DAC Bond

**NEW ISSUE – Book-Entry Only** **RATINGS: See "Ratings of the Bonds" herein**

*In the opinion of Bond Counsel, under existing law and assuming continuing compliance by the Authority with certain covenants which relate to the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), interest on the 2008 Bonds is excluded from gross income for Federal income tax purposes and is not an item of tax preference for purposes of Federal alternative minimum tax; provided, however, that certain federal income tax consequences related to the alternative minimum tax may arise from ownership of the 2008 Bonds. The 2008 Bonds are exempt from personal property tax in Pennsylvania and the interest on the 2008 Bonds is exempt from Pennsylvania corporate net income tax and from Pennsylvania personal income tax (See "Tax Matters" herein).*

# THE PITTSBURGH WATER AND SEWER AUTHORITY

## (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series of 2008
## consisting of
## $145,495,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008
## $71,225,000 Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008
## and
## (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 2008
## consisting of
## $51,910,000 Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008, and
## $51,885,000 Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-2 of 2008

**Dated:** Date of Delivery **Price: 100%** **Due:** September 1, of the years shown on inside front cover.

The Pittsburgh Water and Sewer Authority Water and Sewer System First Lien Revenue Bonds, Series of 2008, consisting of $145,495,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008 (the "2008B Bonds"), $71,225,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008 (the "2008D-2 Bonds"), and $51,910,000 aggregate principal amount, (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008 (the "2008C-1 Bonds"), and $51,885,000 aggregate principal amount, (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-2 of 2008 (the "2008C-2 Bonds," and, together with the 2008C-1 Bonds, the "2008C Bonds") The 2008B Bonds, the 2008C-1 Bonds, the 2008C-2 Bonds and the 2008D-2 Bonds are collectively referred to herein as the "Variable Rate Bonds". The Variable Rate Bonds will be special limited obligations of The Pittsburgh Water and Sewer Authority (the "Authority" or "PWSA"). The 2008B Bonds and the 2008D-2 Bonds are being issued pursuant to a Trust Indenture dated as of October 15, 1993, as amended and supplemented (the "First Lien Indenture") by and between the Authority and The Bank of New York Trust Company, N.A., as Trustee (in such capacity, the "First Lien Indenture Trustee"). The 2008C Bonds are being issued pursuant to the Subordinate Trust Indenture dated as of July 15, 1995, as amended and supplemented (the "Subordinate Indenture") by and between the Authority and The Bank of New York Trust Company, N.A., as Trustee (in such capacity, the "Subordinate Indenture Trustee," and when referred to herein as trustee under both Indentures, the "Trustee"). The 2008B Bonds and the 2008D-2 Bonds (along with all other bonds issued pursuant to the First Lien Indenture (the "First Lien Bonds") and certain Periodic Payments due under Qualified Interest Rate Swap Agreements) are secured 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 First Lien Indenture as provided therein. The Subordinate Bonds (along with certain Periodic Payments due under Qualified Interest Rate Swap Agreements related to the Subordinate Bonds) have a subordinate lien on the Receipts and Revenues of the Authority after payment of the Current Expenses and the First Lien Bonds, together with a first lien on certain funds held by the Trustee under the Subordinate Indenture as provided therein.

The 2008 Bonds will mature in the aggregate principal amounts set forth on the inside front cover hereof. The Variable Rate Bonds initially will be issued in the Weekly Mode and will bear interest at a Weekly Rate to be initially established by the Underwriters from their date of initial delivery to but excluding the first day of the next Weekly Rate Period for the respective series of Variable Rate Bonds, payable on July 1, 2008 and on each Interest Payment Date (as defined herein) thereafter until maturity or earlier redemption. Thereafter, for each Weekly Rate Period, the Variable Rate Bonds will bear interest at the respective Weekly Rate determined by the respective Remarketing Agents for the respective series of Variable Rate Bonds in accordance with the procedures detailed herein (See "THE VARIABLE RATE BONDS – Rate Modes.") The Variable Rate Bonds may bear interest at a Weekly Rate or Fixed Rate. While a Variable Rate Bond bears interest at either of those rates, such Variable Rate Bond will be deemed to be operating in a Weekly Mode or a Fixed Mode, respectively. All Variable Rate Bonds of each series may be in only one Rate Mode at the same time. The Rate Mode in which a series of the Variable Rate Bonds are operating may be changed from time to time. Initially, all of the Variable Rate Bonds will be issued in a Weekly Rate Period and will remain in that Rate Mode until a particular series is converted to the Fixed Mode as described herein.

The Variable Rate 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 2008 Bonds will be made by the Trustee directly to Cede & Co., as nominee for DTC, as registered owner of the Variable Rate Bonds, to be subsequently disbursed to DTC Participants and thereafter to beneficial owners of the Variable Rate Bonds, all as described herein. Purchasers of Variable Rate Bonds will not receive physical delivery of certificates representing their ownership interests in the Variable Rate Bonds. See "BOOK-ENTRY ONLY SYSTEM." The Variable Rate 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 Variable Rate Bonds are subject to redemption prior to maturity as herein described. See "THE VARIABLE RATE BONDS – Redemption Prior to Maturity." The Variable Rate Bonds while in the Weekly Mode are subject to optional and mandatory tender for purchase as described herein. See "THE VARIABLE RATE BONDS – Optional Tenders and Mandatory Tenders." The Weekly Mode for the Variable Rate Bonds is subject to conversion to the Fixed Mode as described herein, in which case the Variable Rate Bonds will be subject to mandatory tender for purchase. See "THE VARIABLE RATE BONDS – Conversion of Rate Mode."

The scheduled payment of the principal of and interest on the Variable Rate Bonds when due will be insured under an insurance policy to be issued concurrently with the delivery of the Bonds by Financial Security Assurance Inc.

**This Official Statement describes the terms and provisions of the Variable Rate Bonds while in the Weekly Mode only. If the Authority converts the Variable Rate Bonds to the Fixed Mode, a supplement to this Official Statement or a new official statement or remarketing circular describing the Fixed Mode will be prepared.**

While in the Weekly Mode, the purchase price of Variable Rate Bonds tendered or deemed tendered for purchase, and the interest due thereon, will be secured by four separate substantially identical liquidity facilities, one with respect to each of the 2008B Bonds, the 2008C-1 Bonds, the 2008C-2 Bonds and the 2008D-2 Bonds, in the form of a Standby Bond Purchase Agreement (each, a "Standby Purchase Agreement"), subject to certain terms and conditions as described herein and in each Standby Purchase Agreement (see "THE VARIABLE RATE BONDS – Optional Tenders and Mandatory Tenders" and "THE STANDBY PURCHASE AGREEMENT" herein), entered into between the Authority and

**JPMorgan Chase Bank, National Association** or **Dexia Credit Local** (acting through its New York Branch)

JPMorgan Chase Bank, National Association ("JPMorgan") will provide liquidity support with respect to the 2008C-2 Bonds and the 2008D-2 Bonds. Dexia Credit Local ("Dexia") will provide liquidity support with respect to the 2008B Bonds and the 2008C-1 Bonds. JPMorgan's obligation to provide liquidity support for the 2008C-2 Bonds is a separate obligation from its obligation to provide liquidity support for the 2008D-2 Bonds, and separate from Dexia's obligation to provide liquidity support for the 2008B Bonds and the 2008C-1 Bonds. Dexia's obligation to provide liquidity support for the 2008B Bonds is a separate obligation from its obligation to provide liquidity support for the 2008C-1 Bonds, and separate from JPMorgan's obligation to provide liquidity support for the 2008C-2 Bonds and the 2008D-2 Bonds.

The proceeds of the Variable Rate Bonds will be used to fund the costs of currently refunding the Authority's 1998A Bonds and 1998C Bonds; currently refunding certain maturities of the Authority's 2007B-1 and 2007B-2 Bonds; advance refunding certain maturities of the Authority's 1998B Bonds, to fund the costs of certain Capital Additions; to fund termination payments on interest rate swaps; to fund the premium for the Bond Insurance Policy securing payments on the 2008 Bonds; to fund any required deposit to the Debt Service Reserve Fund or, alternatively, the costs of a surety bond to be held by the Trustee in lieu of a funded account in the Debt Service Reserve Fund, and to fund the costs of issuance of the 2008 Bonds.

**THE VARIABLE RATE 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 THEREOF IS OBLIGATED TO PAY THE PRINCIPAL, REDEMPTION PRICE OF, OR INTEREST ON, THE VARIABLE RATE 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 THEREOF IS PLEDGED TO SUCH PAYMENT. THE AUTHORITY HAS NO TAXING POWER.**

The Variable Rate Bonds are offered when, as and if issued by the Authority and received by the Underwriters, 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, for the Underwriters by Buchanan Ingersoll & Rooney PC. The Authority expects that delivery of the Variable Rate Bonds in definitive form will be made in New York, New York, on or about June 12, 2008.

**JPMorgan** **Commonwealth Securities and Investments, Inc.** **Merrill Lynch & Co.**

June 11, 2008

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**THE PITTSBURGH WATER AND SEWER AUTHORITY**

Don Walko, Chairman
Robert P. Jablonowski, Vice Chairman
Scott Kunka, Treasurer
Henry C. Blum, Secretary
Len Bodack, Assistant Secretary/Assistant Treasurer
Dan Deasy, Member
Margaret Lanier, Member

Michael P. Kenney, Executive Director

**AUTHORITY COUNSEL**
Thorp, Reed & Armstrong, LLP
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**AUTHORITY CONSULTING ENGINEER**
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**FINANCIAL ADVISOR and SWAP ADVISOR**
PNC Capital Markets LLC
Pittsburgh, Pennsylvania

**UNDERWRITERS**
J.P. Morgan Securities Inc.
Commonwealth Securities and Investments, Inc.
Merrill Lynch & Co.

**INITIAL REMARKETING AGENTS**
J.P. Morgan Securities Inc. (2008B and 2008D-2 Bonds)
Merrill Lynch & Co. (2008C-1 and 2008C-2 Bonds)

**BOND COUNSEL**
Pepper Hamilton LLP
Pittsburgh, Pennsylvania

**UNDERWRITERS' COUNSEL**
Buchanan Ingersoll & Rooney PC
Pittsburgh, Pennsylvania

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

**LIQUIDITY FACILITY PROVIDERS**
JPMorgan Chase Bank, National Association
New York, New York

Dexia Credit Local, New York Branch
New York, New York

**COUNSEL TO LIQUIDITY FACILITY PROVIDERS**
Greenberg Traurig, LLP
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 Bonds or the matters described herein, other than those contained in this Official Statement, 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 Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the 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 Official Statement is not to be construed as a contract or agreement between the Authority and the purchasers or holders of any of the Bonds. Any statements made in this Official Statement 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 Official Statement 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 Official Statement, including the Appendices, are not to be deemed to be a determination of relevance, materiality or importance, and this Official Statement, including the Appendices, must be considered in its entirety.

The Authority has deemed this Official Statement 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 JPMorgan Chase Bank, National Association, and Dexia Credit Local, acting through its New York Branch (together, the "Banks") contained under the caption "THE BANKS," none of the information in this Official Statement has been supplied or verified by the Banks, and the Banks make no representation or warranty, express or implied as to: (i) the accuracy or completeness of such information; (ii) the validity of the 2008 Bonds; or (iii) the tax-exempt status of the interest on the 2008 Bonds.

Other than with respect to the information regarding Financial Security Assurance Inc. (the "Bond Insurer") contained under the caption "BOND INSURANCE" and in APPENDIX G, none of the information in this Official Statement has been supplied or verified by the Bond Insurer, and the Bond Insurer makes no representation or warranty, express or implied as to: (i) the accuracy or completeness of such information; (ii) the validity of 2008 Bonds; or (iii) the tax-exempt status of the interest on the 2008 Bonds.

The Underwriters have reviewed the information in this Official Statement 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 Underwriters do not guarantee the accuracy or completeness of such information.

THE BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, NOR HAS THE APPLICABLE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE REGISTRATION OR QUALIFICATION OF THE BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE SECURITIES LAWS OF THE STATES, IF ANY, IN WHICH THE 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 BONDS OR THE ACCURACY OR COMPLETENESS OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

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## SUMMARY INFORMATION

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

Issuer .....The Pittsburgh Water and Sewer Authority (the "Authority" or "PWSA")

2008 Bonds.....The Pittsburgh Water and Sewer Authority Water and Sewer System First Lien Revenue Bonds, Series of 2008, consisting of $145,495,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008, and $71,225,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008; and $51,910,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008 and $51,885,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-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 of the years specified on the inside front cover hereof.

Interest.....Payable on the first Business Day of each month commencing July 1, 2008.

Security.....The 2008B and 2008D-2 Bonds are secured (along with all other bonds issued pursuant to the First Lien Indenture and certain Periodic Payments due under Qualified Interest Rate Swap Agreements) 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 First Lien Indenture as provided therein. The 2008C Bonds have a subordinate lien on the Receipts and Revenues of the Authority after payment of the Current Expenses and the First Lien Bonds, together with a first lien on certain funds held by the Trustee under the Subordinate Indenture as provided therein. (See "SECURITY FOR THE 2008 BONDS – Pledge of Receipts and Revenues")

Bond Insurance.....The timely payment of principal of and interest on the Variable Rate Bonds is insured under a bond insurance policy issued by Financial Security Assurance Inc. (the "Bond Insurer"). (See "SECURITY FOR THE 2008 BONDS" and "BOND INSURANCE" herein.)

Liquidity Support.....The Authority and the Trustee will enter into a separate Standby Bond Purchase Agreement, for each of the 2008B Bonds, the 2008D-2 Bonds, the 2008C-1 Bonds and the 2008C-2 Bonds (each, a "Standby Bond Purchase Agreement," and, collectively, the "Standby Bond Purchase Agreements"), each dated as of June 1, 2008, with JPMorgan Chase Bank, National Association (with respect to the 2008C-2 Bonds and the 2008D-2 Bonds) or Dexia Credit Local, acting through its New York Branch (with respect to the 2008B Bonds and the 2008C-1 Bonds) (each, a "Bank"), whereby, subject to the terms and conditions of each such agreement, each Bank will agree to purchase any Eligible Bond (hereinafter defined) of the applicable series that is not remarketed after a tender of such Eligible Bond for purchase pursuant to the optional or mandatory tender provisions of the applicable Indenture. See "STANDBY BOND PURCHASE AGREEMENTS" herein for a discussion of certain provisions of the Standby Bond Purchase Agreements.

Use of Proceeds .....The proceeds of the 2008 Bonds will be used to fund the costs of currently refunding the Authority's 1998A Bonds and 1998C Bonds; currently refunding certain maturities of the Authority's 2007B-1 and 2007B-2 Bonds; advance refunding certain maturities of the Authority's 1998B Bonds, to fund the costs of certain Capital Additions; to fund termination payments on interest rate swaps; to fund the premium for the Bond Insurance Policy securing payments on the 2008 Bonds; to fund any required deposit to the Debt Service Reserve Fund or, alternatively, the costs of a surety bond to be held by the Trustee in lieu of a funded account in the Debt Service Reserve Fund, and to fund the costs of issuance of the 2008 Bonds.

Redemption.....The Variable Rate Bonds are subject to optional, mandatory redemption and extraordinary optional redemption prior to maturity. (See "THE VARIABLE RATE BONDS" herein.)

Bond Ratings .....The following ratings are based solely upon the creditworthiness of the Bond Insurer and, in the case of the short term rating, the creditworthiness of the Banks.

Moody's: "Aaa" / "VMIG 1" Standard & Poor's: "AAA" / "A-1+"

Trustee &
Paying Agent .....The Bank of New York Trust Company, N.A.

# THE PITTSBURGH WATER AND SEWER AUTHORITY

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

**consisting of**

**$145,495,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008**
**$71,225,000 Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008**

**and**

## (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 2008

**consisting of**

**$51,910,000 Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008, and**
**$51,885,000 Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-2 of 2008**

## INTRODUCTION

The purpose of this Official Statement, 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 issuance by the Authority of the following bonds (collectively, the "Variable Rate Bonds"):

1. (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series of 2008, consisting of:
   a) $145,495,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008 (the "2008B Bonds"),
   b) $71,225,000 (Variable Rate Demand) Water and Sewer System First Lien Revenue Bonds, Series D-2 of 2008 (the "2008D-2 Bonds").
2. (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 2008 (the "2008C Bonds"), consisting of:
   a) $51,910,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Refunding Bonds, Series C-1 of 2008 (the "2008C-1 Bonds"),
   b) $51,885,000 (Variable Rate Demand) Water and Sewer System Subordinate Revenue Bonds, Series C-2 of 2008 (the "2008C-2 Bonds").

In addition to the Variable Rate Bonds, the Authority intends to issue and deliver on the date of delivery of the Variable Rate Bonds the following fixed rate bonds (collectively, the "2008 Fixed Rate Bonds," and, together with the Variable Rate Bonds, the "2008 Bonds"):

(Fixed Rate) Water and Sewer System First Lien Revenue Bonds, Series of 2008, consisting of:

a) $68,970,000 (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008 Taxable (the "Taxable 2008A Bonds"),

b) $24,665,000 (Fixed Rate) Water and Sewer System First Lien Revenue Bonds, Series D-1 of 2008 (the "2008D-1 Bonds").

The Taxable 2008A Bonds, the 2008B Bonds, the 2008D-1 Bonds and the 2008D-2 Bonds (collectively referred to herein as the "First Lien 2008 Bonds") are being issued pursuant to a Trust Indenture dated as of October 15, 1993, 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 (together, the "Existing First Lien Indenture"), and a Seventh Supplemental Indenture dated as of June 1, 2008 (the "Seventh Supplemental Indenture," and, collectively with the Existing First Lien Indenture, the "First Lien Indenture") by and between the Authority and The Bank of New York Trust Company, N.A., as Trustee (in such capacity, the "First Lien Indenture Trustee").

The 2008C Bonds are being issued pursuant to the Subordinate Trust Indenture dated as of July 15, 1995, as amended and supplemented by a First Supplemental Subordinate Indenture dated as of March 1, 1998 (together, the "Existing Subordinate Indenture"), and a Second Supplemental Subordinate Indenture dated as of June 1, 2008 (the "Second

Subordinate Indenture, and, collectively with the Existing Subordinate Indenture, the "Subordinate Indenture") by and between the Authority and The Bank of New York Trust Company, N.A., as Trustee (in such capacity, the "Subordinate Indenture Trustee," and when referred to herein as trustee under both Indentures, the "Trustee"). The 2008C Bonds together with the 1998C Bonds (defined hereinafter) any other bonds issued under the terms of the Subordinate Indenture are referred to herein as the "Subordinate Bonds." The Subordinate Indenture and the First Lien Indenture are collectively referred to herein as the "Indentures".

The Variable Rate Bonds will initially be issued in the Weekly Mode as more fully described herein. The Indentures provides for conversion of the Variable Rate Bonds to the Fixed Mode. If converted from the Weekly Mode to the Fixed Mode, the Variable Rate Bonds will be purchased from the existing Bondholders pursuant to the mandatory tender provisions of the respective Indentures on the Conversion Date. This Official Statement provides information with respect to the Variable Rate Bonds in the Weekly Mode only and does not provide information with respect to the Variable Rate Bonds in the Fixed Mode. If the Authority converts any one or more series of the Variable Rate Bonds from the Weekly Mode to the Fixed Mode, a supplement to this Official Statement or remarketing circular describing the Fixed Mode 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 INDENTURES - DEFINITIONS OF CERTAIN TERMS. All references herein to the Act, the 2008 Bonds, the Indentures, the Standby Bond Purchase Agreements, the Remarketing Agreement, the Escrow Deposit Agreement 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 Underwriters and thereafter, executed copies may be obtained from the Trustee. All statements in this Official Statement 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 realize.

**THIS OFFICIAL STATEMENT PROVIDES CERTAIN INFORMATION CONCERNING THE VARIABLE RATE BONDS PRIOR TO A DATE ON WHICH AN ALTERNATE LIQUIDITY FACILITY IS DELIVERED, A DATE ON WHICH THE STANDBY BOND PURCHASE AGREEMENTS EXPIRE, OR A CONVERSION DATE ON WHICH THE RATE MODE IS CHANGED TO A FIXED MODE. OWNERS AND PROSPECTIVE PURCHASERS OF THE VARIABLE RATE BONDS SHOULD NOT RELY ON THIS OFFICIAL STATEMENT FOR INFORMATION CONCERNING THE VARIABLE RATE BONDS ON AND AFTER ANY SUCH DATE, BUT SHOULD LOOK TO THE REVISIONS, AMENDMENTS, SUPPLEMENTS OR SUBSTITUTIONS THEREOF FOR INFORMATION CONCERNING THE VARIABLE RATE BONDS ON OR AFTER ANY SUCH DATE.**

**THE 2008 FIXED RATE BONDS ARE NOT BEING OFFERED PURSUANT TO THIS OFFICIAL STATEMENT BUT ARE BEING OFFERED PURSUANT TO A SEPARATE OFFICIAL STATEMENT. THE 2008 FIXED RATE BONDS ARE EXPECTED TO BE ISSUED CONCURRENTLY WITH THE VARIABLE RATE BONDS.**

## 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 acquired 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 "CAPITAL LEASE AGREEMENT WITH THE CITY OF PITTSBURGH" in APPENDIX A – Description of the Authority and Water and Sewer System.)

