do not in all cases follow accounting principles generally accepted in the United States, including the opinions and statements of the Accounting Principles Board or the Financial Accounting Standards Board ("U.S. GAAP"). While the Call Reports are supervisory and regulatory documents, not primarily financial accounting documents, and do not provide a complete range of financial disclosure about PNC Bank, the reports nevertheless provide important information concerning the financial condition and results of operations of PNC Bank.

The publicly available portions of the Call Reports are on file with, and publicly available on written request to, the FDIC, Public Information Center, 801 17th Street, NW, Room 100, Washington, D.C. 20434, or by calling the FDIC Public Information Center at 877-275-3342 or 202-416-6940. The Call Reports are also available by accessing the FDIC's website at http://www.fdic.gov.

PNC Financial, the parent company of PNC Bank, is subject to the informational requirements of the Securities Exchange Act of 1934 ("Exchange Act"). In accordance with the Exchange Act, PNC Financial files annual, quarterly and current reports, proxy statements, and other information with the SEC. PNC Financial's SEC File Number is 001-09718. You may read and copy this information at the SEC's Public Reference Room, located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can obtain information on the operation of the Public Reference Room by calling the SEC at

1-800-SEC-0330. You can also obtain copies of this information by mail from the public reference section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates.

The SEC also maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers, like PNC Financial, who file electronically with the SEC. The address of that website is http://www.sec.gov. You can also inspect reports, proxy statements and other information about PNC Financial at the offices of the New York Stock Exchange, Inc., 20 Broad Street, New York, New York 10005.

We have included the web addresses of the FDIC and the SEC as inactive textual references only. Except as specifically incorporated by reference into this summary, information on those websites is not part hereof.

The publicly-available portions of PNC Bank's Call Reports for the years ended December 31, 2008, 2007, and 2006 and for the quarters ended March 31, 2009 and June 30, 2009, and of any amendments or supplements thereto, as filed by PNC Bank with the OCC, are incorporated herein by reference. The publicly-available portions of each other PNC Bank Call Report, and of any amendments or supplements thereto or to any of the PNC Bank Call Reports listed above, filed with the OCC after December 31, 2008 and prior to the expiration of the Letter of Credit are also incorporated herein by reference and will be deemed a part hereof from the date of filing of each such document. Subsequently filed reports, and amendments or supplements to reports, will automatically update and supersede prior information.

In addition to the Call Reports referred to above, PNC Bank incorporates herein by reference the following documents: PNC Financial's Annual Report on Form 10-K for the year ended December 31, 2008; PNC Financial's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009; PNC Financial's Current Reports on Form 8-K (by date filed) dated January 2, 2009 (two filings), February 13, 2009, February 19, 2009, March 3, 2009 (with respect to Item 8.01 thereof), April 3, 2009, April 14, 2009, May 4, 2009, May 14, 2009, May 27, 2009 (with respect to Item 8.01 thereof), and June 9, 2009; and any amendments or supplements to those reports.

Each other annual, quarterly and current report, and any amendments or supplements thereto or to any of the PNC Financial reports listed above, filed by PNC Financial with the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act after December 31, 2008 and prior to the expiration of the Letter of Credit is incorporated herein by reference and will be deemed a part hereof from the date of filing of each such document. Subsequently filed reports, and amendments or supplements to reports, will automatically update and supersede prior information. The information incorporated by reference herein does not include any report, document or portion thereof that PNC Financial furnishes to, but does not file with, the SEC unless otherwise specifically provided above.

Neither the delivery of this document nor the sale of any Bonds will imply that the information herein or in any document incorporated by reference is correct as of any time after its date. Any statement contained in a document incorporated or deemed to be incorporated by reference herein will be deemed to be modified or superseded for purposes hereof to the extent that a statement contained therein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part hereof.

Any of the above documents incorporated herein by reference (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents) are available upon request by holders of the Bonds or by prospective investors in the Bonds without charge: (1) in the case of PNC Bank documents, by written request addressed to Ronald Lewis, Manager of Regulatory Reporting, at The PNC Financial Services Group, Inc., One PNC Plaza, 249 Fifth Avenue, Pittsburgh, Pennsylvania 15222-2707; or (2) in the case of PNC Financial documents, (a) for copies without exhibits, upon written request addressed to Computershare Investor Services, LLC, 250 Royall Street, Canton, MA 02021, or by calling 800-982-7652, and (b) for exhibits, by contacting Shareholder Relations at 800-843-2206 or via e-mail at investor.relations@pnc.com.

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX G

SUMMARY OF THE LETTERS OF CREDIT AND REIMBURSEMENT AGREEMENTS

[THIS PAGE INTENTIONALLY LEFT BLANK]

The following is a summary of certain provisions of the Letters of Credit and the Reimbursement Agreements. This summary does not purport to be comprehensive or definitive and is subject to all of the terms and provisions of the Letters of Credit and the Reimbursement Agreements. Capitalized terms in this section not otherwise defined shall have the meanings set forth in the Indenture or Reimbursement Agreements.