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

In addition to the Variable Rate Bonds, the Authority has previously issued under the First Lien Indenture other series of bonds that have a parity claim to the Receipts and Revenues of the Authority. The other parity issues that will be outstanding following the delivery of the 2008 Bonds are the following:

$123,960,000 Water and Sewer System First Lien Revenue Refunding Bonds, Series of 2007 (the "2007 Bonds");

$81,430,000 Water and Sewer System Revenue Refunding Bonds, Series of 2003 (the "2003 Bonds");

$36,440,069.70 initial issuance amount of 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")

As indicated above, the Authority also intends to issue and deliver on the date of delivery of the Variable Rate Bonds, two series of fixed rate bonds that are to be secured on a parity basis with the 2008B and 2008D-2 Bonds, the $68,970,000 (Fixed Rate) Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008 Taxable (the "Taxable 2008A Bonds"), and the $24,665,000 (Fixed Rate) Water and Sewer System First Lien Revenue Bonds, Series D-1 of 2008 (the "2008D-1 Bonds") The Variable Rate Bonds, the Taxable 2008A Bonds, the 2008D-1 Bonds, the 2007 Bonds, the 2003 Bonds, the 1998B Bonds and the 1993A Bonds, and any additional bonds which are hereafter issued pursuant to the First Lien Indenture are referred to herein as the "First Lien Bonds".

In addition to the Subordinate Bonds, the Authority has outstanding six loans from the Pennsylvania Infrastructure Investment Authority ("PENNVEST") in the current outstanding principal amount of approximately $13,821,611 (the "Pennvest Loans"), which loans are also subordinated to the Authority's Bonds.

## THE VARIABLE RATE BONDS

### *General*

The Variable Rate Bonds will be dated the date of authentication and will bear interest from the date of the first authentication and delivery thereof. The Variable Rate 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 Variable Rate 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 Variable Rate 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 Variable Rate Bonds, in which event such Variable Rate 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 Variable Rate Bonds shall bear interest from the succeeding Interest Payment Date. Interest on the Variable Rate Bonds shall be paid on each Interest Payment Date. Each Variable Rate 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 Variable Rate Bonds at the designated trust office of the Trustee upon the surrender for cancellation of the Variable Rate Bonds.

Notwithstanding the foregoing, interest payable on the Variable Rate 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 Variable Rate Bonds prior to their date of initial issuance and delivery or after the maturity thereof or after the redemption date for such Variable Rate Bond (provided the redemption price is paid or provided for in accordance with the provisions of the First Lien

Indenture). The holder of any Variable Rate Bond purchased following the mandatory tender of such Variable Rate Bond shall be entitled to interest on such Variable Rate Bond accruing from such mandatory tender date.

See "REGISTRATION, TRANSFER AND EXCHANGE OF THE 2008 BONDS" and "BOOK-ENTRY ONLY SYSTEM" for a description of provisions relating to the registration, transfer and exchange of the Variable Rate Bonds.

***Rate Modes***

Each Variable Rate Bond shall bear interest at the Weekly Rate, the Fixed Rate or the Bank Bond Rate, as described below. Each series of the Variable Rate Bonds shall bear interest in the same Rate Mode. Both sub-series of the Variable Rate Bonds shall initially be issued in the Weekly Mode. Each sub-series of the Variable Rate Bonds may be converted to a Fixed Mode, as provided in the First Lien Indenture.

**This Official Statement provides information with respect to the Variable Rate Bonds while bearing interest as a Weekly Rate only**. Upon conversion of the Variable Rate Bonds to the Fixed Rate, 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 on the following dates with respect to interest on any Variable Rate Bond payable at the Weekly Rate (other than a Bank Bond for which interest will be paid in accordance with the terms of the Liquidity Facility), interest shall be payable in arrears on the first Business Day of each month (beginning July 1, 2008 in the case of the initial delivery of the Variable Rate Bonds) while such Variable Rate Bond bears interest at a Weekly Rate, and (ii) with respect to interest on any Variable Rate Bond payable at the Fixed Rate commencing on the effective date of conversion of such Variable Rate Bond from the Weekly Mode to the Fixed Mode, interest shall be payable on March 1 and September 1 of each year (each such date being herein called an "Interest Payment Date").

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 Variable Rate Bond on any Interest Payment Date will be paid to the person in whose name such Variable Rate 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 Variable Rate 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 Holder on such Regular Record Date, and shall be paid to the person in whose name the Variable Rate 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 Holders of the Variable Rate Bonds not less than 10 days prior to the Special Record Date.

***Method of Payment***

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

The principal of and interest on the Variable Rate 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 Agents (initially, J.P. Morgan Securities Inc. with respect to the 2008B and 2008D-2 Bonds and Merrill Lynch with respect to the 2008C-1 and C-2 Bonds) while any sub-series of the Variable Rate Bonds is in the Weekly Mode, subject to the following terms and conditions:

(1) The Weekly Rate with respect to any Variable Rate Bond shall be determined on or before the date of initial issuance of the Variable Rate 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 the 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 the Remarketing Agent does not determine a Weekly Rate shall be determined in accordance with the First Lien Indenture.

(3) The Weekly Rate with respect to a Variable Rate Bond shall be determined by the Remarketing Agent and shall be the lowest interest rate that would, in the opinion of the Remarketing Agent, result in the market value of such Variable Rate 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 Variable Rate Bond the Remarketing Agent shall give written notice to the Trustee, the Authority, the Bond Insurer, the Counterparties under the Swap Agreements, as hereinafter defined, and the Banks of the Weekly Rate so determined. Upon the written request of the Holder of any Variable Rate Bond, the Banks or the Authority, the Remarketing Agent shall confirm the Weekly Rate then in effect. The determination of the Weekly Rate by the Remarketing Agent shall be conclusive and binding upon the Authority, the Trustee, the Remarketing Agent, the Banks, and the Holders.

(5) If for any reason the 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 Bond Insurer) 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.

***Bank Bond Rate***

Any Variable Rate Bonds that are purchased by one of the Banks pursuant to the applicable Standby Bond Purchase Agreement ("Bank Bonds") shall bear interest at the Bank Bond Rate (the "Bank Bond Rate"). Interest on Bank Bonds is payable to the applicable Bank or (if applicable) to any other Bank Bondholder (as such term is defined in the Standby Bond Purchase Agreements), notwithstanding any provisions of the applicable Indenture regarding the Regular Record Date or Special Record Date. Interest accrual at the Bank Bond Rate shall begin on (and shall include) the date such Variable Rate Bond is purchased by the applicable Bank pursuant to the applicable Standby Bond Purchase Agreement and shall end on (but shall not include) the date such Variable Rate Bond is remarketed pursuant to the applicable Indenture or redeemed in accordance with the applicable Standby Bond Purchase Agreement.

***Conversion of Rate Mode***

All Variable Rate Bonds of a series shall bear interest in the same Rate Mode. The Authority may effect a conversion of the Rate Mode on the 2008B, the 2008C and/or the 2008D-2 Bonds from a Weekly Rate to the Fixed Mode (once converted to the Fixed Mode, the Variable Rate Bonds may not, thereafter, be converted to another Rate Mode) at its option with the consent of the Bond Insurer and with prior notice to the Banks and the Counterparties (defined hereinafter), subject to certain terms and conditions in the applicable First Lien Indenture or Subordinate Indenture. On the Conversion Date, the Variable Rate Bonds subject to conversion must be purchased by the Banks pursuant to the Mandatory Tender provisions of the Indentures 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 Holders of the series of Weekly Rate Variable Rate 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 Variable Rate 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 Variable Rate Bonds not later than 10 days prior to the proposed Conversion Date in which case the Trustee shall notify the Holders in writing to such effect, and (iv) that all Outstanding Weekly Rate Variable Rate

Bonds of such 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 Variable Rate Bonds are subject to Mandatory Tender on the Conversion Date. See "THE VARIABLE RATE BONDS – Mandatory Tenders."

***Conversion to Fixed Rate Mode Upon Occurrence of Certain Events***

The Variable Rate Bonds will be converted to the Fixed Rate Mode for a Fixed Rate Period extending until the maturity date of the Variable Rate Bonds, unless the Bond Insurer shall otherwise direct, upon the occurrence of any of the following events: (i) upon failure of the Banks to purchase Variable Rate Bonds in accordance with the applicable Indenture and the Liquidity Facility; (ii) upon expiration or termination of the Liquidity Facility with no substitution therefor as required by the terms of the applicable Indenture; (iii) if the Variable Rate Bonds are held as Bank Bonds for forty-five (45) days or more in any 12-month period; (iv) if or twice in a twelve-month period (X) the Remarketing Agent has failed to determine the interest rate on the Variable Rate Bonds or (Y) the proceeds of the sale by the Remarketing Agent of Variable Rate Bonds tendered in accordance with the applicable Indenture have been insufficient to pay the Purchase Price of all such Variable Rate Bonds on any Purchase Date; or (v) the Authority fails to replace the Liquidity Facility when required by the applicable Indenture. Upon the occurrence of any of the events described in either (i), (ii), (iii), (iv) or (v) above, the Trustee is directed and authorized in the Indentures to take such actions, in the name and on behalf of the Authority, as shall be necessary or appropriate to cause such conversion of the Variable Rate Bonds to the Fixed Rate Mode in accordance with the provisions of the applicable Indenture.

Any conversion to the Fixed Rate Mode as described in this section will be on terms and at a fixed interest rate that will permit the remarketing of all then outstanding Variable Rate Bonds (including Bank Bonds) at par. If such a remarketing cannot be effected on such terms, the Variable Rate Bonds shall continue to bear interest at the Weekly Rate then in effect until such time as such a conversion to the Fixed Rate Mode and related remarketing can be effected. Pursuant to the applicable Indenture, the Remarketing Agent will be directed to attempt such a remarketing of fixed rate Variable Rate Bonds on a weekly basis until either (a) the specified conversion and related remarketing are accomplished or (b) the Bond Insurer consents to the discontinuation of such efforts.

The Variable Rate Bonds are subject to Mandatory Tender on the Conversion Date. See "THE VARIABLE RATE BONDS – Mandatory Tenders."

***Optional Tenders***

The holders of Variable Rate Bonds bearing interest at variable rates in a Weekly Rate Period may elect to have their Variable Rate 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 holders' Variable Rate Bonds shall be made in such a manner that all Variable Rate Bonds held by such holder after such tender are in Authorized Denominations) purchased at a purchase price equal to 100% of the principal amount of the Variable Rate Bonds (or portion thereof) tendered plus accrued interest to the specified Purchase Date. During a Weekly Rate Period, Variable Rate 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 Variable Rate Bondholder and must specify (i) the principal amount of the Variable Rate Bond to which the notice relates, (ii) that the Bondholder irrevocably demands purchase of such Variable Rate 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 Variable Rate 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 First Lien Indenture. Upon delivery of a written notice of Optional Tender, the election to tender shall be irrevocable and binding upon such Holder and may not be withdrawn. The Trustee shall, in its sole discretion, determine whether, with respect to any Variable Rate Bond, the Holder thereof shall have properly exercised the option to have his Variable Rate Bond purchased, and such determination shall be conclusive and binding on such Holder.

Any Variable Rate Bond subject to Optional Tender shall be tendered by the Holder thereof for purchase on the Purchase Date, by delivering such Variable Rate Bond to the Delivery Office of the Trustee. If only a portion of such Variable Rate 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 holder of such Variable Rate Bond, without service charge, a new Variable Rate Bond or Variable Rate Bonds of the same Maturity and interest rate and of any Authorized Denomination or Denominations as requested by such holder in aggregate principal amount equal to and in exchange for the unpurchased portion of the principal amount of the Variable Rate Bond surrendered. Any Variable Rate Bond (or portion thereof) that is subject to purchase but that is not so delivered to the Trustee (i.e., an Undelivered Variable Rate Bond) shall nevertheless be deemed to have been tendered by the Holder thereof on the Purchase Date.

On each Purchase Date the Trustee shall pay the Purchase Price to the Holder of each Variable Rate Bond (or portion thereof) properly tendered for purchase. Funds for payment of the Purchase Price of such Variable Rate 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 applicable Indenture. If sufficient funds are not available for the purchase of all tendered Variable Rate Bonds, no purchase shall be consummated.

If the Trustee is in receipt of the Purchase Price of any Undelivered Variable Rate Bond, such Undelivered Variable Rate Bond shall be deemed to have been tendered for purchase and purchased from the Holder thereof on such Purchase Date and registration thereof shall be transferred to the purchaser of such Undelivered Variable Rate Bond. Any Holder who fails to deliver a Variable Rate 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 Variable Rate 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 Variable Rate Bond as agent for the Trustee. The Holder of such Undelivered Variable Rate Bond shall not be entitled to receive interest on such Undelivered Variable Rate Bond for any period on and after the Purchase Date. The Trustee shall, as to any tendered Variable Rate Bonds which are Undelivered Variable Rate Bonds, (i) promptly notify the Remarketing Agent of such non-delivery and (ii) place a stop transfer against such Variable Rate 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 Variable Rate Bond to the Holder thereof and make any necessary adjustments to the Register.

Anything in the applicable Indenture to the contrary notwithstanding, Variable Rate Bondholders may not exercise their Optional Tender rights at any time when the obligation of the Banks to purchase Variable Rate Bonds pursuant to the Liquidity Facility has been suspended or terminated in accordance with the provisions of the Liquidity Facility.

***Mandatory Tenders***

The Holder of each Variable Rate Bond shall be required to tender such Variable Rate 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 Variable Rate Bond;

(2) on the second ($2^{nd}$) Business Day preceding the expiration date of the Liquidity Facility then in effect for such Variable Rate 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 applicable 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 Banks, at least one Business Day prior to such mandatory tender, in the event that the Banks directs the Trustee to call the Variable Rate 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 Holders of all Variable Rate 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 applicable 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 Variable Rate Bond subject to Mandatory Tender shall be tendered by the Holder thereof for purchase on the Mandatory Tender Date, by delivering such Variable Rate Bond to the Delivery Office of the Trustee. Any such Variable Rate Bond that is subject to purchase, but that is not so delivered to the Trustee on the Mandatory Tender Date (i.e., an Undelivered Variable Rate Bond), shall nevertheless be deemed to have been tendered for purchase by the Holder thereof on the Mandatory Tender Date.

On the Mandatory Tender Date with respect to any Variable Rate Bond, the Trustee shall pay the Purchase Price to the Holder of such Variable Rate Bond. Funds for payment of the Purchase Price of such Variable Rate 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 applicable Indenture. If sufficient funds are not available for the purchase of all tendered Variable Rate Bonds, no purchase shall be consummated.

If the Trustee is in receipt of the Purchase Price of any Undelivered Variable Rate Bond, such Undelivered Variable Rate Bond shall be deemed to have been tendered for purchase and purchased from the Holder thereof on such Mandatory Tender Date and the Holder of such Undelivered Variable Rate Bond shall not be entitled to receive interest on such Undelivered Variable Rate Bond for any period on and after the Mandatory Tender Date. The Trustee shall, as to any

tendered Variable Rate Bonds which are Undelivered Variable Rate Bonds, (i) promptly notify the Remarketing Agent of such non-delivery and (ii) place a stop transfer against such Variable Rate 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 Variable Rate Bond to the Holder thereof and make any necessary adjustments to the Register.

If the Trustee receives notice that an Automatic Termination Event or an Automatic Suspension Event (as such terms are defined in the Standby Bond Purchase Agreements) exists under a Standby Bond Purchase Agreement, or the applicable Bank is otherwise no longer obligated to purchase Eligible Bonds under the purchase provisions of the applicable Standby Bond Purchase Agreement as described below, the Trustee shall promptly notify the Variable Rate Bondholders that such notice has been received and that Variable Rate Bonds tendered for purchase pursuant to the Mandatory Tender provisions of the applicable Indenture will no longer be purchased by the applicable Bank. The Variable Rate Bonds shall nevertheless be subject to Mandatory Tender under such circumstances in accordance with the provisions for Mandatory Tender discussed herein, but the Purchase Price of Variable Rate Bonds so tendered will be paid only from remarketing proceeds or funds contributed by the Authority at its option. Failure to pay the Purchase Price shall not constitute a default or Event of Default on the Variable Rate Bonds. Payment of the Purchase Price of the Variable Rate Bonds is not insured by the Bond Insurance Policy (as defined below). However, the Variable Rate Bonds may be required to be converted to a Fixed Rate upon the failure to pay Purchase Price. See "THE VARIABLE RATE BONDS – Conversion to Fixed Rate Mode Upon Occurrence of Certain Events."

***Redemption Prior to Maturity***

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

**Mandatory Sinking Fund Redemption**

The Variable Rate 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:

**2008B Bonds**

| Redemption Date (9/1) | Principal Amount | Redemption Date (9/1) | Principal Amount |
|---|---|---|---|
| 2035 | $26,870,000 | 2038 | $37,085,000 |
| 2036 | 34,020,000 | 2039* | 12,000,000 |
| 2037 | 35,520,000 | | |

*Final Maturity

**2008C-1 Bonds**

| Redemption Date (9/1) | Principal Amount | Redemption Date (9/1) | Principal Amount |
|---|---|---|---|
| 2012 | $40,000 | 2032 | $12,755,000 |
| 2013 | 30,000 | 2033 | 13,240,000 |
| 2030 | 1,470,000 | 2034 | 13,825,000 |
| 2031 | 7,675,000 | 2035* | 2,875,000 |

*Final Maturity

**2008C-2 Bonds**

| Redemption Date (9/1) | Principal Amount | Redemption Date (9/1) | Principal Amount |
|---|---|---|---|
| 2012 | $ 35,000 | 2032 | $12,750,000 |
| 2013 | 30,000 | 2033 | 13,235,000 |
| 2030 | 1,470,000 | 2034 | 13,820,000 |
| 2031 | 7,670,000 | 2035* | 2,875,000 |

*Final Maturity

**2008D-2 Bonds**

| Redemption Date (9/1) | Principal Amount | Redemption Date (9/1) | Principal Amount |
|---|---|---|---|
| 2032 | $ 240,000 | 2039 | $26,675,000 |
| 2033 | 395,000 | 2040* | 40,440,000 |
| 2034 | 3,475,000 | | |

*Final Maturity

**Optional Redemption**

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

**Extraordinary Optional Redemption**

The Variable Rate 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***

Subject to the provisions of the applicable Indenture requiring redemption of all Bank Bonds eligible for redemption before any other eligible Variable Rate Bonds are redeemed, if less than all Variable Rate Bonds of a series are to be redeemed, the particular Variable Rate Bonds of a 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 Variable Rate Bonds in a denomination larger than the smallest Authorized Denomination.

***Effect of Redemption***

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

***Notice of Redemption***

Any notice of redemption shall be given by registered or certified mail, mailed not less than 30 days (15 days in the case of Variable Rate Bonds bearing interest in the Weekly Mode) prior to the redemption date, to each Holder of Variable Rate Bonds to be redeemed, at his address appearing in the Register. So long as DTC is effecting book-entry transfers of the Variable Rate Bonds, the Trustee shall provide the notices specified under this heading only to DTC. It is expected that the 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 Variable Rate Bond to notify the beneficial owner of the Variable Rate Bond so affected, shall not affect the validity of the redemption of such Variable Rate Bond.

## REGISTRATION, TRANSFER AND EXCHANGE OF THE 2008 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 2008 Bond shall be registered on the bond register shall be deemed and regarded as the absolute owner of such 2008 Bond for all purposes, and payment of or on account of the principal of and redemption premium, if any, and interest on any such 2008 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 2008 Bond, including the interest thereon, to the extent of the sum or sums so paid.

Any 2008 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 2008 Bond a new 2008 Bond or 2008 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 2008 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 2008 Bond and ending at the close of business on the day of such mailing, or (ii) transfer or exchange any 2008 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 2008 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 2008 Bonds.

## BOOK-ENTRY ONLY SYSTEM

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the 2008 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 issue 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 be 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. (or 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 book-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 2008 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 2008 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium and interest payments on the 2008 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 2008 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 2008 BONDS, REFERENCES HEREIN TO THE HOLDERS OF THE 2008 BONDS, OR OWNERS OF THE 2008 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 2008 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 2008 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 2008 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.