General

To secure the payment of the Series 2008B-1 Bonds and the Series 2008B-2 Bonds, the 2008B-1 Letter of Credit Bank and the 2008B-2 Letter of Credit Bank (each as defined herein) will each issue an irrevocable transferable letter of credit in favor of the Trustee as follows: BOA (the "2008B-1 Letter of Credit Bank") will issue its irrevocable transferable letter of credit supporting payment of the Series 2008B-1 Bonds (the "2008B-1 Letter of Credit"); and PNC (the "2008B-2 Letter of Credit Bank") will issue its irrevocable transferable letter of credit supporting payment of the Series 2008B-2 Bonds (the "2008B-2 Letter of Credit") (the 2008B-1 Letter of Credit and 2008B-2 Letter of Credit are referred to collectively as the "Letters of Credit" and individually as a "Letter of Credit" and BOA and PNC are referred to collectively as the "LOC Banks" and individually as a "LOC Bank"). **The 2008B-1 Letter of Credit secures only the Series 2008B-1 Bonds and the 2008B-2 Letter of Credit secures only the Series 2008B-2 Bonds**.

2008B-1 Letter of Credit and Reimbursement Agreement

General. The 2008B-1 Letter of Credit will be an irrevocable obligation of the 2008B-1 Letter of Credit Bank to pay to the Trustee, upon request and in accordance with the terms thereof, amounts sufficient to pay the unpaid principal amount and up to fifty (50) days' accrued interest (at the maximum interest rate of 12%) on the Series 2008B-1 Bonds when due, whether at the stated maturity thereof or upon acceleration or call for redemption, and amounts sufficient to pay the Purchase Price of Series 2008B-1 Bonds, tendered for purchase and not remarketed.

The 2008B-1 Letter of Credit will expire on the earliest to occur on the close of business of any of the following under the applicable Letter of Credit (the "Termination Date"): (i) October 22, 2011 or if such date is extended pursuant to the terms of the 2008B-1 Reimbursement Agreement, the date as so extended; (ii) the 2008B-1 Letter of Credit Bank honoring the Trustee's Final Drawing presented under the 2008B-1 Letter of Credit accompanied by the 2008B-1 Letter of Credit, (iii) 5:00 p.m. (Pittsburgh, Pennsylvania time) on the date on which the 2008B-1 Letter of Credit Bank receives a certificate signed by the Trustee accompanied by the 2008B-1 Letter of Credit stating that the Authority has provided and the Trustee has accepted an Alternate Liquidity Facility (as defined in the Indenture) in accordance with the terms of the Indenture that is effective the date of such certificate; and (iv) 5:00 p.m. (Pittsburgh, Pennsylvania time) on the date on which the 2008B-1 Letter of Credit Bank receives a certificate signed by the Trustee accompanied by the 2008B-1 Letter of Credit (provided, however, that the 2008B-1 Letter of Credit shall not be surrendered prior to honoring any draw request resulting from the mandatory tender for purchase of the Series 2008B-1 Bonds on such Conversion Date) (as defined in the Indenture) stating that a Conversion Date to an Interest Rate Period other than a Weekly Rate Period (as defined in the Indenture) has occurred pursuant to Indenture and the 2008B-1 Letter of Credit will not be applicable to the Series 2008B-1 Bonds.

There can be no assurance that the 2008B-1 Letter of Credit Bank will maintain its present financial condition or that an adverse change in such condition will not adversely affect its ability to honor drawings under the 2008B-1 Letter of Credit.

The Authority and the 2008B-1 Letter of Credit Bank will enter into a Reimbursement Agreement (the "2008B-1 Reimbursement Agreement") which provides for the issuance by the 2008B-1 Letter of Credit Bank of the 2008B-1 Letter of Credit and for the reimbursement of the 2008B-1 Letter of Credit Bank by the Authority for draws on the 2008B-1 Letter of Credit. Upon the 2008B-1 Letter of Credit Bank honoring any drawing to pay the Purchase Price of the Series 2008B-1 Bonds tendered for purchase and not remarketed, the 2008B-1 Letter of Credit Bank shall be deemed to have purchased such Series 2008B-1 Bonds (the "Pledged 2008B-1 Bonds") at the Purchase Price. Any draw under the 2008B-1 Letter of Credit for principal, interest or Purchase Price creates a reimbursement obligation on the part of the Authority that is secured under the Indenture on a parity basis with the other Bonds issued under the Indenture.

The 2008B-1 Reimbursement Agreement also sets forth various covenants and obligations of the Authority. Under the terms of the 2008B-1 Reimbursement Agreement, the Authority covenants, while such 2008B-1 Reimbursement Agreement is in effect and until all obligations thereunder are paid in full, that it will, among other things, reimburse the 2008B-1 Letter of Credit Bank for draws under the 2008B-1 Letter of Credit, pay certain other amounts to the 2008B-1 Letter of Credit Bank and the Trustee and furnish the 2008B-1 Letter of Credit Bank with certain financial information.

The 2008B-1 Reimbursement Agreement also provides that upon the sixty-first (61st) day following any Tender Advance (the "Term Loan Conversion Date"), the Authority's obligation to repay the Tender Advance shall be in the form of a term loan (the "Term Loan") providing for principal repayment as follows: the Authority shall pay one-sixth (1/6) of the outstanding principal amount of each Term Loan on the first day of the sixth month following the Term Loan Conversion Date (the "Amortization Commencement Date"). Subsequently, each Term Loan shall be repaid in monthly installments of principal, each such installment being equal (or nearly as equal as may be practical) to one-thirtieth (1/30) of the remaining principal amount of the Term Loan, commencing on the first day of the first month after the Amortization Commencement Date, and on the first day of each month thereafter, provided that the entire then unpaid principal amount of such Term Loan will become due and payable in full on the earliest of (i) the third anniversary after the Term Loan Conversion Date, (ii) the third (3rd) anniversary after the expiration date of the 2008B-1 Letter of Credit, (iii) the date that a substitute letter of credit replaces the 2008B-1 Letter of Credit and (iv) the date that the 2008B-1 Letter of Credit is permanently reduced to zero or is otherwise terminated prior to its expiration date.

The Authority may prepay Tender Advances and principal payments due under a Term Loan, with any partial prepayment of a Term Loan to be applied to installments in inverse order of normal maturity.

Events of Default. Pursuant to the 2008B-1 Reimbursement Agreement, the occurrence of any of the following events shall constitute an Event of Default thereunder. Reference is made to the 2008B-1 Reimbursement Agreement for a complete listing of all Events of Default.

(a) The Authority shall fail to reimburse the 2008B-1 Letter of Credit Bank for any draw on the 2008B-1 Letter of Credit or the Authority shall fail to make any payment under the Related Documents when due or within the applicable grace period; or

(b) The Authority shall fail to make any payments as required under the 2008B-1 Reimbursement Agreement relating to any Term Loan or relating to a Default Term Loan (as hereinafter defined) and such failure shall continue for a period of thirty (30) days; or

(c) A default by the Authority in the due observance or performance by the Authority of certain covenants as set forth in the 2008B-1 Reimbursement Agreement; or

(d) A default by the Authority in the due observance or performance by the Authority of any other term, covenant or agreement set forth in the 2008B-1 Reimbursement Agreement (other than those set forth in (a), (b) or (c) above) and the continuance of such default for 30 days after the occurrence thereof; provided however, that if such failure is reasonably susceptible of cure, but cannot be cured within such thirty (30) day period, then, so long as the Authority promptly commences cure and thereafter diligently pursues such cure to completion, then the cure period provided for herein shall be extended for a reasonable period within which the Authority may complete such cure, such period not to exceed an additional ninety (90) days; or

(e) Any representation or warranty made by the Authority in the 2008B-1 Reimbursement Agreement (or incorporated therein by reference) or in any of the other Related Documents (as defined in the 2008B-1 Reimbursement Agreement) or in any certificate, financial statement or other document contemplated by or made or delivered pursuant to or in connection with the 2008B-1 Reimbursement Agreement or with any of the other Related Documents, shall prove to have been incorrect in any material respect when made; or

(f) Any default on the part of the Authority shall exist, and shall remain unwaived or uncured beyond the expiration of any applicable notice and/or grace period, under (i) any contract or agreement of

the Authority which default, if uncured, would materially and adversely affect the Authority's ability to perform its obligations hereunder (including, without limitation, any of the Related Documents) or (ii) any contract or agreement now existing or hereafter entered into with or for the benefit of the 2008B-1 Letter of Credit Bank or any affiliate of the 2008B-1 Letter of Credit Bank in any capacity or capacities; or

(g) Any default shall exist and remain unwaived or uncured with respect to any other Indebtedness of the Authority or any for borrowed money in excess of $1,000,000 in aggregate principal amount or the advance of credit in excess of $1,000,000 in aggregate principal amount; or any such other Indebtedness for borrowed money in excess of $1,000,000 in aggregate principal amount shall not have been paid when due, or shall have been declared to be due and payable prior to its stated maturity, or any event or circumstance shall occur which permits, or with the lapse of time or the giving of notice or both would permit, the acceleration of the maturity of any such Indebtedness in excess of $1,000,000 in aggregate principal amount by the holder or holders thereof; or

(h) The Authority shall be dissolved; or the Authority shall commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to the Authority or the debts of any of the foregoing under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official for the Authority or for any substantial part of the property of any of the foregoing, or the Authority shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against the Authority, or the Authority shall fail generally to pay its debts as they become due, or shall make a general assignment for the benefit of creditors, or shall take any action to authorize any of the foregoing; or

(i) An involuntary case or other proceeding shall be commenced against the Authority seeking liquidation, reorganization or other relief with respect to any such Person or the debts of any such Person under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of the Authority or for any substantial part of the property of the Authority or the System and such involuntary case or other proceeding shall remain undismissed and unstayed for a period of sixty (60) days; or

(j) The Water and Sewer System shall suffer substantial loss, theft, taking, damage or destruction to or of any of its property which (i) is uninsured or (ii) if insured, nonetheless would have a material adverse effect upon the business, operations or financial condition of the Water and Sewer System; or the Water and Sewer System shall suffer the loss (or proceedings shall be commenced which could result in the loss) of any license or permit material to the operation of the Water and Sewer System for the purposes intended; or

(k) The security interest and lien of the 2008B-1 Letter of Credit Bank or the Trustee in and on any of the Collateral shall not be in full force and effect as a fully perfected lien with the priority intended by the Indenture and the provisions hereof, or any Person shall contest the validity, enforceability or perfection of any lien granted pursuant to the Indenture or this Agreement, or any party to the Indenture or this Agreement shall seek to disaffirm, terminate, limit or reduce its obligation under any of the foregoing instruments or if the payment obligations or security interests provided herein, with respect to the Pledged Bonds or the Bond Documents become invalid, unenforceable or null and void, for any reason; or

(l) There shall be entered any final uninsured judgment which, singly or with any other final uninsured judgment or judgments against the Authority and then remaining unpaid for an unreasonable amount of time, exceeds $1,000,000; or

(m) The Authority shall suffer or sustain any Material Adverse Change or the 2008B-1 Letter of Credit Bank shall, in a commercially reasonable manner, determine that the prospect of payment by the Authority of its obligations hereunder is materially impaired; or

(n) The long term ratings assigned by Moody's, S&P or Fitch to the Authority's Parity Obligations are withdrawn or suspended for credit-related reasons or reduced below “Baa3/BBB-/BBB-” (or the equivalent) respectively; or

(o) Any “event of default” (as defined in Indenture), shall have occurred or any failure or default shall have occurred under any of the Related Documents and shall have continued beyond the expiration of any applicable notice and/or grace period; or

(p) The occurrence and continuation of an "Event of Default" as described in Section 8.01 of the Indenture which results in an acceleration of principal of not less than 25% in aggregate principal amount of the Authority Bonds then Outstanding.