## BOND INSURANCE

**Bond Insurance Policy**

Concurrently with the issuance of the 2008 Bonds, Financial Security Assurance Inc. ("Financial Security") will issue its Municipal Bond Insurance Policy for the Bonds (the "Policy"). The Policy guarantees the scheduled payment of principal of and interest on the 2008 Bonds when due as set forth in the form of the Policy included as an exhibit to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

**Financial Security Assurance Inc.**

Financial Security is a New York domiciled financial guaranty insurance company and a wholly owned subsidiary of Financial Security Assurance Holdings Ltd. ("Holdings"). Holdings is an indirect subsidiary of Dexia, S.A., a publicly held Belgian corporation, and of Dexia Credit Local, a direct wholly-owned subsidiary of Dexia, S.A. Dexia, S.A., through its bank subsidiaries, is primarily engaged in the business of public finance, banking and asset management in France, Belgium and other European countries. No shareholder of Holdings or Financial Security is liable for the obligations of Financial Security.

At March 31, 2008, Financial Security's consolidated policyholders' surplus and contingency reserves were approximately $3,012,872,486 and its total net unearned premium reserve was approximately $2,419,501,630 in accordance with statutory accounting principles. At March 31, 2008, Financial Security's consolidated shareholder's equity was approximately $3,053,752,711 and its total net unearned premium reserve was approximately $1,882,057,335 in accordance with generally accepted accounting principles.

The consolidated financial statements of Financial Security included in, or as exhibits to, the annual and quarterly reports filed after December 31, 2007 by Holdings with the Securities and Exchange Commission are hereby incorporated by reference into this Official Statement. All financial statements of Financial Security included in, or as exhibits to, documents filed by Holdings pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this Official Statement and before the termination of the offering of the Notes shall be deemed incorporated by reference into this Official Statement. Copies of materials incorporated by reference will be provided upon request to Financial Security Assurance Inc.: 31 West 52nd Street, New York, New York 10019, Attention: Communications Department (telephone (212) 826-0100).

The Policy does not protect investors against changes in market value of the 2008 Bonds, which market value may be impaired as a result of changes in prevailing interest rates, changes in applicable ratings or other causes. Financial Security makes no representation regarding the 2008 Bonds or the advisability of investing in the Bonds. Financial Security makes no representation regarding the Official Statement, nor has it participated in the preparation thereof, except that Financial Security has provided to the Authority the information presented under this caption for inclusion in the Official Statement.

## STANDBY BOND PURCHASE AGREEMENTS

***General***

The purchase price of Variable Rate Bonds which are tendered or deemed tendered for purchase will be payable, to the extent that remarketing proceeds are not sufficient therefor, from funds made available by the applicable Bank pursuant to the four separate substantially identical Standby Bond Purchase Agreements, one with respect to each of the 2008B Bonds, the 2008C-1 Bonds, the 2008C-2 Bonds and the 2008D-2 Bonds (each, a "Standby Bond Purchase Agreement"). JPMorgan Chase Bank, National Association ("JPMorgan") will provide liquidity support for the 2008C-2 Bonds and the 2008D-2 Bonds. Dexia Credit Local, New York Branch ("Dexia," and, together with JPMorgan, each a "Bank" and together, the "Banks"), will provide liquidity support for the 2008B Bonds and the 2008C-1 Bonds. JPMorgan's obligation to provide liquidity support for the 2008C-2 Bonds is a separate obligation from its obligation to provide liquidity support for the 2008D-2 Bonds, and separate from Dexia's obligation to provide liquidity support for the 2008B Bonds and the 2008C-1 Bonds. Dexia's obligation to provide liquidity support for the 2008B Bonds is a separate obligation from its obligation to provide liquidity support for the 2008C-1 Bonds, and separate from JPMorgan's obligation to provide liquidity support for the 2008C-2 Bonds and the 2008D-2 Bonds.

Each Standby Bond Purchase Agreement will provide liquidity for the purchase of those Variable Rate Bonds which are optionally tendered for purchase or are subject to mandatory purchase, but not remarketed by the applicable Remarketing Agent, provided that each Bank will provide liquidity for only the series covered by the applicable Standby Bond Purchase Agreement. Each Standby Bond Purchase Agreement is scheduled to expire on June 11, 2009, but may terminate earlier upon the occurrence of certain Events of Default described herein. The enforceability of each Standby Bond Purchase Agreement may be limited by the bankruptcy, insolvency or reorganization of the applicable Bank. No assurances can be given that in such event the obligations of the such Bank under such Standby Bond Purchase Agreement would survive.

For purposes of this section and as otherwise used in this Official Statement, the following terms have the meanings ascribed to them:

"Bank Bond" means each Variable Rate Bond purchased by a Bank pursuant to the applicable Standby Bond Purchase Agreement and held by or for the account of a Bank Bondholder in accordance with the terms of such Standby Bond Purchase Agreement, until purchased from or retained in accordance with such Standby Bond Purchase Agreement or redeemed in accordance with such Standby Bond Purchase Agreement or otherwise.

"Bank Bondholder" means a Bank and any other Person to whom such Bank has sold Bank Bonds pursuant to the applicable Standby Bond Purchase Agreement (or the Bond Insurer, to the extent of payments made on Bank Bonds under the Bond Insurance Policy).

"Default" means the occurrence of any event which, with the passage of time, the giving of notice, or both, would become an Event of Default (as defined below).

"Eligible Bonds" with respect to each series of Variable Rate Bonds, means any Variable Rate Bonds bearing interest at a Weekly Rate other than Variable Rate Bonds owned by, for the account of, or on behalf of the Authority.

"Indebtedness" of the Authority means at any date, without duplication, (a) all obligations of the Authority for borrowed money, (b) all obligations of the Authority evidenced by bonds, debentures, notes or other similar instruments, (c) all obligations of the Authority to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business, (d) all obligations of the Authority as lessee under capital leases, (e) all obligations of the Authority to purchase securities (or other assets) that arise out of or in connection with the sale of the same or substantially similar securities or assets, (f) all obligations of the Authority to reimburse any bank or any other Person in respect of amounts paid under a letter of credit or any other similar instrument, (g) all Indebtedness of others secured by a lien on any asset of the Authority, whether or not such Indebtedness is assumed by the Authority and (h) all guarantees by the Authority of Indebtedness of other Persons.

"Insurer Adverse Change" occurs when the financial strength ratings assigned to the Bond Insurer by Moody's, S&P and Fitch Ratings ("Fitch") shall fall below "Aa3", "AA-" and "AA-", respectively, and such financial strength ratings shall remain below "Aa3", "AA-" and "AA-", respectively, for a period of 90 consecutive days.

"Investment Grade" means (a) in the case of S&P and Fitch, "BBB-" and (b) in the case of Moody's, "Baa3."

"Related Documents" with respect to each Standby Bond Purchase Agreement, means such Standby Bond Purchase Agreement, the applicable Indenture, the applicable Variable Rate Bonds, the Official Statement, the Purchase Contract, the Bond Insurance Policy, the applicable Custody Agreement and the applicable Remarketing Agreement, as the same may be amended or modified from time to time in accordance with their respective terms and the terms of the applicable Standby Bond Purchase Agreement.

***Purchase of Tendered Variable Rate Bonds by the Banks***

From time to time during the period prior to the expiration or earlier termination of each Standby Bond Purchase Agreement (the "Purchase Period") the applicable Bank will purchase Variable Rate Bonds of the applicable series in the Weekly Mode that have been optionally tendered for purchase pursuant to the applicable Indenture, but not remarketed, or which are tendered pursuant to a mandatory tender under the applicable Indenture, upon receipt of an appropriate notice from the Trustee pursuant to the applicable Indenture and Standby Bond Purchase Agreement on the date specified for purchase (the "Purchase Date"). See "THE VARIABLE RATE BONDS – Optional Tenders" and "- Mandatory Tenders." The price to be paid by the applicable Bank for such Variable Rate Bonds will be equal to the aggregate principal amount of such tendered Variable Rate Bonds, plus interest accrued thereon to the date of such purchase calculated at the applicable interest rate for the Variable Rate Bonds. The commitment of a Bank with respect to interest under the applicable Standby Bond Purchase Agreement shall be equal to 34 days' interest on the principal amount of the related series of Variable Rate Bonds outstanding (assuming an interest rate of 12% per annum).

**UNDER CERTAIN CIRCUMSTANCES DESCRIBED BELOW, THE OBLIGATION OF THE BANKS TO PURCHASE VARIABLE RATE BONDS OPTIONALLY TENDERED BY THE OWNERS THEREOF OR SUBJECT TO MANDATORY PURCHASE MAY BE AUTOMATICALLY TERMINATED OR SUSPENDED WITHOUT PRIOR NOTICE TO ANY PERSON, INCLUDING HOLDERS OF THE VARIABLE RATE BONDS. IN SUCH EVENT, SUFFICIENT FUNDS MAY NOT BE AVAILABLE TO PURCHASE VARIABLE RATE BONDS TENDERED BY THE OWNERS THEREOF OR SUBJECT TO MANDATORY PURCHASE. THE INSURANCE POLICY DOES NOT INSURE PAYMENT OF THE PURCHASE PRICE OF THE VARIABLE RATE BONDS. FAILURE TO PAY THE PURCHASE PRICE OF TENDERED VARIABLE RATE BONDS IS NOT AN EVENT OF DEFAULT UNDER THE INDENTURES.**

***Events of Default and Remedies***

Each of the following events constitutes an "Event of Default" under each Standby Bond Purchase Agreement:

(a) Any principal or interest due on the applicable series of Variable Rate Bonds is not paid by the Authority when due and such principal or interest is not paid by the Bond Insurer when, as, and in the amounts required to be paid pursuant to the terms of the Bond Insurance Policy or the Bond Insurer defaults in any payment of amounts payable by it when due under any bond insurance policy (other than the Bond Insurance Policy) with respect to publicly-rated debt

representing an obligation of the Bond Insurer on a parity with or senior to the Bond Insurer's obligations under the Bond Insurance Policy, and such default continues for a period of seven (7) days; or

(b) (i) The President or any Executive Vice President of the Bond Insurer claims, in writing, that the Bond Insurance Policy, with respect to the payment of principal of or interest on the applicable Variable Rate Bonds, is not valid and binding on the Bond Insurer in accordance with its terms, or repudiates the obligations of the Bond Insurer under the Bond Insurance Policy with respect to the payment of principal of and interest on such Variable Rate Bonds, or denies that the Bond Insurer has any or further liability or obligation under the Bond Insurance Policy to the extent set forth in the Bond Insurance Policy, (ii) any material provision relating to payment of principal of or interest on the applicable Variable Rate Bonds under the Bond Insurance Policy at any time for any reason ceases to be valid and binding on the Bond Insurer in accordance with the terms of the Bond Insurance Policy or is declared to be null and void by a court or other governmental agency of appropriate jurisdiction, or (iii) the validity or enforceability of the Bond Insurance Policy with respect to payment of principal of or interest on the Variable Rate Bonds is contested by the Bond Insurer; or

(c) (i) A proceeding is instituted in a court having jurisdiction in the premises seeking an order for relief, rehabilitation, reorganization, conservation, liquidation or dissolution in respect to the Bond Insurer or for any substantial part of its property under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or for the appointment of a receiver, liquidator, assignee, custodian, trustee or sequestrator (or other similar official) and such proceeding is not terminated for a period of sixty (60) consecutive days or such court enters an order granting the relief sought in such proceeding; (ii) the Bond Insurer institutes or takes any corporate action for the purpose of instituting any such proceeding; or (iii) the Bond Insurer becomes insolvent or unable to pay its debts as they mature or claims under any of its insurance policies as such claims are made, commences a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, consents to the entry of an order for relief in an involuntary case under any such law or consents to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian or sequestrator (or other similar official) of the Bond Insurer or for any substantial part of its property, or makes a general assignment for the benefit of creditors, or fails generally to pay its debts or claims as they become due, or takes any corporate action in furtherance of any of the foregoing; provided, however, that the Bond Insurer's failure to make payments on any debt or financial guaranty insurance policies or surety bonds because of a legitimate dispute between the Bond Insurer and a creditor or the beneficiary of such policies or surety bonds will not in and of itself constitute a failure of the Bond Insurer to generally pay its debts or claims as they become due; or

(d) Any representation or warranty made by the Authority under or in connection with the applicable Standby Bond Purchase Agreement or any of the applicable Related Documents proves to be untrue in any material respect on the date as of which it was made; or

(e) Nonpayment of any facility fees payable under the applicable Standby Bond Purchase Agreement within fifteen (15) Business Days after the Authority and the Bond Insurer have received notice from the applicable Bank that the same were not paid when due; or

(f) Nonpayment of any other fees, or other amounts when due under the applicable Standby Bond Purchase Agreement, if such failure to pay when due continues for fifteen (15) Business Days after written notice thereof to the Authority by the applicable Bank; or

(g) The breach by the Authority of any of the other terms or provisions of the applicable Standby Bond Purchase Agreement which are not remedied within thirty (30) days after written notice thereof has been received by the Authority from the applicable Bank; provided however that there will be no 30-day cure period for a failure to observe or perform certain covenants and agreements made by the Authority and set forth in the applicable Standby Bond Purchase Agreement; or

(h) Any material provision of the applicable Standby Bond Purchase Agreement or any applicable Related Document (other than the Bond Insurance Policy) at any time for any reason ceases to be valid and binding on the Authority or the then current related Remarketing Agent, as applicable, or is declared to be null and void, or the validity or enforceability thereof is contested in writing by the Authority or the then current related Remarketing Agent, as applicable, or by any Governmental Authority having jurisdiction, or the Authority or the then current related Remarketing Agent, as applicable, denies that it has any or further liability or obligation under any such document and the occurrence of such event would have a material adverse effect on the security for the related series of Variable Rate Bonds or the Authority's ability to pay its obligations under such Standby Bond Purchase Agreement or the Bank Bonds; or

(i) The occurrence of an "event of default" as defined in the applicable Indenture or any "event of default" which is not cured within any applicable cure period under any of the applicable Related Documents and which, if not cured, could give rise to remedies available thereunder; or

(j) (i) The Authority's commencement of any case, proceeding or other action (A) under any existing or future law of any jurisdiction, domestic or foreign, relating to bankruptcy, insolvency, reorganization or relief of debtors, seeking to have an order for relief entered with respect to it, or seeking to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, winding-up, liquidation, dissolution, composition or other relief with respect to it or its debts, or (B) seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or any substantial part of its assets, or the Authority's making a general assignment for the benefit of its creditors; or (ii) there is commenced against the Authority, any case, proceeding or other action of a nature referred to in clause (i) above which (x) results in an order for such relief or in the appointment of a receiver or similar official or (y) remains undismissed, undischarged or unbonded for a period of sixty (60) days; or (iii) there is commenced against the Authority, any case, proceeding or other action seeking issuance of a warrant of attachment, execution, distraint or similar process against all or any substantial part of its assets, which results in the entry of an order for any such relief which is not vacated, discharged, or stayed or bonded pending appeal within sixty (60) days from the entry thereof; or (iv) the Authority takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the acts set forth in clause (i), (ii) or (iii) above; or (v) the Authority is generally not, or is unable to, or so admits in writing its inability to, pay its debts; or

(k) Nonpayment of principal and interest due (whether by scheduled maturity, required prepayment, demand or otherwise) on any bonds or other obligations payable by the Authority from Revenues and Receipts; or

(l) (i) Default by the Authority in any payment of principal of or premium, if any, or interest on any Indebtedness which is on a parity with, or senior to, the Authority's obligation to make payments on the applicable Variable Rate Bonds (the "Parity Debt") in excess of $1,000,000 which continues beyond the expiration of the applicable grace period, if any, (ii) the failure by the Authority to perform any other agreement, term or condition contained in any agreement, mortgage or other instrument under which any such obligation is created or secured, which results in Parity Debt in excess of $1,000,000 becoming due and payable or which enables (or, with the giving of notice or lapse of time, or both would enable) the holder of Parity Debt in excess of $1,000,000 or any Person acting on such holder's behalf to accelerate the maturity thereof; provided, however, that in either case, the applicable Bank will not be entitled to pursue any remedies if, within the time allowed for service of a responsive pleading in any proceeding to enforce payment of such Parity Debt under the laws governing such proceeding, (A) the Authority in good faith commences proceedings to contest the existence or payment of such Indebtedness and the opposing party in such proceedings is stayed from exercising remedies, or (B) a surety bond in the amount of such Indebtedness is obtained or sufficient moneys are escrowed with a bank or trust company for the payment of such Indebtedness, but only so long as, in the case of either (A) or (B), such default does not result in the occurrence of an event of default under any of the Related Documents or with respect to other Parity Debt; or (iii) a final judgment or order for the payment of money in an amount in excess of $5,000,000 has been rendered against the Authority and such judgment or order is not (x) satisfied, stayed or bonded pending appeal or (y) subject to a written agreement by the judgment holder thereof pursuant to which such judgment holder has agreed that such judgment or order will not in any manner be executed upon pending appeal, in each case within a period of thirty (30) days from the date on which such judgment or order was first so rendered; or

(m) (i) each of Moody's, S&P and Fitch downgrades the rating of the financial strength or claims-paying ability of the Bond Insurer to below Investment Grade or (ii) each of Mood's, S&P and Fitch suspends or withdraws such financial strength or claim-paying ability rating for credit-related reasons; or

(n) an Event of Default occurs under any other Standby Bond Purchase Agreement relating to any of the Variable Rate Bonds.

If any Event of Default occurs and is continuing under a Standby Bond Purchase Agreement:

(a) In the case of an Automatic Suspension Event (described in paragraphs (b) and (c)(i) under "Events of Default" above), the applicable Bank's obligation to purchase the applicable Variable Rate Bonds will immediately be suspended without notice or demand to any person, and thereafter, such Bank will be under no obligation to purchase such Variable Rate Bonds until its obligation to purchase such Variable Rate Bonds is reinstated as described below. Promptly upon an Event of Default specified in paragraph (b) above or a Default specified in paragraph (c)(i) above, such Bank will notify the Authority, the Trustee, the Bond Insurer and the applicable Remarketing Agent of such suspension in writing. With respect to an Event of Default specified in paragraph (b) above, if (i) a court with jurisdiction to rule on the validity of the Bond Insurance Policy thereafter enters a final, nonappealable judgment that the Bond Insurance Policy is not valid and binding on the Bond Insurer or (ii) a period of two years elapses since the commencement of the suspension under the applicable Standby Bond Purchase Agreement, then the obligation of such Bank under such Standby Bond Purchase Agreement will immediately terminate and such Bank will be under no further obligation to purchase the related Variable Rate Bonds (a "7.1(b) Final Suspension Event"). With respect to a Default specified in paragraph (c)(i) above, if such Default becomes an Event of Default, then the obligation of the applicable Bank under applicable the Standby Bond Purchase Agreement will immediately terminate and such Bank will be under no further obligation to purchase the related Variable Rate Bonds (together with a 7.1(b) Final Suspension Event, a "Final Suspension Event"). If with respect to an Event of

Default under paragraph (b) above, a court with jurisdiction to rule on the validity of the Bond Insurance Policy finds or rules that the Bond Insurance Policy is valid and binding on the Bond Insurer or if the proceeding triggering an Event of Default under paragraph (c)(i) above is terminated on or prior to the end of the 60-day period, then upon such ruling or termination, as applicable, the applicable Bank's obligation under the applicable Standby Bond Purchase Agreement will be automatically reinstated and the terms of such Standby Bond Purchase Agreement will continue in full force and effect as if there had been no such suspension.

(b) In the case of an Automatic Termination Event (described in paragraphs (a), (c)(ii), (c)(iii) and (m) under "Events of Default" above), the Available Commitment and the obligation of the applicable Bank to advance funds for the purchase of Eligible Bonds will immediately terminate without notice or demand to any Person, and thereafter such Bank will be under no obligation to advance funds for the purchase of the applicable Variable Rate Bonds. Promptly after the occurrence of an Automatic Termination Event, such Bank will give written notice of same to the Trustee, the Bond Insurer, the Authority and the applicable Remarketing Agent; provided, that such Bank will incur no liability or responsibility whatsoever by reason of its failure to give such notice and such failure will in no way affect the termination of such Bank's Available Commitment under the applicable Standby Bond Purchase Agreement and of its obligation to advance funds for the purchase of the related Variable Rate Bonds pursuant to such Standby Bond Purchase Agreement.

(c) In the case of an Event of Default specified in paragraph (e) above or an Insurer Adverse Change, the applicable Bank may terminate its obligation to advance funds for the purchase of Eligible Bonds by giving written notice (a "Notice of Termination") to the Authority, the Trustee, the applicable Remarketing Agent and the Bond Insurer, specifying the date on which the Available Commitment and the obligation of such Bank to advance funds for the purchase of Eligible Bonds will terminate (the "Noticed Termination Date"), which will be not less than twenty-five (25) days from the date of receipt of such notice by the Trustee and, on and after the Noticed Termination Date such Bank will be under no further obligation to purchase the applicable Variable Rate Bonds under the applicable Standby Bond Purchase Agreement other than the applicable Variable Rate Bonds which are the subject of the mandatory tender pursuant to the applicable Indenture, which such Bank will be required to purchase on or prior to the Noticed Termination Date.