Remedies. Following the occurrence of the above described Events of Default, the 2008B-1 Letter of Credit Bank, may exercise any one or more of the following rights and remedies in addition to any other remedies provided in the 2008B-1 Reimbursement Agreement or by law:

(q) notify the Trustee of an Event of Default, direct the Trustee to declare an Event of Default, as defined in the Indenture, accelerate the Series 2008B-1 Bonds and direct the Trustee to draw on the 2008B-1 Letter of Credit and/or to exercise remedies under the Bond Documents;

(r) subject to the limitations set forth below, declare all amounts owing under the Related Documents and otherwise owing by the Authority to the 2008B-1 Letter of Credit Bank to be immediately due and payable (and if an Event of Default under subparagraph (a), (h), (i) or (p) above shall occur, all such amounts shall be immediately due and payable), without presentment, demand, protest or further notice of any kind;

(s) pursue any rights and remedies it may have under the 2008B-1 Reimbursement Agreement; or

(t) cause the Trustee to enforce the rights and remedies under the Indenture.

Notwithstanding the foregoing, prior to the 2008B-1 Letter of Credit Bank's exercise of the remedy provided in subparagraph (b) above, but only so long as there is no Event of Default as provided in subparagraph (p) above, all amounts owing to the 2008B-1 Letter of Credit Bank under the Related Documents and otherwise owing to the Authority (other than amounts owing to the Bank as a result of a Term Loan or as a result of a Default Term Loan (as hereinafter defined)) shall, upon written notice of the 2008B-1 Letter of Credit Bank to the Authority, be automatically be converted on the first day of the month following such written notice (the "Default Conversion Date") to a three year amortizing loan to the Authority (a "Default Term Loan") and shall be repaid as follows.

The unpaid balance of each Default Term Loan shall bear interest from the Default Conversion Date at the Default Rate. Accrued interest on each Default Term Loan shall be due and payable monthly, commencing on the Default Conversion Date and on the first day of each month thereafter. One sixth of the outstanding principal of each Default Term Loan shall be repaid on the first day of the sixth month following the Default Conversion Date (the "Initial Default Term Loan Principal Payment"). Subsequently, each Default Term Loan shall be repaid in monthly installments of principal, each such installment being equal (as nearly as may be practical) to one thirtieth (1/30) of the remaining principal amount of the Default Term Loan (the amount outstanding after the Initial Default Term Loan Principal Payment), commencing on the first day of the seventh month following the Default Conversion Date, and on the first day of each month thereafter; provided, however, that the entire principal amount of each Default Term Loan, together with accrued interest thereon, shall be due and payable on the first day of the 36th month following the Default Conversion Date of such Default Term Loan (the "Default Term Loan Maturity Date").

The Authority may prepay any Default Term Loan in whole or in part at any time, without premium or penalty, together with interest accrued on the amount prepaid to the date of prepayment, provided that each partial prepayment shall be applied to the outstanding installments of such Default Term Loan in inverse order of maturity.

Notwithstanding anything herein contained to the contrary, no amounts owing by the Authority in respect of payments of principal or interest on a Term Loan or Default Term Loan shall be eligible to be converted to a Default Term Loan. The failure of the Authority to make any payment of principal or interest on a Term Loan or Default Term Loan for a period of thirty (30) days shall empower the 2008B-1 Letter of Credit Bank to declare all amounts owing under the Related Documents to be immediately due and payable.

2008B-2 Letter of Credit and Reimbursement Agreement

General. The 2008B-2 Letter of Credit will be an irrevocable obligation of the 2008B-2 Letter of Credit Bank to pay to the Trustee, upon request and in accordance with the terms thereof, amounts sufficient to pay the unpaid principal amount and up to thirty-four (34) days' accrued interest (at the maximum interest rate of 12%) on the Series 2008B-2 Bonds when due, whether at the stated maturity thereof or upon acceleration or call for redemption, and amounts sufficient to pay the Purchase Price of Series 2008B-2 Bonds, tendered for purchase and not remarketed.

The 2008B-2 Letter of Credit will expire on the earliest to occur on the close of business of any of the following under the applicable Letter of Credit (the "Termination Date"): (i) October 22, 2011 or if such date is extended pursuant to the terms of the 2008B-2 Reimbursement Agreement, the date as so extended; (ii) the 2008B-2 Letter of Credit Bank honoring the Trustee's Final Drawing presented under the 2008B-2 Letter of Credit accompanied by the 2008B-2 Letter of Credit, (iii) 5:00 p.m. (Eastern time) on the date on which the 2008B-2 Letter of Credit Bank receives a certificate signed by the Trustee accompanied by the 2008B-2 Letter of Credit stating that the Authority has provided and the Trustee has accepted an Alternate Liquidity Facility (as defined in the Indenture) in accordance with the terms of the Indenture that is effective the date of such certificate; and (iv) 5:00 p.m. (Eastern time) on the date on which the 2008B-2 Letter of Credit Bank receives a certificate signed by the Trustee accompanied by the 2008B-2 Letter of Credit (provided, however, that the 2008B-2 Letter of Credit shall not be surrendered prior to honoring any draw request resulting from the mandatory tender for purchase of the Series 2008B-2 Bonds on such Conversion Date) (as defined in the Indenture) stating that a Conversion Date to an Interest Rate Period other than a Weekly Rate Period (as defined in the Indenture) has occurred pursuant to the Indenture and the 2008B-2 Letter of Credit will not be applicable to the Series 2008B-2 Bonds.

There can be no assurance that the 2008B-2 Letter of Credit Bank will maintain its present financial condition or that an adverse change in such condition will not adversely affect its ability to honor drawings under the 2008B-2 Letter of Credit.

The Authority and the 2008B-2 Letter of Credit Bank will enter into a Reimbursement Agreement (the "2008B-2 Reimbursement Agreement") which provides for the issuance by the 2008B-2 Letter of Credit Bank of the 2008B-2 Letter of Credit and for the reimbursement of the 2008B-2 Letter of Credit Bank by the Authority for draws on the 2008B-2 Letter of Credit. Upon the 2008B-2 Letter of Credit Bank honoring any drawing to pay the Purchase Price of the Series 2008B-2 Bonds tendered for purchase and not remarketed, the 2008B-2 Letter of Credit Bank shall be deemed to have purchased such Series 2008B-2 Bonds (the "Pledged 2008B-2 Bonds") at the Purchase Price. Any draw under the 2008B-2 Letter of Credit for principal, interest or Purchase Price creates a reimbursement obligation on the part of the Authority that is secured under the Indenture on a parity basis with the other Bonds issued under the Indenture.

The 2008B-2 Reimbursement Agreement also sets forth various covenants and obligations of the Authority. Under the terms of the 2008B-2 Reimbursement Agreement, the Authority covenants, while such 2008B-2 Reimbursement Agreement is in effect and until all obligations thereunder are paid in full, that it will, among other things, reimburse the 2008B-2 Letter of Credit Bank for draws under the 2008B-2 Letter of Credit, pay certain other amounts to the 2008B-2 Letter of Credit Bank and the Trustee and furnish the 2008B-2 Letter of Credit Bank with certain financial information.

The 2008B-2 Reimbursement Agreement also provides that upon the sixty-first (61st) day following any Tender Advance (the "Tender Conversion Date"), the Authority's obligation to repay the Tender Advance shall be in the form of a term loan (the "Tender Term Loan") providing for principal repayment as follows: the Authority shall pay one-sixth (1/6) of the outstanding principal amount of each Tender Term Loan on the first day of the sixth month following the Tender Conversion Date (the "Initial Tender Term Loan Principal Payment"). Subsequently, each Tender Term Loan shall be repaid in monthly installments of principal, each such installment being equal (or nearly as equal as may be practical) to one-thirtieth (1/30) of the remaining principal amount of the Tender Term Loan, commencing on the first day of the seventh month following the Tender Conversion Date, and on the first day of each month thereafter, provided that the entire then unpaid principal amount of such Tender Term Loan will become due and payable in full on the first day of the thirty-sixth (36) month following the Tender Conversion Date of such Tender Term Loan.

The Authority may prepay any Tender Term Loan in whole or in part at any time, without premium or penalty, together with interest accrued on the amount prepaid to the date of prepayment, provided that each partial prepayment shall be applied to the outstanding installments of such Tender Term Loan in inverse order of maturity.

Events of Default and Remedies

Events of Default Pursuant to the 2008B-2 Reimbursement Agreement, the occurrence of any of the following events shall constitute an Event of Default thereunder. Reference is made to the 2008B-2 Reimbursement Agreement for a complete listing of all Events of Default.

(a) The Authority shall fail to reimburse the Bank for any draw on the 2008B-2 Letter of Credit or the Authority shall fail to make any payment under the Bank Documents when due or within the applicable grace period, if any, set forth therein;

(b) The Authority shall fail to make any payments as required under the 2008B-2 Reimbursement Agreement relating to any Tender Term Loan or relating to a Default Term Loan (as hereinafter defined) and such failure shall continue for a period of thirty (30) days;

(c) The Authority shall fail to comply with certain covenants contained in the 2008B-2 Reimbursement Agreement;

(d) A default by the Authority in any payment of principal of or interest on any Indebtedness in excess of $1,000,000 in principal amount beyond any period of grace with respect to such payment or a default in the observance of any other covenant, term or condition contained in any agreement or instrument pursuant to which such Indebtedness is created, secured or evidenced, if the effect of such default is to cause the acceleration of any such Indebtedness (whether or not such right shall have been waived);

(e) Any representation or warranty in any certificate or other document delivered in connection with the 2008B-2 Reimbursement Agreement shall prove false or misleading in any material respect;

(f) Any party shall obtain or seek an order or decree in any court of competent jurisdiction seeking to enjoin or prohibit the 2008B-2 Letter of Credit Bank or the Authority from carrying out the terms and conditions of any of the 2008B-2 Reimbursement Agreement or any document delivered in connection therewith and such proceedings are not discontinued or such decree is not vacated within sixty (60) days after the filing thereof;