(d) In addition to the rights and remedies set forth above, upon the occurrence of any Event of Default, each Bank will have all the rights and remedies available under the applicable Standby Bond Purchase Agreement, the applicable Related Documents or otherwise pursuant to law or equity, provided, however, that such Bank will not have the right to terminate its obligation to purchase the related Variable Rate Bonds, to declare any amount due under such Standby Bond Purchase Agreement due and payable, or to accelerate the maturity date of any such Variable Rate Bonds except as described above. Without limiting the generality of the foregoing, each Bank has agreed, so long as no Automatic Suspension Event or Automatic Termination Event has occurred, to purchase the applicable Variable Rate Bonds on the terms and conditions of the applicable Standby Bond Purchase Agreement notwithstanding the institution or pendency of any bankruptcy, insolvency or similar proceeding with respect to the Authority. A Bank will not assert as a defense to its obligation to purchase the applicable Variable Rate Bonds under the applicable Standby Bond Purchase Agreement (i) the institution or pendency of a bankruptcy, insolvency or similar proceeding with respect to the Authority or (ii) a determination by a court of competent jurisdiction in a bankruptcy, insolvency or similar proceeding with respect to the Authority that such Standby Bond Purchase Agreement is not enforceable against the Authority under applicable bankruptcy, insolvency or similar laws.

***Extension, Reduction, Adjustment or Termination of the Standby Bond Purchase Agreement***

Upon any redemption, repayment or other payment of all or any portion of the principal amount of a series of the Variable Rate Bonds, the applicable Bank's purchase commitment under the applicable Standby Bond Purchase Agreement with respect to principal of such Variable Rate Bonds shall automatically be reduced proportionally by the principal amount of such Variable Rate Bonds so redeemed, repaid or otherwise paid, as the case may be.

The renewal or extension of each Standby Bond Purchase Agreement is subject to agreement by the applicable Bank and the Authority. A Bank has no obligation to extend or renew a Standby Bond Purchase Agreement beyond its initial term and may determine whether to extend or renew such Standby Bond Purchase Agreement in its sole discretion. The Authority has the right under certain circumstances to terminate the Standby Bond Purchase Agreements.

***Alternate Liquidity Facility Agreement***

The Indentures provide that, with the approval of the Bond Insurer, an Alternate Liquidity Facility may be substituted for the existing Standby Bond Purchase Agreements. The Variable Rate Bonds are subject to Mandatory Tender on the date of delivery of an Alternate Liquidity Facility. Notice of any such Mandatory Tender shall be given by the Trustee by registered or certified mail, mailed to the Holder of each affected Variable Rate Bond 10 days prior to the Mandatory Tender Date. See "THE VARIABLE RATE BONDS – Mandatory Tenders."

In event that the short-term rating of the 2008 Bonds is downgraded to below "VMIG-2" by Moody's or "A-1" by S&P (or then-equivalent short-term ratings from either such Rating Service or other Rating Service then maintaining a short-term rating on the 2008 Bonds), the Authority will provide for delivery of an Alternate Liquidity Facility.

## THE BANKS

***JPMorgan Chase Bank, National Association***

JPMorgan Chase Bank, National Association ("JPMorgan") is a wholly owned bank subsidiary of JPMorgan Chase & Co., a Delaware corporation whose principal office is located in New York, New York. JPMorgan offers a wide range of banking services to its customers, both domestically and internationally. It is chartered and its business is subject to examination and regulation by the Office of the Comptroller of the Currency.

As of March 31, 2008, JPMorgan Chase Bank, National Association, had total assets of $1,407.6 billion, total net loans of $477.5 billion, total deposits of $806.3 billion, and total stockholder's equity of $108.9 billion. These figures are extracted from JPMorgan's unaudited Consolidated Reports of Condition and Income (the "Call Report") as at March 31, 2008, prepared in accordance with regulatory instructions that do not in all cases follow U.S. generally accepted accounting principles, which are filed with the Federal Deposit Insurance Corporation. The Call Report, including any update to the above quarterly figures, can be found at www.fdic.gov.

Additional information, including the most recent annual report on Form 10-K for the year ended December 31, 2007, of JPMorgan Chase & Co., the 2007 Annual Report of JPMorgan Chase & Co., and additional annual, quarterly and current reports filed with or furnished to the Securities and Exchange Commission (the "SEC") by JPMorgan Chase & Co., as they become available, may be obtained without charge by each person to whom this Official Statement is delivered upon the written request of any such person to the Office of the Secretary, JPMorgan Chase & Co., 270 Park Avenue, New York, New York 10017 or at the SEC's website at www.sec.gov.

The information contained in this Section relates to and has been obtained from JPMorgan. The delivery of the Official Statement shall not create any implication that there has been no change in the affairs of JPMorgan since the date hereof, or that the information contained or referred to in this Section is correct as of any time subsequent to its date.

***Dexia Credit Local***

Dexia Credit Local ("Dexia") is a subsidiary of the Dexia Group, which was created in 1996. The Dexia Group is a major European banking organization that is the product of several cross-border mergers. Dexia is an authentically European bank in terms of both its management organization and the scope of its different lines of business. The Dexia Group is listed on the Brussels, Paris and Luxembourg stock exchanges. With a stock market capitalization of over 20 billion euros as of December 31, 2007, the Dexia Group ranks in the top third of the Euronext 100 companies.

Dexia specializes in the Dexia Group's first line of business – public and project finance and financial services for the public sector. Dexia has recognized expertise in local public sector financing and project finance. It is backed by a network of specialized banks, which employ over 3,500 professionals. Through this network of subsidiaries, affiliates and branches, Dexia is present in almost all of the countries of the European Union as well as Central Europe, the United States of America and Canada. Dexia also has operations in Latin America, the Asian-Pacific Region including Australia, and the countries around the Mediterranean.

Dexia is a bank with its principal office located in La Défense, France. In issuing the facility, Dexia will act through its New York Branch, which is licensed by the Banking Department of the State of New York as an unincorporated branch of Dexia. Dexia is the leading local authority lender in Europe, funding its lending activities in 2007 primarily through the issuance of euro and U.S. dollar-denominated bonds. In 2007, total funding raised by Dexia and Dexia Municipal Agency was 18.2 billion euros.

The Dexia Group is the owner of Financial Security Assurance Holdings Ltd. ("FSA Holdings"), the holding company for Financial Security Assurance Inc., a leading financial guaranty insurer.

As of December 31, 2007, Dexia had total consolidated assets of 345 billion euros, outstanding medium and long-term loans to customers of 285.1 billion euros and shareholders' equity of over 6.29 billion euros (Tier I plus Tier II), and for the year then ended had consolidated net income of 991 million euros. These figures were determined in accordance with generally accepted accounting principles in France. Dexia maintains its records and prepares its financial statements in euros. At December 31, 2007, the exchange rate was 1.0000 euro equals 1.4721 United States dollar. Such exchange rate fluctuates from time to time.

Dexia is rated Aa1 long-term and P-1 short-term by Moody's, AA long-term and A-1+ short-term by S&P, and AA+ long-term and F1+ short-term by Fitch.

Dexia will provide without charge a copy of its most recent publicly available annual report. Written requests should be directed to: Dexia Credit Local, New York Branch, 445 Park Avenue, 8th Floor, New York, New York 10022, Attention: General Manager. The delivery of this information shall not create any implication that the information contained or referred to herein is correct as of any time subsequent to its date.

## ESTIMATED SOURCES AND USES OF FUNDS

**SOURCES OF FUNDS**

| | |
|---|---|
| Principal | $ 320,515,000.00 |
| TOTAL | $ 320,515,000.00 |

**USES OF FUNDS**

| | |
|---|---|
| Deposit to Escrow Deposit Agreements and Swap Termination Amounts | $ 235,462,326.41 |
| Deposit to Project Fund | 71,040,652.21 |
| Deposit to Capitalized Interest Account | 3,018,624.34 |
| Debt Service Reserve Fund Surety Bond Premium | 2,249,610.52 |
| Costs of Issuance* | 8,743,786.52 |
| TOTAL | $ 320,515,000.00 |

*Includes the bond insurance premium, underwriters' discount, fees of the financial and swap advisor, bond counsel, issuer's counsel, underwriters' counsel, counsel to the liquidity provider, rating agencies, trustee, verification agent, dissemination agent, auditor, printing costs and other miscellaneous fees and expenses.

## USE OF PROCEEDS

The proceeds of the 2008 Bonds will be used to fund the costs of currently refunding the Authority's 1998A Bonds and 1998C Bonds; currently refunding certain maturities of the Authority's 2007B-1 and 2007B-2 Bonds; advance refunding certain maturities of the Authority's 1998B Bonds (the "Advance Refunded Bonds"), to fund the costs of certain Capital Additions; to fund termination payments on interest rate swaps; to fund the premium for the Bond Insurance Policy securing payments on the 2008 Bonds; to fund any required deposit to the Debt Service Reserve Fund or, alternatively, the costs of a surety bond to be held by the Trustee in lieu of a funded account in the Debt Service Reserve Fund, and to fund the costs of issuance of the 2008 Bonds.

A portion of the proceeds from the sale of the 2008 Bonds will be irrevocably deposited with The Bank of New York Trust Company, N.A. (the "Escrow Agent") under the terms of an Escrow Deposit Agreement, dated as of June 1, 2008 (the "Escrow Agreement") between the Escrow Agent and the Authority, and will be applied towards the purchase of direct obligations of the United States of America, State and Local Government Series (the "Government Obligations"), which will mature at such times and in such amounts to provide funds from maturing principal, interest income and any cash balances, sufficient to pay interest and principal on the Advance Refunded Bonds, until maturity or earlier redemption.

***Verification Agent***

The accuracy of arithmetic computations supporting the conclusion that the principal amounts of and interest earned on, the Government Obligations are sufficient to pay the Advance Refunded Bonds when due and the redemption price of the Advance Refunded Bonds on each respective redemption date will be independently verified by Maher Duessel, Certified Public Accountants.

## SECURITY FOR THE 2008 BONDS

***Limited Obligations***

**THE 2008 BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY. THE 2008 BONDS DO NOT PLEDGE THE GENERAL CREDIT OR TAXING POWER OF THE CITY OF PITTSBURGH, THE COMMONWEALTH OF PENNSYLVANIA (THE "COMMONWEALTH") OR ANY POLITICAL SUBDIVISION THEREOF; NOR SHALL THE 2008 BONDS BE DEEMED AN OBLIGATION OF THE CITY, THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF; 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 2008 BONDS. THE AUTHORITY HAS NO TAXING POWER.**

***Pledge of Receipts and Revenues***

*First Lien Bonds*. The First Lien 2008 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, 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 First Lien Indenture, together with cash and investments from time to time held in certain funds pursuant to the First Lien 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 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 Indentures".)

*Subordinate Bonds*. The 2008C Bonds, together with any other Subordinate Bonds issued under the Subordinate Indenture and the Authority's obligation to make Periodic Payments under Qualified Interest Rate Swap Agreements related to such Subordinate Bonds, if any, are secured, on a parity, by a pledge of the Receipts and Revenues of the Water and Sewer System after payment of (i) Current Expenses, (ii) the debt service due on the First Lien Bonds and Periodic Payments related thereto, (iii) the funding of the Debt Service Reserve Fund, the Operating Reserve Fund, the Renewal and Replacement Fund, held pursuant to and as required and defined in the First Lien Indenture, and (iv) Policy Costs (as defined in the First Lien Indenture) (the "Subordinate Receipts and Revenues"), together with cash and investments from time to time held in certain funds pursuant to the Subordinate Indenture. Any other amounts due, including any termination payments, under a Qualified Interest Rate Swap Agreement related to either the First Lien Bonds or the Subordinate Bonds are subordinate to payments of debt service on the Subordinate Bonds.

***Debt Service Reserve Fund***

*First Lien Bonds*. The First Lien 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. Upon issuance of the 2008 Bonds, the Authority will purchase 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. Certain of the existing Municipal Bond Debt Service Reserve Fund Policies will be replaced in connection with the issuance of the 2008 Bonds due to a downgrade to the credit rating of the issuer of certain of the existing policies.

*Subordinate Bonds*. The Subordinate Indenture requires that a Debt Service Reserve Fund be funded in 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 requirements on all Authority Bonds. Upon issuance of the 2008 Bonds, the Authority will purchase 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 all Authority Bonds (but in no event shall such amount be required to be in excess of the amount permitted by federal tax laws). A credit instrument may be provided in lieu of a cash deposit into the Debt Service Reserve Fund. Currently, the Debt Service Reserve Fund for the First Lien Bonds and the Subordinate is fully funded as required under the Indentures and is comprised of Municipal Bond Debt Service Reserve Fund Policies. Certain of the existing Municipal Bond Debt Service Reserve Fund Policies will be replaced in connection with the issuance of the 2008 Bonds due to a downgrade to the credit rating of the issuer of certain of the existing policies.

Currently, the Debt Service Reserve Fund for the First Lien Bonds and the Subordinate Bonds is fully funded as required under the Indentures. Debt Service Reserve Fund requirements currently are satisfied through Municipal Bond Debt Service Reserve Fund Surety Policies issued by FGIC and FSA. The ratings of FGIC recently have been downgraded and FGIC, in its capacity as surety bond provider, will be replaced in connection with the issuance of the 2008 Bonds with a new Municipal Bond Debt Service Reserve Fund Policy to be issued by FSA. See "SECURITY FOR THE 2008 Bonds – Municipal Bond Insurance" herein

***Municipal Bond Insurance***

Payments of principal and interest on the 2008 Bonds when due are insured by a municipal bond insurance policy to be issued by the Bond Insurer simultaneously with the issuance of the 2008 Bonds. See "BOND INSURANCE" herein.

In recent months, Standard & Poor's, a division of The McGraw-Hill Companies ("S&P"), Moody's Investors Service ("Moody's") and Fitch Ratings ("Fitch" and, collectively, the "Rating Agencies") have expressed growing concern about the potential effects of downturns in the market for structured finance instruments, including collateralized debt obligations and residential mortgage backed securities, on the claims-paying ability of the bond insurance companies. As a

result of exposure to such risks, the Rating Agencies have issued press releases and/or reports addressing their ratings on a number of bond insurance companies. Among others, these companies include: (a) FGIC, which provides bond insurance on certain Authority Bonds, and a surety policy providing Debt Service Reserve Fund credit enhancement which will be replaced as noted in the section captioned "Debt Service Reserve Fund" and (b) Financial Security Assurance Inc. ("FSA"), which provides bond insurance on the 2008 Bonds and on other Authority Bonds and surety policies providing Debt Service Reserve Fund credit enhancement, including surety amounts as necessitated by the 2008 Bonds. See "BOND INSURANCE" and "SECURITY OF PAYMENT FOR THE 2008 BONDS – Debt Service Reserve Fund" herein. The paragraphs below address recent actions by the Rating Agencies on the bond insurance companies referenced above that have provided bond insurance and Debt Service Reserve Fund credit enhancement for Authority Bonds. There could be further deterioration in the financial condition of any of the bond insurance companies, and further credit rating downgrades, which could potentially impact the market price of the 2008 Bonds and/or the funding of the Debt Service Reserve Fund.

*FGIC*. As of March 31, 2008, the financial strength ratings of FGIC were as follows: Fitch – "BBB", Rating Outlook Negative; S&P – "BB", Outlook Negative; and Moody's – "Baa3", under review for possible downgrade. Each rating of FGIC should be evaluated independently. The ratings reflect the respective Rating Agency's current assessment of the insurance financial strength of FGIC, and further explanations of any rating may be obtained only from the applicable Rating Agency. See "BOND INSURANCE" for more information.

*FSA*. In a March 11, 2008 press release Moody's affirmed its "Aaa" rating of FSA, with a stable outlook. In a press release dated January 31, 2008, S&P affirmed its "AAA" rating of FSA, with a stable rating outlook. In a January 24, 2008 press release, Fitch affirmed its "AAA" rating of FSA, with a stable rating outlook. There can be no assurance that the views expressed in those documents represent the current views of the rating agencies or that those views will not change in the future. A downgrade or withdrawal of the above ratings in the future may have an adverse impact upon the market price of the 2008 Bonds.

***Additional Debt***

The Authority may issue additional bonds on a parity with the First Lien Bonds for the purposes of financing the cost of acquiring, constructing or completing capital additions or refunding outstanding indebtedness incurred under the First Lien Indenture, upon satisfaction of the conditions set forth in the First Lien Indenture. Additional bonds may be issued under the Subordinate Indenture for any lawful purpose, including refunding. The Subordinate Indenture also permits the incurrence of debt that is subordinated to payments due on the Subordinate Bonds.

The Authority presently anticipates incurring approximately $5.8 million of additional subordinated debt in 2008 in connection with loans from Pennvest to fund capital improvements. Additional loans, which loans will be subordinate to payments due on the 2008 Bonds, are expected to be sought in the amount of approximately $5-6 million in each of the next four years from Pennvest to fund capital improvements.

***Municipal Bond Insurance***

Payments of principal and interest on the 2008 Bonds when due are insured by a municipal bond insurance policy to be issued by the Bond Insurer simultaneously with the issuance of the 2008 Bonds. See "BOND INSURANCE" herein.

In recent months, Standard & Poor's, a division of The McGraw-Hill Companies ("S&P"), Moody's Investors Service ("Moody's") and Fitch Ratings ("Fitch" and, collectively, the "Rating Agencies") have expressed growing concern about the potential effects of downturns in the market for structured finance instruments, including collateralized debt obligations and residential mortgage backed securities, on the claims-paying ability of the bond insurance companies. As a result of exposure to such risks, the Rating Agencies have issued press releases and/or reports addressing their ratings on a number of bond insurance companies. Among others, these companies include: (a) FGIC, which provides bond insurance on certain Authority Bonds, and a surety policy providing Debt Service Reserve Fund credit enhancement which will be replaced as noted in the section captioned "Debt Service Reserve Fund" and (b) Financial Security Assurance Inc. ("FSA"), which provides bond insurance on the 2008 Bonds and on other Authority Bonds and surety policies providing Debt Service Reserve Fund credit enhancement, including surety amounts as necessitated by the 2008 Bonds. See "BOND INSURANCE" and "SECURITY OF PAYMENT FOR THE 2008 BONDS – Debt Service Reserve Fund" herein. The paragraphs below address recent actions by the Rating Agencies on the bond insurance companies referenced above that have provided bond insurance and Debt Service Reserve Fund credit enhancement for Authority Bonds. There could be further deterioration in the financial condition of any of the bond insurance companies, and further credit rating downgrades, which could potentially impact the market price of the 2008 Bonds and/or the funding of the Debt Service Reserve Fund.

*FGIC*. As of March 31, 2008, the financial strength ratings of FGIC were as follows: Fitch – "BBB", Rating Outlook Negative; S&P – "BB", Outlook Negative; and Moody's – "Baa3", under review for possible downgrade. Each rating of FGIC should be evaluated independently. The ratings reflect the respective Rating Agency's current assessment of

the insurance financial strength of FGIC, and further explanations of any rating may be obtained only from the applicable Rating Agency. See "BOND INSURANCE" for more information.

*FSA*. In a March 11, 2008 press release Moody's affirmed its "Aaa" rating of FSA, with a stable outlook. In a press release dated January 31, 2008, S&P affirmed its "AAA" rating of FSA, with a stable rating outlook. In a January 24, 2008 press release, Fitch affirmed its "AAA" rating of FSA, with a stable rating outlook. There can be no assurance that the views expressed in those documents represent the current views of the rating agencies or that those views will not change in the future. A downgrade or withdrawal of the above ratings in the future may have an adverse impact upon the market price of the 2008 Bonds.

***Additional Debt***

The Authority may issue additional bonds on a parity with the First Lien Bonds for the purposes of financing the cost of acquiring, constructing or completing capital additions or refunding outstanding indebtedness incurred under the First Lien Indenture, upon satisfaction of the conditions set forth in the First Lien Indenture. Additional bonds may be issued under the Subordinate Indenture for any lawful purpose, including refunding. The Subordinate Indenture also permits the incurrence of debt that is subordinated to payments due on the Subordinate Bonds.

The Authority presently anticipates incurring approximately $5.8 million of additional subordinated debt in 2008 in connection with loans from Pennvest to fund capital improvements. Additional loans, which loans will be subordinate to payments due on the 2008 Bonds, are expected to be sought in the amount of approximately $5-6 million in each of the next four years from Pennvest to fund capital improvements.