(g) The Authority shall become insolvent or unable to pay its debts as the same mature, or a petition shall be filed by or against the Authority in bankruptcy (unless dismissed within sixty (60) days after any involuntary filing) or seeking the appointment of a receiver, trustee or conservator for the Authority or for any portion of the Authority's property, or for reorganization or to effect a plan or other arrangement with or for the benefit of the Authority's creditors, or such a petition shall be granted or the Authority shall consent to the appointment of a receiver, trustee or conservator for the Authority or for any portion of the Authority's property;

(h) Any document delivered in connection with the Series 20008B-2 Bonds is amended without the 2008B-2 Letter of Credit Bank's prior written consent;

(i) The occurrence of an event of default under any hedge agreement;

(j) The occurrence of an event of default under any loan, credit or other agreement between the Authority and the 2008B-2 Letter of Credit Bank;

(k) Any materially adverse change in the financial condition of the Authority shall occur; or

(l) The occurrence and continuation of an "Event of Default" as described in Section 8.01 of the Indenture which results in an acceleration of principal of not less than 25% in aggregate principal amount of the Authority Bonds then Outstanding.

Remedies If an Event of Default under the 2008B-2 Reimbursement Agreement, has occurred and is continuing uncured, the 2008B-2 Letter of Credit Bank may:

(a) notify the Trustee of such Event of Default, direct the Trustee to declare an Event of Default, as defined in the Indenture, accelerate the Series 2008B-2 Bonds and direct the Trustee to draw on the 2008B-2 Letter of Credit and/or to exercise remedies under the Series 2008B-2 Bond documents;

(b) subject to the limitations set forth below, declare the principal and all amounts owing under the 2008B-2 Reimbursement Agreement and the documents delivered therewith and otherwise owing by the Authority to the 2008B-2 Letter of Credit Bank to be immediately due and payable (and if an Event of Default under subparagraph (a), (g)or (l) above shall occur, all such amounts shall be immediately due and payable); or

(c) exercise any right or remedy which it has under the 2008B-2 Reimbursement Agreement or any of the other documents delivered therewith or otherwise available at law or in equity.

Notwithstanding the foregoing, prior to the 2008B-2 Letter of Credit Bank's exercise of the remedy provided in subparagraph (b) above, but only so long as there is no Event of Default as provided in subparagraph (l) above, all amounts owing to the 2008B-2 Letter of Credit Bank under the Bank Documents and otherwise owing to the Authority (other than amounts owing to the Bank as a result of a Tender Term Loan or as a result of a Default Term Loan (as hereinafter defined)) shall, upon written notice of the 2008B-2 Letter of Credit Bank to the Authority, be automatically be converted on the first day of the month following such written notice (the "Default Conversion Date") to a three year amortizing loan to the Authority (a "Default Term Loan") and shall be repaid as follows.

The unpaid balance of each Default Term Loan shall bear interest from the Default Conversion Date at the Default Rate. Accrued interest on each Default Term Loan shall be due and payable monthly, commencing on the Default Conversion Date and on the first day of each month thereafter. One sixth of the outstanding principal of each Default Term Loan shall be repaid on the first day of the sixth month following the Default Conversion Date (the "Initial Default Term Loan Principal Payment"). Subsequently, each Default Term Loan shall be repaid in monthly installments of principal, each such installment being equal (as nearly as may be practical) to one thirtieth (1/30) of the remaining principal amount of the Default Term Loan (the amount outstanding after the Initial Default Term Loan Principal Payment), commencing on the first day of the seventh month following the Default Conversion Date, and on the first day of each month thereafter; provided, however, that the entire principal amount of each Default Term Loan, together with accrued interest thereon, shall be due and payable on the first day of the 36th month following the Default Conversion Date of such Default Term Loan (the "Default Term Loan Maturity Date").

The Authority may prepay any Default Term Loan in whole or in part at any time, without premium or penalty, together with interest accrued on the amount prepaid to the date of prepayment, provided that each partial prepayment shall be applied to the outstanding installments of such Default Term Loan in inverse order of maturity.

Notwithstanding anything herein contained to the contrary, no amounts owing by the Authority in respect of payments of principal or interest on a Tender Term Loan or Default Term Loan shall be eligible to be converted to a Default Term Loan. The failure of the Authority to make any payment of principal or interest on a Tender Term Loan or Default Term Loan for a period of thirty (30) days shall empower the 2008B-2 Letter of Credit Bank to declare all amounts owing under the Bank Documents to be immediately due and payable.

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX H

FORM OF ALTERNATE LIQUIDITY FACILITY BOND COUNSEL OPINIONS AND INITIAL APPROVING OPINION

[THIS PAGE INTENTIONALLY LEFT BLANK]

Pepper Hamilton LLP
Attorneys at Law

50th Floor
500 Grant Street
Pittsburgh, PA 15219-2502
412.454.5000
Fax 412.281.0717

Closing Document No. __

June 12, 2008

JPMorgan Chase Bank, National Association
New York, NY

The Bank of New York Trust Company, N.A.
New York, NY

J.P. Morgan Securities, Inc.
Pittsburgh, PA

The Pittsburgh Water and Sewer Authority
Pittsburgh, PA

Merrill Lynch & Co.
Pittsburgh, PA

Re: $310,355,000 The Pittsburgh Water and Sewer Authority (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008 Taxable and (Fixed Rate) Water and Sewer System First Lien Revenue Bonds, Series D-1 of 2008 and The Pittsburgh Water and Sewer Authority (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008 and (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series D-2 of 2008; and $103,795,000, The Pittsburgh Water and Sewer Authority (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 2008 (together, the "2008 Bonds")