***Covenants of the Authority***

Under both the First Lien Indenture and the Subordinate 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 "Summary of Indentures" – APPENDIX B herein.) (Also, see "RATE COVENANT" herein.)

***Rights of Bond Insurer***

Upon the occurrence of an event of default under both the First Lien Indenture and the Subordinate Indenture, the applicable series of the 2008 Bonds may be accelerated only with the consent of, or at the direction of, the Bond Insurer, for so long as it is not in default under the Bond Insurance Policy. In addition, for so long as it is not in default under the Bond Insurance Policy, the Bond Insurer may, on behalf of all 2008 Bondholders, direct the Trustee in the pursuit of remedies available upon default and may approve certain amendments to the financing documents on behalf of 2008 Bondholders. See APPENDIX B – "Summary of the Indentures." If Bond Insurer pays the principal of or interest on any 2008 Bonds pursuant to the terms of the Bond Insurance Policy, the Bond Insurer will be subrogated to all of the rights of the Holders of such 2008 Bonds granted under the applicable Indenture, including the right to receive payment of principal of and interest on the 2008 Bonds.

## FLOW OF FUNDS

The Authority has heretofore established a special fund (the "Revenue Fund") with Authorized Depositaries 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 and 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 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 First Lien Indenture and the Subordinated 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 First Lien Bonds and the Subordinate 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 or the Subordinate Indenture will be remedied before the end of the next ensuing fiscal year.

## INTEREST RATE SWAP AGREEMENTS

In connection with the issuance of the 2007 Bonds, the Authority previously entered into and, in connection with the issuance of the Variable Rate Bonds, the Authority 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 (each a "Swap Agreement" and together, the "Swap Agreements"), 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 variable rate 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 will not alter the Authority's obligation to pay the principal of, premium, if any, and interest on the 2008 Bonds. However, as the Swap Agreements will be "Qualified Interest Rate Swap Agreements" as defined in the applicable 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 series of the 2008 Bonds and other Bonds issued under the applicable Indenture. See "FUTURE INDEBTEDNESS" below.

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 2008 Fixed Rate 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 priority of payments with respect to Qualified Interest Rate Swap Agreements relating to Subordinate Bonds, including those relating to the 2008C Bonds is similar to that relating to the First Lien Bonds in that Periodic Payments (but not Settlement Amounts) payable under a Qualified Interest Rate Swap Agreement relating to Subordinate Bonds are secured

on a parity with the Authority's obligations to pay the principal of, premium, if any, and interest on any series of Subordinate Bonds issued under the Subordinate Indenture, but such payments are subordinate to all payments due on First Lien Bonds, including Periodic Payments. The Authority's obligation to pay any Settlement Amounts with respect to Qualified Interest Rate Swap Agreements relating to any Subordinate Bonds will be subordinate to the Authority's obligation to make all payments due and owing on the any outstanding First Lien Bonds, Periodic Payments due under Qualified Interest Rate Swap Agreements related to such First Lien Bonds, and to 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 Financial Security Assurance Inc. 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 2008 Bonds. These risks include, among others, the following: counterparty risk – the failure of the Counterparty to make required payments; credit risk – the occurrence of an event modifying the credit rating of the Authority or the respective Counterparties; termination risk – the need to terminate the transaction in a market that dictates a payment of a Settlement Amount by the Authority; and 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.

The Authority has adopted a policy relating to interest rate management agreements ("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 Policy at any time in its sole discretion.

The 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 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 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 Policy will prevent the Authority from suffering adverse financial consequences as a result of these transactions.

## FUTURE INDEBTEDNESS

### *Projected Capital Borrowings*

The Authority has established a five (5) year capital improvement program encompassing years 2005 to 2009 (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 System.

As more fully discussed under "CERTAIN BONDHOLDERS' RISKS, *Certain Environmental Matters*" herein, 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 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 the 2007 Bonds).

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 will be provided, in all or in part, through the issuance of the 2008 Bonds, the Pennvest Loans and additional debt. The 2008 Fixed Rate Bonds (being offered through a separate Official Statement) are being issued in the aggregate principal amount of $93,635,000, with approximately $27,009,514 being issued to fund capital projects. In total, the new money bonds being issued as a component of the 2008 Bonds will fund approximately $100 million out of the Authority's $125 million Capital Improvement Program. The Authority also contemplates applying 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 $5-6 million in each of the next four years.

## CERTAIN BONDHOLDERS' RISKS

Investment in the 2008 Bonds may involve certain risks and each investor should carefully consider the risks involved to determine whether to purchase any of the 2008 Bonds. Each prospective investor should carefully examine this Official Statement 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 2008 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 2008 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 Official Statement, including the Appendices hereto. See APPENDIX A – "DESCRIPTION OF THE AUTHORITY AND WATER AND SEWER SYSTEM" – "*Government Regulation*."

***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, treatment of sanitary wastewaters and the storage and disposal of solid waste materials. (See APPENDIX A – "*Government Regulation*".) The Sewer System conveys wastewater generated within the City boundaries, and from certain other municipalities connected to the Sewer System to ALCOSAN interceptors located along the rivers of the City for conveyance to ALCOSAN's wastewater treatment facility for processing prior to discharge into the Ohio River. (See APPENDIX A – "*The Sewer System*".) The 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 Sewer System 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 capacity, resulting in overflows, bypassing and flooding.

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 1234 miles of the Authority's sewers are combined sewers and there are 194 Permitted CSOs within the Authority's Sewer System and at 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 2008 period are approximately $2.25 million for sewer televising, $1.4 million to gunite sewers and conduct cured-in-place pipe linings, $2.25 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 from $200,000,000 to $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 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 be 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 government significantly regulates 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***

In connection with the issuance of the Variable Rate Bonds, the Authority will be entering into various Qualified Interest Rate Swap Agreements. There are various risks associated with Qualified Interest Rate Swap Agreements. For a discussion of such risks, see "INTEREST RATE SWAP AGREEMENTS" above.

## LITIGATION

In the opinion of Authority Counsel, there is no litigation pending or threatened seeking to enjoin the issuance, sale or delivery of the 2008 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

***Federal Tax Exemption***

In the opinion of Bond Counsel, assuming compliance with certain covenants of the Authority, interest on the Variable Rate Bonds is excluded from the gross income of the owners of the Variable Rate Bonds for federal income tax purposes under existing law, as currently enacted and construed. Interest on the Variable Rate Bonds will not be an item of tax preference under the Internal Revenue Code of 1986, as amended (the "Code"), for purposes of determining the alternative minimum tax imposed on individuals and corporations. Interest on a Variable Rate Bond held by a corporation (other than an S corporation, regulated investment company, real estate investment trust or real estate mortgage investment conduit) may be indirectly subject to alternative minimum tax because of its inclusion in the earnings and profits of the corporate holder. Interest on a Variable Rate Bond held by a foreign corporation may be subject to the branch profits tax imposed by the Code.

Ownership of the Variable Rate Bonds may give rise to collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, S corporations with Subchapter C earnings and profits, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry the Variable Rate Bonds. Bond Counsel expresses no opinion as to any such collateral federal income tax consequences. Purchasers of the Variable Rate Bonds should consult their own tax advisors as to collateral federal income tax consequences.

The Code sets forth certain requirements which must be met subsequent to the issuance and delivery of the Variable Rate Bonds for interest thereon to remain excludible from the gross income of the owners of the Variable Rate Bonds for federal income tax purposes. The Authority covenants to comply with such requirements in the Indentures and in the Authority's Non-Arbitrage Certificate, and noncompliance with such requirements may cause the interest on the Variable Rate Bonds to be includible in the gross income of the owners of the Variable Rate Bonds for federal income tax purposes, retroactive to the date of issue of the Variable Rate Bonds. The opinion of Bond Counsel assumes compliance with such covenants and Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the Variable Rate Bonds may affect the tax status of interest on the Variable Rate Bonds.

***Pennsylvania Tax Exemption***

Bond Counsel is of the opinion that, under the laws of the Commonwealth of Pennsylvania, as currently enacted and construed, the Variable Rate Bonds are exempt from personal property taxes in Pennsylvania, and the interest on the Variable Rate Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax.

Pursuant to the provisions of Act 68 of 1993 of the Commonwealth of Pennsylvania ("Act 68"), profits, gain or income from the sale of the Variable Rate Bonds shall be subject to Pennsylvania personal income tax and Pennsylvania corporate net income tax. Bond Counsel expresses no opinion as to the treatment of original issue premium in the computation of profits, gain or income from the sale of the Variable Rate Bonds pursuant to Act 68.

On May 19, 2008, the United States Supreme Court overturned the decision of a Kentucky appellate court in the Case of Davis v. Kentucky Dept. of Revenue of the Finance and Administration Cabinet, 197 S.W. 3d 557 (2006). The Kentucky court held that under the Constitution of the United States, a state may not exempt interest on bonds issued by that

state or political subdivisions thereof from state and local taxes unless the state also provides such exemption to interest on bonds issued by other states and political subdivisions. By overturning the Kentucky appellate court decision, the Supreme Court ruled that a state can tax interest on bonds issued by out of state issuers while exempting interest on their own bonds without violating the Commerce Clause of the U. S. Constitution.

## THE TRUSTEE

The obligations and duties of the Trustee are described in the applicable Indenture, and the Trustee has undertaken only those obligations and duties which are expressly set out in the applicable Indenture. The Trustee has not independently passed upon the validity of the 2008 Bonds, the security therefor, the adequacy of the provisions for payment thereof or the tax-exempt status of the interest on the 2008 Bonds. The Trustee has relied upon the opinion of Bond Counsel for the validity and tax-exempt status of the interest on the 2008 Bonds. The applicable 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 applicable Indenture, the Trustee is liable only for those damages caused by its gross negligence or willful misconduct. Under the applicable Indenture, the Trustee is not required to take notice and is not deemed to have notice, of any default under the applicable 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 2008 Bonds, when due at maturity or earlier redemption, or interest on the 2008 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 applicable 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 applicable Indenture) exists, except as expressly stated above and in the applicable Indenture.

## LEGAL OPINIONS

Purchase of the Variable Rate Bonds by the Underwriter 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 Official Statement as APPENDIX F. Certain legal matters for the Authority will be passed upon by its Counsel, Thorp, Reed & Armstrong, LLP, Pittsburgh, Pennsylvania, for the Underwriters by Buchanan Ingersoll & Rooney PC, Pittsburgh, Pennsylvania. Certain legal matters will be passed upon by Greenberg Traurig, LLP, Philadelphia, Pennsylvania, which has been retained by, and acts as counsel to the Banks and the Counterparties.

## INDEPENDENT AUDITORS

The audited financial statements of the Authority, as of and for the years ended December 31, 2007 and 2006, 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 2008 BONDS

Standard & Poor's Rating Group and Moody's Investors Service are expected to assign their municipal bond ratings of “AAA”, and “Aaa,” respectively, to the 2008 Bonds, with the understanding that upon delivery of the 2008 Bonds, a policy insuring the payment when due of the principal of and interest on the 2008 Bonds will be issued by Bond Insurer.

Standard & Poor's Rating Group and Moody's Investors Service are expected to assign their municipal bond ratings of “A”, and “Baa1,” respectively, to the 2008 Fixed Rate Bonds as underlying ratings without regard to municipal bond insurance.

Standard & Poor's Rating Group and Moody's Investors Service are expected to assign their short term ratings of “A-1+” and “VMIG 1,” respectively, to the Variable Rate Bonds, with the understanding that upon delivery of the Variable Rate Bonds, (i) the Standby Bond Purchase Agreements supporting the payment of the tender purchase price of the Variable Rate Bonds will be executed and delivered by the Banks and (ii) the Bond Insurance Policy will be delivered by the Bond Insurer to the Trustee.

An explanation of the significance of each of such ratings may be obtained from the rating agency furnishing the same at the following addresses: Standard & Poor’s Rating Group, 25 Broadway, New York, NY 10004, and Moody’s Investors Service, 99 Church Street, New York, NY 10007. There is no assurance that such ratings will continue for any given period of time or that they may not be lowered or withdrawn entirely by the rating agencies, or any of them, if, in their or its judgment, circumstances so warrant. Any such downward change in or withdrawal of such ratings, or any of them, may have an adverse effect on the market price of the 2008 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 will enter into a Disclosure Dissemination Agent Agreement ("Disclosure Dissemination Agreement") for the benefit of the holders of the 2008 Bonds with Digital Assurance Certification, L.L.C. ("DAC"), under which the Authority has designated DAC as Disclosure Dissemination Agent (the "Disclosure Dissemination Agent"), and which includes an undertaking for the benefit of the holders of the 2008 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 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 with each Nationally Recognized Municipal Securities Information Repository as defined in the Rule ("NRMSIR"). Notices of material events are to be filed with each NRMSIR or with the Municipal Securities Rulemaking Board ("MSRB") 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 Official Statement 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 2008 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;

(v) Substitution of credit or liquidity providers, or their failure to perform;

(vi) Adverse tax opinions or events affecting the tax-exempt status of the 2008 Bonds;

(vii) Modifications to rights of holders of the 2008 Bonds;

(viii) Bond calls (other than mandatory sinking fund redemptions);

(ix) Defeasances;

(x) Release, substitution or sale of property securing repayment of the 2008 Bonds; and

(xi) Rating changes.

The Securities and Exchange Commission requires the listing of (i) through (xi), although some of such events may not be applicable to the 2008 Bonds.

*Amendments*. The Disclosure Dissemination Agreement may be amended, without the consent of the holders of the 2008 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 2008 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 2008 Bonds, when the Authority is no longer an Obligated Person with respect to the 2008 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 2008 Bonds (although any available remedy in equity may be pursued to compel the Authority's compliance). Nevertheless such 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 2008 Bonds in the secondary market. Consequently, any such failure may adversely affect the transferability and liquidity of the 2008 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 applicable 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 2008 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the 2008 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 2008 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.

## UNDERWRITING

The Variable Rate Bonds are being purchased from the Authority by J.P. Morgan Securities Inc., Commonwealth Securities and Investments, Inc., and Merrill Lynch & Co. (together, the "Underwriter"). The Underwriter has agreed to purchase the Variable Rate Bonds for an aggregate purchase price of $319,713,712.50 (representing the aggregate principal amount of the Variable Rate Bonds, less placement fee of $801,287.50). The Underwriter will purchase all the 2008 Bonds if any are purchased.

## REMARKETING

J.P. Morgan Securities Inc. has been appointed initially as exclusive Remarketing Agent (as defined in the applicable Indenture) for the 2008B and 2008D-2 Bonds.

Merrill Lynch & Co. has been appointed initially as exclusive Remarketing Agent (as defined in the applicable Indenture) for the 2008C-1 and Series 2008C-2 Bonds.

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

**The Remarketing Agent is Paid by the Issuer**

The Remarketing Agent's responsibilities include determining the interest rate from time to time and remarketing 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 Official Statement. The 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 2008 Bonds.

**The Remarketing Agent Routinely Purchase Bonds for its Own Account**

The Remarketing Agent acts as remarketing agent 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 Agent is permitted, but not obligated, to purchase tendered 2008 Bonds for its own account and, if it does so, it may cease doing so at any time without notice. The Remarketing Agent may also make a market in the 2008 Bonds by routinely purchasing and selling 2008 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 Agent is not required to make a market in the 2008 Bonds. The Remarketing Agent may also sell any 2008 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 2008 Bonds. The purchase of 2008 Bonds by the Remarketing Agent may create the appearance that there is greater third party demand for the 2008 Bonds in the market than is actually the case. The practices described above also may result in fewer 2008 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 Agreement, the Remarketing Agent is required to determine the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of the 2008 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 2008 Bonds (including whether the Remarketing Agent is willing to purchase 2008 Bonds for its own account). There may or may not be 2008 Bonds tendered and remarketed on a Rate Determination Date, the Remarketing Agent may or may not be able to remarket any 2008 Bonds tendered for purchase on such date at par and the Remarketing Agent may sell 2008 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 2008 Bonds at the remarketing price. In the event a Remarketing Agent owns any 2008 Bonds for its own account, it may, in its sole discretion in a secondary market transaction outside the tender process, offer such 2008 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 Agent may buy and sell 2008 Bonds other than through the tender process. However, it is not obligated to do so and may cease doing so at any time without notice and may require holders that wish to tender their 2008 Bonds to do so through the Tender Agent with appropriate notice. Thus, investors who purchase the 2008 Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their 2008 Bonds other than by tendering the 2008 Bonds in accordance with the tender process.

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

Under certain circumstances the 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 Agreement.

## 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 issuance of the Variable Rate 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"). 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 Official Statement. The Financial Advisor and the Swap Advisor will each receive a fee for its respective services with regard to the issuance of the Variable Rate Bonds and the execution of 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 and 2008D-2 Bonds. JPMorgan Chase Bank, National Association is providing a liquidity facility in the form of the Standby Bond Purchase Agreement with respect to the 2008C-2 Bonds and the 2008D-2 Bonds, and will also act as a Counterparty under 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 & Co. is an underwriter, the initial Remarketing Agent for the 2008C-1 and 2008C-2 Bonds and will also act as a counterparty under the Swap Agreements. See "INTEREST RATE SWAP AGREEMENTS" and "FUTURE INDEBTEDNESS – Future Refunding Transactions" herein.

PNC Capital Markets LLC has served as both Financial Advisor and Swap Advisor in connection with the issuance of the 2008 Bonds and the execution of the Swap Agreements. See "FINANCIAL ADVISOR AND SWAP ADVISOR" above.

Maher Duessel, Certified Public Accountants, serves both as the Authority's auditor and will provide the verification report in connection with the advance refunding of the Advance Refunded Bonds.

Dexia Credit Local, acting through its New York Branch, which is providing a liquidity facility in the form of the Standby Bond Purchase Agreement with respect to the 2008B Bonds and the 2008C-1 Bonds, is a subsidiary of the Dexia Group. The Dexia Group is the owner of Financial Security Assurance Holdings, Ltd., the holding company of the Bond Insurer.

## 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 Variable Rate Bonds, the security for the payment of the Variable Rate Bonds and the rights of the owners thereof. All capitalized terms used herein are used with the meaning set forth in the applicable Indenture unless otherwise so specified.

The information contained in this Official Statement 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 Official Statement 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 Official Statement 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 Official Statement 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

# APPENDIX A

## DESCRIPTION OF THE AUTHORITY AND THE WATER AND SEWER SYSTEM

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***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, Pennsylvania General Assembly |
| Robert P. Jablonowski, Vice Chairman | Retired (formerly 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 |
| Len Bodack, Jr., Asst. Secretary/Asst. Treasurer | |
| Dan Deasy, Member | Member, City Council City of Pittsburgh |
| Margaret Lanier, Member | |

***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.

**Accounting Manager --** Stephen Simcic joined the Authority's Administrative Division in September 2001. Mr. Simcic is responsible for Accounting and Financial Reporting of the Authority and in the absence of the Finance Director has assisted the Executive Director in all other financial matters of the Authority. Mr. Simcic came to the Authority with 10 years experience in the corporate accounting field with two major energy companies followed by 8 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.

**Water Quality Manager --** 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 that position he is responsible for 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 --** Michael Lichte, PE, joined the Authority in September 1999 after three years with the Allegheny County Health Department and 7 years with the U.S. Geological Survey. Mr. Lichte is responsible for the overall coordination and management of the Engineering and Construction Division's involvement in the Capital Improvement Program. Mr. Lichte graduated from Allegheny College with a Bachelor of Science Degree in Aquatic Environments. He earned a Master of Science in Civil 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 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 is acquiring 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. It is expected that the Cooperation Agreement will be amended in 2008 to 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, five reservoirs, and eleven 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 to approximately five to seven days of normal water usage. 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 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 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 require 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 Microfiltration Facility was placed into production in July 2002.

***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 (1998–2008)**

| | Residential[1] | | Commercial[1] | | Industrial[1] | | Wholesale[2] | | Health & Education[1] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR** | **Rate** | **Increase[3]** | **Rate** | **Increase[3]** | **Rate** | **Increase[3]** | **Rate** | **Increase[3]** | **Rate** | **Increase[4]** |
| | $ | % | $ | % | $ | % | $ | % | $ | % |
| 1998 | 3.85 | 2.5 | 3.79 | 2.5 | 3.54 | 2.5 | 2.59 | 2.5 | 0 | 0 |
| 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 |

(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.

**2006 Water Consumption by Customer Classification (1)**

| Classification | Customer | Percentage of usage |
|---|---|---|
| Residential | 75,028 | 39.05% |
| Commercial (2) | 8,135 | 43.34% |
| Industrial | 143 | 7.76% |
| Wholesale | 16 | 9.85% |
| TOTAL | 83,322 | 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 2007 |
|---|---|---|
| 1. | Fox Chapel Water Authority | 6.36% |
| 2. | Bay Valley Foods | 4.04 |
| 3. | University of Pittsburgh | 2.30 |
| 4. | UPMC Health System | 2.16 |
| 5. | Pittsburgh Housing Authority | 1.98 |
| 6. | Allegheny County Sanitary Authority ("ALCOSAN") | 1.60 |
| 7. | Allegheny County | 1.37 |
| 8. | Borough of Millvale | 1.11 |
| 9. | Reserve Water Department | 0.86 |
| 10. | Carnegie Mellon University | 0.83 |

Source: Pittsburgh Water and Sewer Authority

**PWSA Water Rate Comparison**

| | 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.

### *Expenses of Operation*

Salaries and related expenses account for approximately seventeen percent (17%) of total operating expenses in the 2008 budget. In 2008 the Authority's budget provides for two-hundred-eighty-nine (289) positions as follows: thirty-nine (39) in billing and collections; twenty-eight (28) in administrative and accounting positions; two-hundred-one (201) in water and sewer operations and twenty-one (21) in engineering. Payments to the City of Pittsburgh for services to be provided to the Authority under the Cooperating Agreement are approximately ten percent (10%) of the 2008 total operating expenses. In addition, utility fees and the cost of chemicals account for approximately nine (9%) of the 2008 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, 2002 through December 31, 2007. The audited financial statements and management discussion and analysis for the years ended December 31, 2007 and 2006 are included as APPENDIX C.

**Financial History**
(Dollars expressed in thousands)

| | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 |
|---|---|---|---|---|---|---|
| Operating revenues: | | | | | | |
| Residential, commercial and industrial water sales | $ 89,766 | $ 83,954 | $ 82,726 | $ 71,559 | $ 63,242 | $ 62,236 |
| Utility water sales | -- | -- | -- | -- | -- | -- |
| Other | 2,760 | 2,371 | 2,305 | 2,241 | 1,945 | 1,680 |
| Total operating revenues | 92,526 | 86,325 | 85,031 | 73,800 | 65,187 | 63,916 |
| Operating Expenses: | | | | | | |
| Direct operating expenses | 36,041 | 34,628 | 31,160 | 29,607 | 30,011 | 26,367 |
| Cooperation agreement operating expenses: | | | | | | |
| Wastewater direct expenses | -- | -- | -- | -- | -- | 2,300 |
| Indirect cost allocation - wastewater | 4,415 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Indirect cost allocation - water | 5,235 | 4,150 | 4,150 | 4,150 | 4,150 | 1,850 |
| Transfer costs, net | | | | | | |
| Expense of water provided by other entities: | | | | | | |
| Subsidy of customers located in the City | 684 | 819 | 1,093 | 2,543 | 3,186 | 3,886 |
| Depreciation | 13,692 | 13,332 | 13,795 | 12,647 | 11,922 | 9,877 |
| Amortization of capitalized lease assets | 2,557 | 2,557 | 2,557 | 2,557 | 2,557 | 2,554 |
| Total operating expenses | 62,624 | 58,486 | 55,755 | 54,504 | 54,826 | 49,834 |
| Operating income | 29,902 | 27,839 | 29,276 | 19,296 | 10,361 | 14,082 |
| Other revenues (expenses): | | | | | | |
| Interest revenue | 2,598 | 2,216 | 1,348 | 685 | 1,322 | 1,480 |
| Interest expense | (28,394) | (27,946) | (27,500) | (26,727) | (28,355) | (25,944) |
| Unrealized gain/(loss) on trust investments | (155) | (145) | (160) | (84) | (53) | 84 |
| Amortization of bond issue costs | (622) | (627) | (643) | (628) | (401) | (496) |
| Total other revenue (expense) | (26,573) | (26,502) | (26,955) | (26,754) | (27,487) | (24,876) |
| Increase/(Decrease) in Net Assets | 3,329 | 1,337 | 2,321 | (7,458) | (17,126) | (10,794) |
| Net Asset Surplus/(Deficit): | | | | | | |
| Beginning of year | (37,932) | (39,269) | (41,590) | (34,132) | (17,006) | (6,212) |
| End of year | $ (34,603) | $ (37,932) | $ (39,269) | $ (41,590) | $ (34,132) | $ (17,006) |
| Annual debt service requirement | | | | | | |
| Principal | $ 17,299 | $ 17,834 | $ 17,159 | $ 12,079 | $ 14,055 | $ 10,065 |
| Interest | 30,493 | 26,021 | 23,180 | 23,325 | 26,631 | 25,738 |
| Total annual debt service requirement | $ 47,792 | $ 43,855 | $ 40,339 | $ 35,404 | $ 40,686 | $ 35,803 |

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”.

***Billings, Collections and Enforcement***

All bills are due 20 days after the billing date and a penalty is applied 10 days past that date. The penalty is reflected on dunning notices generated and mailed to customers above a certain dollar threshold (dependent on customer class), and all unpaid balances and penalty are reflected on the next regularly monthly scheduled statement. In addition specified delinquent accounts are also issued to a collection agency, as a matter of routine, as part of the overall collection process. Termination is dependent on customer class and time of year.

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 waste water 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 has 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.

***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, the American Federation of State, County and Municipal Employees, Local 2719 represents white-collar employees and Local 2037 represents the foreman. 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. Three year agreements were reached with each of the American Federation of State, County and Municipal Employees Locals. Both locals received salary increases on January 1, 2006, 2007, and 2008. A five year agreement was recently reached with the Pittsburgh Joint Collective Bargaining Committee which provide 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 exceedances, 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 stormwater. Any facility which discharges sewage, process wastewater, non-contact cooling water, stormwater from municipal separate storm sewer systems or stormwater 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.

***Air Quality***

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.

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.

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# APPENDIX B

# SUMMARY OF INDENTURES

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The Water and Sewer System First Lien Revenue Refunding Bonds, Series A of 2008, the Water and Sewer System First Lien Revenue Refunding Bonds, Series B of 2008 and the Water and Sewer System First Lien Revenue Refunding Bonds, Series D of 2008 (the "2008 First Lien Bonds") are being 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 (collectively, the "First Lien Indenture"). Simultaneously with the issuance of the 2008 First Lien Bonds, the Authority is issuing its Water and Sewer System Subordinate Revenue Refunding Bonds, Series C of 1998 (the "2008 Subordinate Bonds") pursuant to and secured under a Subordinate Trust Indenture, dated as of July 15, 1995, as amended and supplemented by the First Supplemental Subordinate Indenture, dated as of March 1, 1998 and the Second Supplemental Subordinate Indenture, dated as of June 1, 2008 (collectively, the "Subordinate Indenture"). The 2008 First Lien Bonds together with the 2008 Subordinate Bonds are herein referred to as the "2008 Bonds."

## 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

**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-l" 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-l" by Moody's and a "Short-Term CD" rating of "A-l" 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-l" or "A3" or better by Moody's and "A-l" 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.

**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.

**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.

**Receipts and Revenues.** The term "Receipts and Revenues" shall mean any and all rates, fees, 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.

**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, without preference, priority or distinction as to lien or otherwise, except as otherwise provided in the First Lien Indenture, of any one Bond over any other Bond 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 2007 Bonds, 2005 Bonds, the 2003 Bonds, the 2002 Bonds, the 1998A Bonds, the 1998B 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 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 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.

**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. In addition, the Trustee shall be entitled to exercise any or all of the remedies granted to a trustee or under the Bond insurance policy or the Municipality Authorities Act. In no event, so long as the Bond insurance policy is in effect and the bond insurer is not in default thereunder, shall the Trustee accelerate the payment of the Bonds without the written consent of each bond insurer with respect to the series of Bonds it insures. 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.

**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.** In case of the breach of any of the covenants or conditions of the First Lien Indenture, the Trustee shall have the right and power to take appropriate judicial proceedings for the enforcement of its rights and the rights of the Bondholders thereunder. Upon the happening of an Event of Default, the Trustee may either after entry, or without entry, proceed by suit or suits, actions or special proceedings at law or in equity to enforce its rights and the rights of the Bondholders under the First Lien Indenture, 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 Bonds then outstanding and upon being indemnified. For purposes of this provision, each Bond insurer shall, so long as no event of default has occurred under its respective insurance policy, be deemed to be the owner of the Bonds it has insured.

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.

**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 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 series of Bonds which it insures with respect to the taking of each remedy and the Trustee may not take any action directed by such Bondholders without the prior written consent of the Bond insurer.

**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:

(a) 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.

(b) Federal Housing Administration debentures.

(c) 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.

(d) 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-l" or better by S&P.

(e) 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.

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

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

(h) "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-l" 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.

(i) 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.

(j) 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); (£) 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.

(k) 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:

1) 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:

(a) 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

(b) 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

(c) 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

(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 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

(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, 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

(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 may 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 under the Subordinate Indenture or the Municipality Authorities Act; or

(h) 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

(i) 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:

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

(d) 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;

(e) 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

(f) 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.

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# APPENDIX C

# AUTHORITY FINANCIAL STATEMENTS

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# PITTSBURGH WATER AND SEWER AUTHORITY

## FINANCIAL STATEMENTS
AND
## REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION

YEARS ENDED DECEMBER 31, 2007 AND 2006

WITH

INDEPENDENT AUDITOR'S REPORT

MAHER DUESSEL
CERTIFIED PUBLIC ACCOUNTANTS

# PITTSBURGH WATER AND SEWER AUTHORITY

YEARS ENDED DECEMBER 31, 2007 AND 2006

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# MAHER DUESSEL

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## 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, 2007 and 2006 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. 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 opinion.

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, 2007 and 2006, 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.

The Management's Discussion and Analysis Section on pages i through iv 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 basic financial statements taken as a whole. The accompanying additional information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

*Maher Duessel*

Pittsburgh, Pennsylvania
April 10, 2008

# THE PITTSBURGH WATER AND SEWER AUTHORITY

2007 Financial Statements
Management Discussion and Analysis

The Pittsburgh Water and Sewer Authority's (the "Authority") comparative 2007 and 2006 fiscal years 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 Statements of Net Assets classify 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.

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 2007, operating income increased by 7.4% or $2.1 million resulting in a net income of $3.3 million, up from a $1.3 million net income in 2006. Below are the 2007 financial highlights:

Operating revenues in 2007 increased by $6.2 million or 7.2% to $92.5 million from $86.3 million in 2006. This rise in revenues was driven by a 5.4% increase in Sewer Conveyance rates effective January 1, 2007.

Total operating expenses in 2007 increased by $4.1 million or 7.1% to $62.6 million from $58.5 million in 2006. Operating expenses were impacted by the following major factors:

- Salary and employee benefit expense were up $815,000 or 6.2%. The increase is attributed to an average salary increase of 2.5% and staff increases in MIS and Customer Services. Medical insurance premiums increased by $138,000 or 6.5%.

  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. In March 2006, a new three-year AFSCME agreement was signed which expires in December 2008. The five-year PJCBC agreement expired in December 2007.

- Chemical expense increased by 26.6% or $814,000 due to price increases resulting from petroleum industry refining and transportation costs. Also, due to equipment down time of lime machines used to adjust Ph, plant operations switched to using Caustic Soda which is approximately four times the cost.

- Professional service expenses were up 13.2% or $418,000. The Authority's office move accounted for $311,000 and legal services amounted to $138,000. Insurance premiums for General Liability were down approximately $31,000.

- Office rents increased 27.7% or $91,000 due to the relocation of the Authority's Administrative offices. The new 20 year lease agreement provides for an additional 27,346 sq. ft., a 150% increase in office space (from 18,272 to 45,618 sq.ft.). Lease rents will increase by 80% from approximately $27,484 per month to $49,419 per month.

- In 2007, collections increased by $8.1 million or 6.7% and the accounts receivable aggregate reserve adjustment for bad debt expense decreased by 27.9% or $840,000. The decrease in bad debt expense was due to the year-end reserve adjustment booked in 2006 for the settlement on a non-recurring lien repurchase agreement with MBIA/CARC totaling $2,033,000.

- Electricity expenses were up 10% or approximately $405,000. The increase was due to an expiration of a multi-year contract resulting in spot market pricing during the 2nd and 3rd quarters. A new short-term contract was signed in the 4th quarter. The Authority anticipates additional savings resulting from its participation with other local government agencies in longer term contracts beginning in May of 2008.

- Co-op expenses with the City of Pittsburgh (City) increased 35% or $2.5 million to cover increased costs associated with services provided to the Authority under the terms of the agreement and financial expertise furnished during the 2007 and 2008 debt restructuring that occurred during the year. The City and the Authority are in the process of renegotiating the co-op agreement to reflect current levels of services provided.

- The Authority's 2007 rate increase exceeded the rate increases of other water providers in the City. This differential resulted in a decrease of the rate equalization subsidy by 16.4% or $135,000.

Non-operating expenses remained relatively unchanged during 2007.

Additional operating highlights include the following:

- Debt service coverage in 2007 and 2006 was 1.77 and 1.73, respectively. The coverage factors exceed the 1.2 coverage factor required under the bond covenant. The improved coverage factor was a direct result of the 2007 Bond Refunding package which delivered a $3.7 million reduction in overall debt service during 2007.

- The Authority relocated its administrative office center to a new location at 1200 Penn Avenue, Pittsburgh, Pennsylvania. During August, the Authority's Administrative, Engineering, Finance, and Permitting Divisions were relocated and fully operational within two weeks with minimal disruptions to daily operations.

- The Authority invested $1.7 million of operating funds to upgrade its SAP financial reporting system's technical capabilities and to support future business requirements in areas such as GIS Interfaces with SAP in the field, Enterprise Permit processing, Customer on-line interaction, e-billing and e-payment access, and seamless City/County Interaction (Portals).

- Other asset acquisitions utilizing operating funds included a new phone system and computers for $.212 million, office furniture for $.277 million, vehicles for $.211 million, and $.778 million in improvements to the Authority's three primary reservoirs (Highland 1&2 and Lanpher). The reservoir projects consisted of replacing pumps, repairing covers, hatch

replacements, sludge removal, and upgrades to rain water removal systems. These efforts significantly reduced the overall health risks associated with the potential for cross contamination between potable water in the reservoirs and the stagnant dirty water on the covers.

- The City is the largest of the 83 municipalities that convey raw sewage to ALCOSAN for treatment. In January 2004, the Authority and the City executed a Consent Order and Agreement (the Order) regarding sanitary and combined sewer overflows within the City. 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 remained under financial stress in 2007. The Authority has three agreements with the City. 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 (Agreement). Under this Agreement, the Authority also funds on behalf of the City a rate equalization subsidy to other City water companies. Under a 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 to increase Authority funding would require Board of Directors (Board) approval.

## CONDENSED FINANCIAL STATEMENTS

### CONDENSED STATEMENTS OF NET ASSETS

(Dollars expressed in thousands)

| | December 31, | | Variance | |
|---|---|---|---|---|
| | 2007 | 2006 | Dollars | % |
| | | | Increase (Decrease) | |
| Capital assets: | | | | |
| Producing assets | **$ 420,120** | **$ 419,459** | $ 661 | 0.2% |
| Constructions in progress | **22,901** | **16,658** | 6,243 | 37.5% |
| Restricted assets | **51,547** | **68,765** | (17,218) | -25.0% |
| Current assets and bond costs | **68,975** | **64,309** | 4,666 | 7.3% |
| **Total Assets** | **$ 563,543** | **$ 569,191** | $ (5,648) | -1.0% |
| Liabilities: | | | | |
| Current liabilities | **$ 46,693** | **$ 45,106** | $ 1,587 | 3.5% |
| Long-term liabilities | **551,453** | **562,017** | (10,564) | -1.9% |
| Total Liabilities | **598,146** | **607,123** | (8,977) | -1.5% |
| Net Assets (Deficit): | | | | |
| Invested in capital assets, net of related liabilities | **(64,959)** | **(69,075)** | 4,116 | -6.0% |
| Restricted for capital activity and debt service | **8,837** | **8,401** | 436 | 5.2% |
| Unrestricted | **21,519** | **22,742** | (1,223) | -5.4% |
| Total Net Assets (Deficits) | **(34,603)** | **(37,932)** | 3,329 | -8.8% |
| **Total Liabilities and Net Assets (Deficits)** | **$ 563,543** | **$ 569,191** | $ (5,648) | -1.0% |

**CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET ASSETS**
(Dollars expressed in thousands)

| | Year Ended December 31, | | Variance | |
|---|---|---|---|---|
| | 2007 | 2006 | Dollars | % |
| | | | Increase (Decrease) | |
| Operating Revenues | $ 92,526 | $ 86,325 | $ 6,201 | 7.2% |
| Operating Expenses: | | | | |
| Direct operating | 36,041 | 34,628 | 1,413 | 4.1% |
| Cooperation Agreement | 9,650 | 7,150 | 2,500 | 35.0% |
| Subsidy of non-customer City residents | 684 | 819 | (135) | -16.5% |
| Depreciation and amortization | 16,249 | 15,889 | 360 | 2.3% |
| **Total Operating Expenses** | 62,624 | 58,486 | 4,138 | 7.1% |
| Operating Income | 29,902 | 27,839 | 2,063 | 7.4% |
| Non-operating revenue (expense): | | | | |
| Interest revenue | 2,598 | 2,216 | 382 | 17.2% |
| Interest expense and other | (29,171) | (28,718) | (453) | 1.6% |
| **Total Non-operating Revenue (Expenses)** | (26,573) | (26,502) | (71) | 0.3% |
| **Net Gain/(Loss)** | $ 3,329 | $ 1,337 | $ 1,992 | 149.0% |

## Financial Condition

The Authority's financial condition in 2007 continued to improve for the fifth year in a row. Under Board directives, management moved quickly to control spiraling costs in the chemical, energy, and emergency water line repair sectors of operations, which limited the rise in expenditures to 7%. Subsidy expenses continued to decline. The Authority also realized an increase in operating cash funds of $3 million due to the 2007 refunding of the 2002 and 2005 Bond Debt issues. Including the bond refundings scheduled to occur in 2008, the Authority is projecting to save approximately $26 million in interest on bonded debt over the next 28 years. This, combined with the sewer conveyance rate increase of 5.4%, improved the Authority's position in meeting its future commitments to capital infrastructure renewals and regulatory mandates.

The Authority is currently considering a 2008 bond issue for the Capital Improvement Program. While a final amount of funding has not been determined, it is projected to be in the $50-$100 million range. Approximately, 40% of the proceeds are estimated to be directed towards major improvements to the Water Treatment Plant. Other significant investments will include URA, SEA, and Port Authority projects.

The Authority's strategic plan continues to focus on improving its financial condition, customer service and internal effectiveness, maintaining regulatory compliance and security, and providing a culture that encourages employee development and safety. The Authority examines work practices at all levels in order to find more effective and efficient methods of operation and remains fully committed to its vision of providing water and waste water services that meet or exceed regulations and customer expectations at the most cost effective levels.