Ladies and Gentlemen:

We have acted as Bond Counsel in connection with the issuance by the Pittsburgh Water and Sewer Authority (the "Authority") of the above described bonds (the "2008 Bonds"). The 2008 Bonds are being issued under the provisions of that certain Trust Indenture by and between the Authority and The Bank of New York Trust Company, N.A., as successor trustee, dated as of October 15, 1993, as supplemented as of July 15, 1995, March 1, 1998, March 1, 2002, September 15, 2003, June 1, 2005, March 1, 2007 and June 1, 2008 and to a Subordinate Trust Indenture by and between the Authority to the Trustee, as successor trustee, dated as of July 15, 1995, as supplemented as of March 1, 1998 and June 1, 2008 (together, the "Indentures").

The 2008 Bonds have been purchased by J.P. Morgan Securities, Inc. and Merrill Lynch & Co. (the "Underwriters") pursuant to two Bond Purchase Contracts dated May 29, 2008 and June 11, 2008, (collectively the "Bond Purchase Agreements") among the Underwriters and the Authority. All capitalized terms not otherwise defined in this opinion shall have the respective meanings given to them in the Bond Purchase Agreement.

At your request, we have reviewed (a) the Bond Purchase Agreements; (b) certain sections described below of an Official Statements of the Authority dated May 30, 2008 and June 11, 2008, relating to 2008 Bonds (together, the "Official Statements"); (c) the Escrow Deposit Agreements, each dated June 1, 2008, by and between the Authority and The Bank of New York Trust Company, N.A., relating to the advance refunding of the Authority's Water and Sewer First Lien Revenue Bonds, Series A of 1993, Water and Sewer First Lien Revenue Bonds, Series B of 1998 and Water and Sewer First Lien Revenue Bonds, Series of 2003 and (d) certified copies of proceedings of the Authority with respect to the Bond Purchase Agreement and the Official Statements, as well as such other documents as we deem necessary to render this opinion.

We express no opinion as to other parts of the Official Statements not described below and no opinion is expressed as to financial statements and other financial data in the Official Statements.

Based upon the foregoing, we are of the opinion that the statements contained in the Official Statements under the captions "THE 2008 FIXED RATE BONDS," "THE 2008 VARIABLE RATE BONDS," "SECURITY FOR THE 2008 BONDS," "REGISTRATION, TRANSFER AND EXCHANGE," "FLOW OF FUNDS," "RATE COVENANT," and "TAX MATTERS," which we have reviewed, fairly and accurately describe the matters purported to be described therein, and the statements made under the heading "TAX MATTERS" accurately reflect our opinion as bond counsel as to the application of federal and Pennsylvania tax laws discussed therein.

The Bond Purchase Agreements and the Escrow Deposit Agreements have been duly authorized, executed and delivered by the Authority and, assuming the due authorization, execution and delivery thereof by the other parties thereto, are valid and binding obligations of the Authority, enforceable in accordance with their terms.

The foregoing opinions are limited to the application of the present internal laws of the Commonwealth of Pennsylvania, except with respect to the applicability of federal securities law provided in such opinion.

This opinion is rendered to you and is intended solely for your benefit in connection with the issuance and sale of the 2008 Bonds and may not be relied upon for any other purpose. This opinion may not be relied upon by any other person or entity for any purpose or quoted or furnished to or be relied upon by any other person, firm or corporation for any purpose without our prior written consent.

We express no opinion herein as to the accuracy, adequacy or completeness of the Official Statements relating to the Bonds.

The rights of the owners of the Bonds and the enforceability of the Bonds may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights generally and by equitable principles, whether considered at law or in equity.

The foregoing opinion is given as of the date hereof. We expressly disclaim any obligation or responsibility to advise you of any changes in fact or law arising or coming to our attention after the date hereof that may affect the opinion set forth herein.

Pepper Hamilton LLP

PEPPER HAMILTON LLP

[THIS PAGE INTENTIONALLY LEFT BLANK]

FORM OF BOND COUNSEL SERIES B-1 OF 2008 SUBSTITUTION OPINION

October _____, 2009

The Pittsburgh Water and Sewer Authority
Pittsburgh, Pennsylvania

Re: The Pittsburgh Water and Sewer Authority (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 – Substitution of Liquidity Facility

Ladies and Gentlemen:

We have acted as Bond Counsel in connection with the execution and delivery by The Pittsburgh Water and Sewer Authority (the "Authority") of its $72,750,000 aggregate principal amount of (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-1 of 2008 (the "Bonds"). The Bonds were issued on June 12, 2008 under the provisions of a Trust Indenture dated as of October 15, 1993 (the "Original Indenture"), as supplemented by a Seventh Supplemental Indenture dated as of June 1, 2008 (the "Seventh Supplemental Indenture", and together with the Original Indenture, the "Indenture"), from the Authority to The Bank of New York Mellon Trust Company, N.A. (the "Trustee"). Capitalized terms used but not defined herein shall have the same meanings ascribed to such terms in the Indenture.

The Bonds bear interest at a Weekly Rate and are subject to optional and mandatory tender for purchase as set forth in the Indenture. Liquidity for the payment of the purchase price of Bonds tendered or deemed tendered and not remarketed currently is provided by a Standby Bond Purchase Agreement dated as of June 1, 2008, among the Trustee, the Authority and Dexia Credit Local, acting through its New York Branch, as the Bank (the "Original Liquidity Facility").