## 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 Avenue, Pittsburgh, PA 15222.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET ASSETS

*(Dollars expressed in thousands)*

DECEMBER 31, 2007 AND 2006

| Assets | 2007 | 2006 |
|---|---|---|
| Current assets: | | |
| Cash and cash equivalents | $ 35,024 | $ 31,907 |
| Accounts receivable, net: | | |
| Water: | | |
| Billed | 11,012 | 9,759 |
| Unbilled | 4,037 | 4,877 |
| Total water | 15,049 | 14,636 |
| Wastewater treatment: | | |
| Billed | 5,527 | 5,239 |
| Unbilled | 2,957 | 2,091 |
| Total wastewater treatment | 8,484 | 7,330 |
| Other receivables | 1,339 | 1,470 |
| Total accounts receivable, net | 24,872 | 23,436 |
| Prepaid expenses | 434 | 319 |
| Inventory | 1,572 | 1,612 |
| Total current assets | 61,902 | 57,274 |
| Noncurrent assets: | | |
| Restricted assets: | | |
| Accrued interest receivable | 338 | 472 |
| Cash and cash equivalents | 6,593 | 9,320 |
| Investments | 44,616 | 58,973 |
| Total restricted assets | 51,547 | 68,765 |
| Capital assets, not being depreciated | 22,901 | 16,658 |
| Capital assets, net of accumulated depreciation | 420,120 | 419,459 |
| Bond issue costs, net of accumulated amortization | 7,073 | 7,035 |
| Total noncurrent assets | 501,641 | 511,917 |
| **Total Assets** | $ 563,543 | $ 569,191 |

(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, 2007 AND 2006

(Continued)

| Liabilities and Net Assets (Deficit) | 2007 | 2006 |
|---|---|---|
| Liabilities: | | |
| Current liabilities: | | |
| Bonds and loans payable, current portion | $ 17,936 | $ 17,995 |
| Accrued payroll and related obligations | 940 | 1,081 |
| Accounts payable wastewater treatment | 12,168 | 10,590 |
| Accounts payable and other accrued expenses | 4,323 | 6,348 |
| Accounts payable from restricted assets | 3,319 | 2,518 |
| Accrued interest payable from restricted assets | 8,007 | 6,574 |
| Total current liabilities | 46,693 | 45,106 |
| Noncurrent liabilities: | | |
| Deferred revenue | 378 | 399 |
| Accrued payroll and related obligations | 1,183 | 907 |
| Bonds and loans payable, net of current portion | 549,892 | 560,711 |
| Total noncurrent liabilities | 551,453 | 562,017 |
| Total Liabilities | 598,146 | 607,123 |
| Net Assets (Deficit): | | |
| Invested in capital assets, net of related debt | (64,959) | (69,075) |
| Restricted for capital activity and debt service | 8,837 | 8,401 |
| Unrestricted | 21,519 | 22,742 |
| Total Net Assets (Deficit) | (34,603) | (37,932) |
| **Total Liabilities and Net Assets (Deficit)** | $ 563,543 | $ 569,191 |

(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, 2007 AND 2006

| | 2007 | 2006 |
|---|---|---|
| **Operating Revenues:** | | |
| Residential, commercial, and industrial water sales | $ 89,766 | $ 83,954 |
| Other | 2,760 | 2,371 |
| Total operating revenues | 92,526 | 86,325 |
| **Operating Expenses:** | | |
| Direct operating expenses | 36,041 | 34,628 |
| Cooperation agreement operating expenses: | | |
| Indirect cost allocation - wastewater | 4,415 | 3,000 |
| Indirect cost allocation - water | 5,235 | 4,150 |
| Expense of water provided by other entities: | | |
| Subsidy of customers located in the City | 684 | 819 |
| Depreciation | 13,692 | 13,332 |
| Amortization of capitalized lease assets | 2,557 | 2,557 |
| Total operating expenses | 62,624 | 58,486 |
| **Operating Income** | 29,902 | 27,839 |
| **Non-operating Revenues (Expenses):** | | |
| Interest revenue | 2,598 | 2,216 |
| Interest expense - bonds | (28,394) | (27,946) |
| Interest expense - other | (155) | (145) |
| Amortization of bond issue costs | (622) | (627) |
| Total non-operating revenues (expenses) | (26,573) | (26,502) |
| **Net Income** | 3,329 | 1,337 |
| **Net Assets (Deficit):** | | |
| Beginning of year | (37,932) | (39,269) |
| End of year | $ (34,603) | $ (37,932) |

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, 2007 AND 2006

| | 2007 | 2006 |
|---|---|---|
| **Cash Flows From Operating Activities:** | | |
| Cash received from customers | $ 128,470 | $ 120,363 |
| Cash paid to suppliers and employees and customer refunds | (34,650) | (31,583) |
| Cash paid to City of Pittsburgh under the Cooperation Agreement | (9,650) | (7,150) |
| Cash paid to other water companies for subsidy of customers located in the City of Pittsburgh | (684) | (819) |
| Cash paid to ALCOSAN for sewage | (37,380) | (34,839) |
| Net cash provided by (used in) operating activities | 46,106 | 45,972 |
| **Cash Flows From Investing Activities:** | | |
| Purchase of investment securities | (243,000) | (148,687) |
| Proceeds from sale and maturities of investment securities | 257,372 | 162,875 |
| Interest income | 2,732 | 2,411 |
| Net cash provided by (used in) investing activities | 17,104 | 16,599 |
| **Cash Flows From Capital and Related Financing Activities:** | | |
| Purchase/construction of property, plant, and equipment | (23,153) | (17,463) |
| Proceeds from issuance of long-term debt | 159,165 | 3,699 |
| Payment to refunding bond escrow agent | (151,040) | - |
| Principal payments on debt | (17,299) | (17,834) |
| Interest paid on borrowings | (30,493) | (26,021) |
| Net cash provided by (used in) capital and related financing activities | (62,820) | (57,619) |
| **Increase (Decrease) in Cash and Cash Equivalents** | 390 | 4,952 |
| **Cash and Cash Equivalents:** | | |
| Beginning of year | 41,227 | 36,275 |
| End of year | $ 41,617 | $ 41,227 |
| Consists of: | | |
| Restricted cash and cash equivalents | $ 6,593 | $ 9,320 |
| Unrestricted cash and cash equivalents | 35,024 | 31,907 |
| | $ 41,617 | $ 41,227 |
| **Reconciliation of Operating Income to Net Cash Provided by (Used in) Operating Activities:** | | |
| Operating income | $ 29,902 | $ 27,839 |
| Adjustments: | | |
| Depreciation and amortization | 16,249 | 15,889 |
| Reserve for uncollectible amounts | 2,364 | 1,107 |
| Change in assets and liabilities: | | |
| Change in: | | |
| Accounts receivable | (3,931) | (2,229) |
| Other accounts receivable | 131 | 321 |
| Wastewater accounts payable | 1,578 | 486 |
| Accounts payable and other accrued expenses | (2,025) | 1,350 |
| Accrued interest on restricted assets | 801 | 1,194 |
| Accounts payable restricted assets | 1,433 | (97) |
| Other | (396) | 112 |
| Net cash provided by (used in) operating activities | $ 46,106 | $ 45,972 |

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) and collects wastewater throughout the City.

A 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 commencing upon the date of approval of the articles of amendment.

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.

- 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 2007 and 2006, the Authority's interest expense of $693 and $2,365 respectively, net of deferred interest earnings of $693 and $1,948, respectively, resulted in net capitalized interest expense of $0 and $417, respectively. Earnings on forward float agreements are recorded as deferred revenue and recognized as interest revenue ratably over the life of each agreement.

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, and 2007 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 2016, 2028, 2023, and 2033, respectively. The unamortized balances are reflected as a reduction of bonds payable.

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.

## 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 2007 payroll of $10,525 was covered by the Plan. Employee contributions for the year amounted to approximately $409.

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 2007 Minimum Municipal Obligation calculated for the City's Plan indicated a 2007 normal cost of $554 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 2007, together with other elements of expense for employee service during 2007 would not exceed the sum of the 2007 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, 2007 and 2006, the reserve for uncollectible water accounts was approximately $15.6 million and $13.4 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 receivables 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. Related assets and liabilities appear on the statements of net assets. At December 31, 2007 and 2006, the reserve for uncollectible wastewater accounts was approximately $8.4 million and $8.2 million, respectively.

## 5. CAPITAL ASSETS

Capital assets consisted of the following at December 31, 2007 and 2006:

| | 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 |

| | Balance at December 31, 2005 | Additions | Transfers | Balance at December 31, 2006 |
|---|---|---|---|---|
| Capital assets not being depreciated: | | | | |
| Construction in progress | $ 9,843 | $ 11,020 | $ (4,205) | $ 16,658 |
| Capital assets being depreciated: | | | | |
| Water and sewer system | 102,167 | - | - | 102,167 |
| Utility assets | 444,237 | 10,478 | - | 454,715 |
| Non-utility assets | 16,634 | 169 | (4,029) | 12,774 |
| Total capital assets being depreciated | 563,038 | 10,647 | (4,029) | 569,656 |
| Total capital assets | 572,881 | 21,667 | (8,234) | 586,314 |
| Accumulated depreciation | (138,330) | (15,889) | 4,022 | (150,197) |
| Capital assets, net | $ 434,551 | $ 5,778 | $ (4,212) | $ 436,117 |

## 6. Payroll and Related Obligations

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

| | Balance at December 31, 2006 | Additions | Reductions | Balance at December 31, 2007 | Current Portion |
|---|---|---|---|---|---|
| Compensated absences | $ 766 | $ 16 | $ (4) | $ 778 | $ 33 |
| Workers' compensation | 590 | 260 | (206) | 644 | 206 |
| Early retirement incentive | 7 | 8 | (8) | 7 | 7 |
| Payroll, withholdings, and taxes | 625 | 69 | - | 694 | 694 |
| | $ 1,988 | $ 353 | $ (218) | $ 2,123 | $ 940 |

| | Balance at December 31, 2005 | Additions | Reductions | Balance at December 31, 2006 | Current Portion |
|---|---|---|---|---|---|
| Compensated absences | $ 793 | $ - | $ (27) | $ 766 | $ 36 |
| Workers' compensation | 323 | 267 | | 590 | 413 |
| Early retirement incentive | 15 | - | (8) | 7 | 7 |
| Payroll, withholdings, and taxes | 611 | 14 | - | 625 | 625 |
| | $ 1,742 | $ 281 | $ (35) | $ 1,988 | $ 1,081 |

## 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 currently refunded all outstanding 1985 and 1986 Bonds. The principal of defeased 1986 Bonds still outstanding at December 31, 2007 and 2006 is $148,995 and $159,645, 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, 2007 and 2006 was $12,940 and $25,880, respectively.

During 2008, the bond insurance company for the Series 1993 bonds was downgraded to a credit rating of A 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, 2007 and 2006, with carrying amounts of $49 million for both year-ends, based on quoted market prices, is approximately $56 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, 2007 and 2006, the remaining unamortized deferred refunding loss of $2,920 and $3,172, 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, 2007 and 2006, with carrying amounts of $253 million and $249 million, respectively, based on quoted market prices, is approximately $261 million and $266 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 $166.1 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 $2,251 and $2,452 at December 31, 2007 and 2006, 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, 2007 and 2006, with carrying amounts of $116 million and $130 million, respectively, based on quoted market prices, is approximately $118 million and $132 million, respectively.

Series 2007

During March 2007, the Authority issued $158,895,000 Series 2007 First Lien Water and Sewer Revenue Bonds ("2007 Bonds"): $43,720,000 Series A of 2007 (fixed rate), $57,585,000 Series B-1 of 2007 (variable rate demand), and $57,590,000 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 $8,099 which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. As a result of this transaction, management expects to recognize a present value savings on debt service payments, net of all transaction costs, of approximately $6 million over the life of the new bonds. At December 31, 2007, the principal of the defeased Series 2002 Bonds outstanding was $99,380, and the defeased 2005 Bonds outstanding was $48,540.

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, 2007, with carrying amounts of $156 million, respectively, based on quoted market prices, is approximately $161 million.

Bonds and state loans payable (PENNVEST), consisted of the following at December 31, 2007 and 2006:

| | 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 |

| | Balance at December 31, 2005 | Additions | Reductions | Balance at December 31, 2006 |
|---|---|---|---|---|
| Bonds and loans payable: | | | | |
| Revenue bonds | $ 593,541 | $ 2,924 | $ (16,780) | $ 579,685 |
| State loans (PENNVEST) | 14,968 | 775 | (1,054) | 14,689 |
| | 608,509 | 3,699 | (17,834) | 594,374 |
| Less: deferred refunding loss | (16,771) | - | 1,987 | (14,784) |
| Unamortized bond (discount)/premium | (967) | - | 83 | (884) |
| Total bonds and loans | $ 590,771 | $ 3,699 | $ (15,764) | $ 578,706 |

Debt service payments of the State Loans at December 31, 2007 are as follows:

| | State Loans | | |
|---|---|---|---|
| | Principal | Interest | Total |
| 2008 | $ 801 | $ 166 | $ 967 |
| 2009 | 811 | 156 | 967 |
| 2010 | 820 | 146 | 966 |
| 2011 | 830 | 136 | 966 |
| 2012 | 841 | 126 | 967 |
| 2013-2017 | 4,361 | 473 | 4,834 |
| 2018-2022 | 4,543 | 196 | 4,739 |
| 2023-2025 | 1,158 | 15 | 1,173 |
| | $ 14,165 | $ 1,414 | $ 15,579 |

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

| | Revenue Bonds | | |
|---|---|---|---|
| | Principal | Interest | Total |
| 2008 | $ 14,730 | $ 23,606 | $ 38,336 |
| 2009 | 18,620 | 23,211 | 41,831 |
| 2010 | 19,220 | 22,615 | 41,835 |
| 2011 | 19,885 | 21,952 | 41,837 |
| 2012 | 21,050 | 20,776 | 41,826 |
| 2013-2017 | 121,824 | 87,341 | 209,165 |
| 2018-2022 | 145,197 | 64,134 | 209,331 |
| 2023-2027 | 131,591 | 78,173 | 209,764 |
| 2028-2032 | 54,717 | 67,617 | 122,334 |
| 2033 | 2,935 | 114 | 3,049 |
| | 549,769 | $ 409,539 | $ 959,308 |
| Accretion | 24,352 | | |
| Total | $ 574,121 | | |

Interest incurred for the years ended December 31, 2007 and 2006 on bonds payable, exclusive of capitalized interest and amortization of refunding losses was approximately $28 million. Interest costs for 2007 and 2006 included $2.4 million and $2 million, respectively of amortization of the deferred refunding losses.

In accordance with the provisions of the trust indentures for the 1993, 1998, 2002, 2005, and 2007 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, 2007 and 2006, was:

| | 2007 | 2006 |
|---|---|---|
| Capital project funds | $ 27,511 | $ 39,395 |
| Debt service and reserve funds | 15,199 | 20,969 |
| Operating reserve account | 8,269 | 7,860 |
| Other funds | 568 | 541 |
| | $ 51,547 | $ 68,765 |

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

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 will make semi-annual interest payments on the 1st of each March and September through September 1, 2033. The Counterparties will make monthly interest payments on the 1st of each calendar month, beginning April 1, 2007 through September 1, 2033.

The intention of the swaps is to effectively change the Authority's variable interest rate on the $57,585,000 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds Series B-1 of 2007 and on the $57,590,000 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 of $57,585,000 and $57,590,000, respectively, 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.

During 2007, the Authority paid $2,164 fixed and received $3,426 variable related to the swaps.

As of December 31, 2007, the interest rate swaps had a fair market values of ($1,902), and ($1,345), respectively. The mark to 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.

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 contracts were revised subsequent to period end such that the forward starting swaps will be effective starting June 1, 2008 and will terminate on September 1, 2025.

Once effective, beginning September 1, 2008, the Authority will make semi-annual interest payments on the 1st of each March and September through September 1, 2025. The Counterparties will make monthly interest payments on the 1st of each calendar month, beginning June 1, 2008 through September 1, 2025.

The intention of the swaps is to effectively change the Authority's variable interest rate on the proposed 2008 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds of 2008 to synthetic fixed rates of 3.953%.

The bonds will accrue interest at a weekly rate that is determined by a remarketing agent on each effective rate date. Per the interest rate swap agreements, the Authority will receive SIFMA Municipal Swap Index while paying a fixed rate of 3.953%.

The interest payments on the interest rate swaps are calculated based on a notional amounts of $50,185,000, $50,185,000, $47,080,000, and $47,080,000, respectively, all of which reduces beginning on September 1, 2017 so that the notional amounts approximate the principal outstanding on the respective anticipated 2008 bonds. The interest rate swaps expire on September 1, 2025 consistent with the final maturity of the bonds.

As of December 31, 2007, the interest rate swaps had a fair market values of ($1,292), $(1,335), ($1,219) and ($1,260), respectively. The mark to 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.

A termination event will occur related to the forward starting interest rate swaps if the Authority does not issue variable rate refunding bonds on or before July 30, 2008 in the amounts equal to the notional amounts on the respective interest rate swaps.

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, 2007, the interest rate swap counterparties were rated A+ and AA- 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.

- Interest rate risk is the risk that changes in interest rates will adversely affect the fair values of the Authority's financial instruments or the Authority's cash flows. The Authority could be exposed to interest rate risk if long-term interest rates are less than 3.932% or 3.953%, dependent on the transaction.

- 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.

- 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 September 1, 2033 and September 1, 2025 which are the same day the last payment is due on the respective bonds.

## 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, 2007 and 2006 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, 2007 and 2006, $34,828 and $32,034, respectively, of the Authority's bank balance of $35,128 and $32,334, 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 $35,024 and $31,907 as of December 31, 2007 and 2006, 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, 2007 and 2006: money market funds of $6,027 and $8,781, respectively and repurchase agreements of $566 and $539, respectively. Of the Authority's $566 and $539 investment in repurchase agreements, at December 31, 2007

and 2006, respectively, all of the underlying securities are held by the investment's counterparty, not in the name of the Authority.

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

| | Fair market 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 |

At December 31, 2006, the Authority held the following investment balances:

| | Fair market value | Maturity in years: Less than 1 year |
|---|---|---|
| Guaranteed Investment Contracts | $ 35,081 | $ 35,081 |
| Money market | 8,781 | 8,781 |
| Repurchase agreements | 539 | 539 |
| Commercial paper | 16,054 | 16,054 |
| INVEST | 7,838 | 7,838 |
| Total | $ 68,293 | $ 68,293 |

The fair value of the Authority's investments is the same as their carrying amount. Investments of $44,616 and $58,973 are included as noncurrent restricted investments on the statements of net assets at December 31, 2007 and 2006, respectively. 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. Investments of $9,320, consisting of money market funds

of $8,781 and repurchase agreements of $539, are included as noncurrent restricted cash and cash equivalents on the statements of net assets at December 31, 2006. 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, 2007 and 2006 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, 2007, the Authority's investments in the state investment pool (INVEST) and the guaranteed investment contracts were rated AAA by Standard & Poor's. The Authority's investments in commercial paper at December 31, 2007 was rated A1+ by Standard & Poor's. Additionally, at December 31, 2007, 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 Trinity Plus Fund guaranteed investment contracts, Bank of New York money markets, General Electric commercial paper, CFPI Investment Agreement, and INVEST. These investments are 36.8%, 10.1%, 22.0%, 12.5%, and 16.1%, respectively, of the Authority's total investments at December 31, 2007.

## 10. NET ASSETS (DEFICIT)

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

| | December 31, | |
|---|---|---|
| | 2007 | 2006 |
| Invested in capital assets, net of related liabilities: | | |
| Net property, plant, and equipment in service | $ 443,021 | $ 436,117 |
| Debt as disclosed in footnote | (567,828) | (578,706) |
| Deferred amount on refunding | 20,543 | 14,784 |
| Bonds/loans issuance costs and discounts, net | (85) | 884 |
| Accounts payable for capital items | (3,320) | (2,518) |
| Funded debt from restricted assets: | | |
| Unspent debt proceeds: | | |
| Capital projects | 27,511 | 39,395 |
| Debt service and reserve funds | 15,199 | 20,969 |
| | (64,959) | (69,075) |
| Restricted for capital activity and debt service: | | |
| Restricted cash and cash equivalents | 5,707 | 9,320 |
| Restricted investments | 45,502 | 58,973 |
| Restricted receivables | 338 | 472 |
| Liabilities payable from restricted assets: | | |
| Unspent debt proceeds: | | |
| Capital projects | (27,511) | (39,395) |
| Debt service and reserve funds | (15,199) | (20,969) |
| | 8,837 | 8,401 |
| Unrestricted | 21,519 | 22,742 |
| Total Net Assets (Deficit) | $ (34,603) | $ (37,932) |

## 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, 2007 are as follows:

| | |
|---|---|
| 2008 | $ 593 |
| 2009 | 593 |
| 2010 | 593 |
| 2011 | 593 |
| 2012 | 599 |
| 2013-2017 | 3,091 |
| 2018-2022 | 3,313 |
| 2023-2027 | 3,250 |
| | $ 12,625 |

The total annual rental for office space was approximately $421 for 2007 and $330 for 2006. 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, 2007, $61 million of the program is complete and $68 million is under active contract.

In addition to the matters discussed in Note 14, 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 2007 and 2006, the Authority paid $0 from this fund for claims, and there is $500 and $1,000 accrued as of December 31, 2007 and 2006, respectively.

The Authority plans to issue Series 2008 refunding bonds to current refund the Series 1998 A and Series 1998 C bonds sometime prior to July 31, 2008.

## 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, 2007

| | | | | Cash Equivalents | Investments | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Unrealized Gain/(Loss) | Accrued Interest Receivable | Tri-Party Repurchase Agreement | Commonwealth of PA Revenue Bonds | General Electric Capt. Corp (2) | Trinity Plus Funding (1) | CFPI Inv Agreement (3) |
| Capital project and construction funds: | | | | | | | | |
| 2002 Capital Project Fund | $ 1,272 | $ - | $ 4 | $ 1,268 | $ - | $ - | $ - | $ - |
| 2005 Capital Project Fund | 19,066 | - | 227 | 36 | - | - | 18,803 | - |
| 2007 Capital Project Fund | 7,173 | - | 55 | 700 | - | - | - | 6,418 |
| | 27,511 | - | 286 | 2,004 | - | - | 18,803 | 6,418 |
| Debt service funds: | | | | | | | | |
| 1993 Debt Service Fund | 1,072 | 6 | 2 | - | - | 1,064 | - | - |
| 1998 C Debt Service Fund | 1,689 | 13 | 2 | - | - | 1,674 | - | - |
| 1998 A Debt Service Fund | 1,580 | 9 | 2 | 4 | - | 1,565 | - | - |
| 2002 Debt Service Fund | 2,522 | - | 8 | 2,514 | - | - | - | - |
| 2003 Debt Service Fund | 6,278 | 42 | 9 | 12 | - | 6,215 | - | - |
| 2005 Debt Service Fund | 992 | - | 3 | 989 | - | - | - | - |
| 2007 A Debt Service Fund | 756 | - | 1 | 194 | - | 561 | - | - |
| 2007 B-1 Debt Service Fund | 155 | - | 1 | 154 | - | - | - | - |
| 2007 B-2 Debt Service Fund | 155 | - | 1 | 154 | - | - | - | - |
| | 15,199 | 70 | 29 | 4,021 | - | 11,079 | - | - |
| 1993 Operating Reserve Fund | 8,269 | - | 21 | 2 | 8,246 | - | - | - |
| Self-Insured Escrow Fund | 568 | - | 2 | 566 | - | - | - | - |
| | $ 51,547 | $ 70 | $ 338 | $ 6,593 | $ 8,246 | $ 11,079 | $ 18,803 | $ 6,418 |

(1) Trinity Plus Funding GIC, 4.01%

(2) As per Debt Service Forward Delivery Agreement with Bank of New York and Sun Trust

(3) As per Investment Agreement between Depository Agent (BofNYT) and Citigroup Financial Products Inc. dated June 7, 2007, GIC 4.937%, expires 12/1/09.