We are delivering this opinion as bond counsel to the Authority pursuant to Section 7-7.02(b) of the Seventh Supplemental Indenture in connection with delivery of an irrevocable transferable direct-pay letter of credit dated October __, 2009, by the Bank of America, N.A. (the "Alternate Liquidity Provider") pursuant to a certain Reimbursement Agreement dated as of October __, 2009, between the Alternate Liquidity Facility Provider and the Authority (the "Alternate Liquidity Facility") in replacement of the Original Liquidity Facility. Such substitution and replacement is authorized by the terms of the Seventh Supplemental Indenture.

For purposes of rendering the opinions expressed herein, we have examined such matters of law and such documents, instruments, records and proceedings as we have deemed necessary including, but not limited to, the Indenture, the Original Liquidity Facility, the Alternate Liquidity Facility, letters dated October __, 2009 from Moody's Investors Service and Standard and Poor's to the Authority advising that the substitution of the Original Liquidity Facility with the Alternate Liquidity Facility will not cause the current rating assigned to the Bonds to be reduced or withdrawn.

Based on the foregoing, we are of the opinion that the substitution and replacement of the Original Liquidity Facility with the Alternate Liquidity Facility is authorized under and complies with the terms of the Indenture and that under existing law as currently enacted and construed, the delivery of the Alternate Liquidity Facility will not in and of itself adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds.

We have made no investigation and express no opinion as to whether any events have occurred or any circumstances have existed since the date of issuance of the Bonds which may have affected the federal income tax status of interest on the Bonds. This opinion is not a confirmation or "bring down" of our opinion as bond counsel which was delivered in connection with the issuance of the Bonds.

This opinion is limited to the addressees hereof and no other person is entitled to rely hereon without our prior written consent. By your acceptance of this letter you agree that this letter does not establish, and shall not be deemed to establish, an attorney-client relationship or privity between this firm and you.

PEPPER HAMILTON LLP

FORM OF BOND COUNSEL SERIES B-2 OF 2008 SUBSTITUTION OPINION

October _____, 2009

The Pittsburgh Water and Sewer Authority
Pittsburgh, Pennsylvania

Re: The Pittsburgh Water and Sewer Authority (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008 – Substitution of Liquidity Facility

Ladies and Gentlemen:

We have acted as Bond Counsel in connection with the execution and delivery by The Pittsburgh Water and Sewer Authority (the "Authority") of its $72,745,000 initial aggregate principal amount of (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B-2 of 2008 (the "Bonds"). The Bonds were issue on June 12, 2008 under the provisions of a Trust Indenture dated as of October 15, 1993 (the Original Indenture"), as supplemented by a Seventh Supplemental Indenture dated as of June 1, 2008 (the "Seventh Supplemental Indenture", and together with the Original Indenture, the "Indenture"), from the Authority to The Bank of New York Mellon Trust Company, N.A. (the "Trustee"). Capitalized terms used but not defined herein shall have the same meanings ascribed to such terms in the Indenture.

The Bonds bear interest at a Weekly Rate and are subject to optional and mandatory tender for purchase as set forth in the Indenture. Liquidity for the payment of the purchase price of Bonds tendered or deemed tendered and not remarketed currently is provided by a Standby Bond Purchase Agreement dated as of June 1, 2008, among the Trustee, the Authority and Dexia Credit Local, acting through its New York Branch, as the Bank (the "Original Liquidity Facility").

We are delivering this opinion as bond counsel to the Authority pursuant to Section 7-7.02(b) of the Seventh Supplemental Indenture in connection with delivery of an irrevocable transferable direct-pay letter of credit dated October __, 2009, by PNC Bank, National Association (the "Alternate Liquidity Provider") pursuant to a certain Letter of Credit, Reimbursement and Security Agreement dated as of October __, 2009, between the Alternate Liquidity Facility Provider and the Authority (the "Alternate Liquidity Facility") in replacement of the Original Liquidity Facility. Such substitution and replacement is authorized by the terms of the Seventh Supplemental Indenture.

For purposes of rendering the opinions expressed herein, we have examined such matters of law and such documents, instruments, records and proceedings as we have deemed necessary including, but not limited to, the Indenture, the Original Liquidity Facility, the Alternate Liquidity Facility, a letter dated October __, 2009 from Moody's Investors Service and Standard and Poor's to the Authority advising that the substitution of the Original Liquidity Facility with the Alternate Liquidity Facility will not cause the current rating assigned to the Bonds to be reduced or withdrawn.

Based on the foregoing, we are of the opinion that the substitution and replacement of the Original Liquidity Facility with the Alternate Liquidity Facility is authorized under and complies with the terms of the Indenture, and that under existing law as currently enacted and construed, the delivery of the Alternate Liquidity Facility will not in and of itself adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds.

We have made no investigation and express no opinion as to whether any events have occurred or any circumstances have existed since the date of issuance of the Bonds which may have affected the federal income tax status of interest on the Bonds. This opinion is not a confirmation or "bring down" of our opinion as bond counsel which was delivered in connection with the issuance of the Bonds.

This opinion is limited to the addressees hereof and no other person is entitled to rely hereon without our prior written consent. By your acceptance of this letter you agree that this letter does not establish, and shall not be deemed to establish, an attorney-client relationship or privity between this firm and you.

PEPPER HAMILTON LLP