# PITTSBURGH WATER AND SEWER AUTHORITY

## SCHEDULE OF RESTRICTED ASSETS ACTIVITY - SCHEDULE II

*(Dollars expressed in thousands)*

YEAR ENDED DECEMBER 31, 2007

| | Series 1993 Bonds | | Series 1998 Bonds | | Series 2002 Bonds | | | Series 2003 Bonds | Series 2005 Bonds | | Series 2007 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 | Clearing Fund | 2007 CPF/Project Fund | 2007A Debt Service Fund | 2007 B1 Debt Service Fund | 2007 B2 Debt Service Fund | Self-Insured Escrow Account | Total |
| **Increases:** | | | | | | | | | | | | | | | | | |
| Interest | $ 34 | $ 409 | $ 52 | $ 3 | $ 138 | $ 105 | $ 157 | $ 395 | $ 1,925 | $ 60 | $ 1 | $ 121 | $ 74 | $ 3 | $ 4 | $ 27 | $ 3,508 |
| New Refunding Bond issue | - | - | - | - | - | - | - | - | - | - | 32 | - | - | - | - | - | 32 |
| **Decreases:** | | | | | | | | | | | | | | | | | |
| Capital projects | - | - | - | - | 2,550 | - | - | - | 18,362 | - | - | - | - | - | - | - | 20,912 |
| Interest | 3,192 | - | 4,704 | 4,979 | - | - | - | 4,557 | - | 1,139 | - | - | 977 | 2,630 | 2,596 | - | 24,774 |
| Bond principal/refunding escrow | - | - | - | - | - | - | - | 14,100 | - | - | - | - | 2,405 | - | - | - | 16,505 |
| Total decreases | 3,192 | - | 4,704 | 4,979 | 2,550 | - | - | 18,657 | 18,362 | 1,139 | - | - | 3,382 | 2,630 | 2,596 | - | 62,191 |
| **Interfund Transfers:** | | | | | | | | | | | | | | | | | |
| Nontrusteed accounts | 3,160 | - | 4,657 | 4,981 | - | 1,216 | - | 18,295 | - | - | - | - | 4,065 | 2,782 | 2,747 | - | 41,903 |
| 2002 Debt Service Fund | - | - | - | - | (208) | 592 | (7,873) | - | - | - | - | 7,019 | - | - | - | - | (470) |
| 2007 Clearing Fund | - | - | - | - | - | - | - | - | - | - | (33) | 33 | - | - | - | - | - |
| Total interfund transfers | 3,160 | - | 4,657 | 4,981 | (208) | 1,808 | (7,873) | 18,295 | - | - | (33) | 7,052 | 4,065 | 2,782 | 2,747 | - | 41,433 |
| Net activity | 2 | 409 | 5 | 5 | (2,620) | 1,913 | (7,716) | 33 | (16,437) | (1,079) | - | 7,173 | 757 | 155 | 155 | 27 | (17,218) |
| **Balance:** | | | | | | | | | | | | | | | | | |
| Beginning of year | 1,069 | 7,860 | 1,575 | 1,684 | 3,892 | 609 | 7,716 | 6,245 | 35,503 | 2,071 | - | - | - | - | - | 541 | 68,765 |
| End of year | $ 1,071 | $ 8,269 | $ 1,580 | $ 1,689 | $ 1,272 | $ 2,522 | $ - | $ 6,278 | $19,066 | $ 992 | $ - | $ 7,173 | $ 757 | $ 155 | $ 155 | $ 568 | $ 51,547 |

# APPENDIX D

## CERTAIN INFORMATION REGARDING THE CITY OF PITTSBURGH

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## 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 Committee on Hearings (held by the President of Council),

Members of Council

DANIEL DEASY – Mr. Deasy was elected to Pittsburgh City Council in a special election on May 17, 2005. Councilman Deasy serves as the Chairperson for the Committee on Intergovernmental Affairs

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 Urban Recreation.

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 is available at http://www.city.pittsburgh.pa.us/council/assets/ACT_47_Recovery_Plan_Final_Filing_June_11_FINAL.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 Municipal Services Tax, payable by residents and nonresident employees at $52 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 reduce the City's business privilege tax from 6 mills to 2 mills and to eliminate the 2 mill mercantile tax.

**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 2007, Real Estate Taxes accounted for approximately 28.22% of the receipts of the General Fund, followed by Earned Income Tax at 12.64%, Business Privilege Tax at 2.0% and all other taxes at 16.46%. The remaining 40.69% 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 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 |
|---|---|---|---|---|---|---|
| 1997 | 184.5 | 32.00 | 58.569 | 59.700 | 25.500 | 143.769 |
| 1998 | 184.5 | 32.00 | 58.569 | 59.700 | 25.500 | 143.769 |
| 1999 | 184.5 | 32.00 | 58.569 | 59.700 | 25.500 | 143.769 |
| 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 |

(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 1996 to 2005.

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | $ 2,036489 | 184.50 | 32.00 | $118,952 | $115,898 | $109,720 | $110,276 | 92.7% | 95.1% | 100.5% | $ 8,773 | $ 12,130 | 138.3% |
| 1997 | 2,047,441 | 184.50 | 32.00 | 119,741 | 111,066 | 109,180 | 113,251 | 94.6 | 101.9 | 103.7 | 13,675 | 13,018 | 95.2 |
| 1998 | 2,085,013 | 184.50 | 32.00 | 121,674 | 105,822 | 110,715 | 112,562 | 92.5 | 99.3 | 101.6 | 5,521 | 6,644 | 120.3 |
| 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 | 13,403,818 | 10.80 | 10.80 | 144,761 | 126,471 | 123,998 | 127,612 | 88.2 | 100.9 | 102.9 | 2,741 | 3,121 | 113.9 |

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, 2005.

**TABLE 3**
**CITY OF PITTSBURGH**
**TEN LARGEST REAL ESTATE TAXPAYERS**
**DECEMBER 31, 2007**

| 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 | 3.32% |
| 2) Market Associates Limited Partnership (PPG) | 14,590,400 | 170,409,600 | 185,000,000 | 1.38% |
| 3) PNC Corporation | 18,014,800 | 161,479,000 | 179,493,800 | 1.34% |
| 4) Buncher Company | 31,398,900 | 146,689,270 | 178,088,170 | 1.33% |
| 5) 600 GS Porpoerties LP | 10,000,000 | 150,000,000 | 160,000,00 | 1.195% |
| 6) Oxford Development | 4,186,800 | 107,813,200 | 112,000,000 | 0.84% |
| 7) Grant Liberty Development Group | 9,020,600 | 100,979,400 | 110,000,000 | 0.82% |
| 8) Hertz Gateway Center LP.. | 13,603,700 | 32,096,300 | 45,700,000 | 0.34% |
| 9) Liberty Avenue Holding LLC | 3,500,000 | 41,710,000 | 45,210,000 | 0.34% |
| 10) Harrah's Forest City Associates | 15,014,500 | 22,1656,900 | 37,180,400 | 0.28% |

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). Legal challenges to the current system of assessment are ongoing and no conclusion can be reached at this time as to the likelihood that such challenges will prevail. 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 in a significant increase in refunds issued in 2007. City real estate tax refunds for 2005, 2006 and 2007 were approximately $3.6 million, $3.0 million and $4.3 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 1.20% 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 40% of the consideration paid for each parking transaction is levied on the patrons of non-residential parking places in the City. There is a planned reduction of this tax to 37.5% in 2009 and 35% 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.

**Emergency and Municipal 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.

**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 2006 and 2007, the City's share of the RAD Tax proceeds, which are classified as General Fund revenues, amounted to $12,762,348 and $12,616,535, 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 $40,304,000 million in 2006 and $40,637,257 million in 2007.

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# APPENDIX E

# CONSULTING ENGINEER'S REPORT

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Pittsburgh Water and Sewer Authority
Allegheny County, Pennsylvania

# Engineer's Report in Support of the 2008 Capital Improvements Bond Issue

March 2008

Prepared by: Charles Jordan, P.E.

Approved by: James H. Reynolds, Ph.D., P.E.

Project No.: 08-3548-RET-07

CHESTER ENGINEERS

260 Airside Drive - Moon Township, PA 15108
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# ENGINEER'S REPORT IN SUPPORT OF THE 2008 CAPITAL IMPROVEMENTS BOND ISSUE

## *EXECUTIVE SUMMARY*

The purpose of this report is to provide a brief description of the history of the Pittsburgh Water and Sewer Authority, a general description of the Authority's facilities, an overview of the financial condition of the Authority, and a description of the projects to be financed through the proceeds of the 2008 Capital Improvements Bond Issue.

The capital improvements that will be funded under the 2008 Capital Improvements Bond Issue are divided into the following major tasks:

A. Water System Improvements
   1. Distribution System Improvements
   2. Pumping and Storage System Improvements
   3. Water Treatment Plant Improvements
B. Sewer System Improvements
   1. Combined Sewer System Improvements
   2. Sewage Pump Station Improvements
C. City/URA/Port Authority Capital Projects
D. Engineering
E. Tools and Equipment
F. Contingency

Our opinion of probable project costs for the proposed capital improvements under the 2008 Capital Improvements Bond Issue is $127,882,000. Approximately 78% or $100,042,000 of this capital improvement program will be funded through the issuance of the 2008 Bonds and approximately 22% of this capital improvement program will be funded through the future proposed acquisition of PENNVEST funds. It is anticipated that this capital improvements program will be completed within five years from the date of program implementation.

The Authority has routinely adopted user fees for the water and sewer systems based on a review of previous years' revenues, expenses, and cash balance. We have performed an analysis that indicates that the Authority has sufficient operating revenue and reserves to balance the adopted budget for 2008. It is anticipated that the structure of the 2008 Bond Issue will not increase the annual Debt Service payment for 2008 or the Debt Service

Coverage Factor. Therefore, current user fees appear to be adequate to provide sufficient operating revenues to address operating costs, Debt Service costs and Debt Service Reserve requirements.

# ENGINEER'S REPORT IN SUPPORT OF THE 2008 CAPITAL IMPROVEMENTS BOND ISSUE

## *PURPOSE*

The purpose of this report is to provide a brief description of the history of the Pittsburgh Water and Sewer Authority (Authority), a general description of the existing Authority's facilities, an overview of the financial condition of the Authority, and a description of the projects to be financed through the proceeds of the 2008 Capital Improvements Bond Issue.

## *HISTORY OF THE AUTHORITY*

Operations of The Pittsburgh Water and Sewer Authority through December 31, 1994 were carried out in accordance with the Lease and Management Agreement between the Authority and the City of Pittsburgh, dated March 29, 1984. Pursuant to this agreement the City provided services necessary to operate the water and sewer systems to the Authority with the Authority reimbursing the City for all expenses actually incurred and expended by the City.

The Capital Lease Agreement and Cooperation Agreement between the Authority and City, as authorized in Resolution No. 47 of 1995 terminated the relationship between the City and the Authority with respect to operation and maintenance of the water and sewer systems. The Cooperation Agreement provides for the City to render certain services to the Authority as defined in the agreement. The Agreement also provides for the basis of payment for such services to be rendered by the City. As of January 1, 1995 all positions in the City Water Department and certain positions in the Water and Sewer Division of the Department of Engineering and Construction were eliminated from the City of Pittsburgh budget and similar positions were created and filled by the Authority.

## *GENERAL DESCRIPTION OF THE AUTHORITY SYSTEM*

### *The Water System*

The water supply and distribution system consists of a 117 million gallon per day (MGD) surface water treatment plant, a 20 mgd membrane filter plant at the Highland Park Reservoir, 990 miles of water mains and service lines, 25,847 valves, 7,180 fire hydrants, 12 pumping stations, 5 reservoirs, and 11 water storage tanks. The total storage capacity of the reservoirs and tanks is approximately 455 million gallons, the equivalent of about 6 days of average water consumption.

The sole source of raw water is the Allegheny River. The Pennsylvania Department of Environmental Protection has issued a Water Allocation Permit to the Authority which allows for the withdrawal of up to 100 MGD from the river. In 2007, average water withdrawal (on a monthly basis) was approximately 76.2 MGD and maximum water withdrawal (on a monthly average basis) was approximately 92.1 MGD.

The water system currently provides potable water and water for fire protection to approximately 83,000 residential, commercial, industrial, and public customers within the limits of the City of Pittsburgh. The Authority also provides water to several adjacent municipalities. Approximately 22,000 customers in the southern and western sections of the City are served by either Pennsylvania American Water Co. or the West View Water Authority, and a small number of customers in the eastern end of the City are served by the Wilkinsburg-Penn Joint Water Authority.

### *The Sewer System*

The sewage 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 limits. The total drainage area serviced 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 is an extensive network of approximately 1,230 miles of sewer lines and 4 sewage pump stations. The average age of sewers within the City is 60 to 70 years, with some portions nearing 150 years of age.

The collector sewer system carries wastewater to Allegheny County Sanitary Authority (ALCOSAN) interceptors for conveyance to the ALCOSAN Sewage Treatment Plant along the Ohio River.

The sewer system was 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 interceptor system. The sewer system is in satisfactory operating condition and has adequate capacity for dry weather flows; however, wet weather events have caused the sewer system to overflow, bypass, and flood on occasion.

## *PROPOSED CAPITAL IMPROVEMENTS*

The primary objectives of the Capital Improvements Program are to ensure uninterrupted service to the Authority's consumers and to enhance the systems' capabilities. The Program was designed to maintain a satisfactory level of service to the water and sewer systems users, to improve operating efficiencies, and to address future requirements. The current program was initiated in 1984 and has resulted in major improvements, additions and rehabilitation to many components of the water and sewer systems.

In order to ensure that a continued supply of safe drinking water and adequate sewer service are provided to the Authority's current and future users, and also to address future demands on both the water and sewer systems, it has been determined that additional funding is required. In determining future funding requirements, the following items were considered:

- Necessary improvements that are not currently funded under the Capital Improvements Program.
- Rehabilitation and/or replacement of existing facilities that have exceeded their useful lives. A significant portion of the Authority's facilities, including the water system pump stations, water storage facilities, and the bulk of the water distribution system is over 70 years old. The majority of the sewer system is at least as old, and in some areas was constructed nearly 150 years ago. Due to the age of these systems, an annual program to rehabilitate and/or replace a portion of such facilities has been established and must be maintained. In addition, changing development conditions within various service areas are increasing water demands and causing increased sewage flows that stress distribution and collection systems' capacities.
- Improvements required for sale of water to communities within the region. The Authority's water treatment plant is capable of providing significantly more water than currently being used by existing consumers. This available water can be sold to regional communities to increase Authority revenues. To realize this potential revenue, the Authority may be required to construct water lines or improve existing pumping facilities to serve some of the communities.
- Water and sewer system improvements required to serve planned City Capital Improvement Projects, Sports and Exhibition Authority (S&EA) Projects, and Urban Redevelopment Authority (URA) planned redevelopment projects. Under the City of Pittsburgh Capital Improvement Program, water and sewer facilities within street rights-of-way must be replaced when major street reconstruction is undertaken. The URA has planned a number of commercial and residential redevelopment projects in various areas of the City. Improvements to the Authority's water and sewer systems are typically required to serve these redevelopment projects.
- Improvements required under current and anticipated safe drinking water standards. Current and anticipated future drinking water standards, promulgated through regulations under the Pennsylvania Safe Drinking Water Act (35 P.S. 721.4); will require that process modifications and improvements be made at the Authority's water treatment plant.

- Implementation of Combined Sewer Overflow Controls as required by the U.S. Environmental Protection Agency (EPA), including sewer system investigation and mapping. Capital improvements are expected to be required for both the sewage collection and sewage conveyance systems. The EPA has adopted regulations regarding overflows from combined sewers during storm events. These combined sewer overflows (CSOs) contain pollutants that are present in domestic and industrial wastewaters, as well as those in the urban storm water runoff that enters the combined Sewer System. The EPA regulations require owners of any sewer system having CSOs to acquire National Pollutant Discharge Elimination System (NPDES) discharge permits for each site. Essentially, all of the Authority sewers are combined sewers and there are 194 permitted CSOs within the system. An evaluation of the most efficient and cost effective method of eliminating or controlling the CSOs is being completed at this time. The Authority is required, over the next several years, to expend significant funds to inventory and monitor combined sewer overflows and to evaluate the impact on receiving streams. In addition to routine investigations of the sewer collection and conveyance system, the City of Pittsburgh and the Authority have entered into a Consent Order and Agreement (the Order) with the Pennsylvania Department of Environmental Protection (DEP) and Allegheny County Health Department (ACHD). The Order requires the systematic investigation, mapping, and repair of the sewer collection system.

Based upon these noted factors and conditions and evaluations of the existing Water and Sewer Systems, a proposed Capital Expenditure Plan was developed that addresses the identified and anticipated Capital Improvement needs of the Authority for the next five years (from 2008 through 2012). Descriptions of several projects that have been identified for funding under this Program are included in Appendix B to this report.

This report addresses the proposed 2008 Capital Improvements Bond Issue scheduled to be implemented during the period from mid-2008 through mid-2012 totaling $100,042,000. Additional funding for the Capital Improvement Plan includes approximately $7,000,000 remaining from the existing 2007 Refinancing Bond Issue and other prior capital funding sources.

## *PROJECT COST SUMMARY*

An opinion of probable project costs for the proposed capital improvements under the 2008 Capital Improvements Bond Issue are summarized within Appendix A. Detailed Project Descriptions are included in Appendix B. The estimated bond drawdown schedule is included in Appendix C.

The project costs in Appendix A include construction, design engineering, general project services, right-of-way acquisition, legal and administrative costs, as well as project contingency.

Appendix A provides estimated project costs for each major task, and each major task has been broken into sub-tasks for further clarification. It is anticipated that the proposed capital improvement program will be financed through two funding sources; construction fund proceeds form the Bond Issue and funding through the Pennsylvania Infrastructure Investment Program (PENNVEST). The anticipated source of funding and the amount of funding for each task and sub-task is delineated in Appendix A.

## *PROJECT SCHEDULE*

It is anticipated that all of the capital improvements projects funded within the 2008 Capital Improvements Bond Issue will be completed within 5 years from implementation.

## *REVENUE AND EXPENSE PROJECTIONS*

A projection of operating revenues was made based on a review of historical revenues and anticipated revenues under the current rate schedule.

The projection of operating expenses was made based on a review of the historical expenses and the anticipated level of operations during the projection period (2008 through 2012). The forecasted operating expenses for the Program period (2008 through 2012) were based on using 2006 operating results, budgeted figures for 2007 and the 2008 Budget adopted at the Authority Board's meeting of December 20, 2007.

Projections of revenues and expenses are shown in Table 1.

At the present time, the Authority carries forward unrestricted operating cash into the next fiscal year. Current Authority practices include maintaining a minimum unrestricted operating cash balance of $20 million. Based upon revenue and expense projections through 2012, the Authority will be able to maintain the minimum unrestricted operating cash balance. Therefore, a rate increase should not be required unless the Authority incurs additional debt.

## *PROPOSED BOND ISSUE*

### *Series 2008 First Lien Water and Sewer Revenue Bonds (the "2005 Bonds")*

The Pittsburgh Water and Sewer Authority propose to issue Series 2008 Water and Sewer Revenue Bonds on or about June 1, 2008 in order to provide approximately $100,042,000 for the Capital Improvement Program described herein. These bonds are expected to carry interest rates between approximately 3.82% and 5.25% and are expected to mature between the years 2008 and 2040.

**Table 1**
**2006 Actual, 2007 Actual, and 2008 Budgeted Revenues and Expenses**

| | 2006 Actual | 2007 Actual | 2008 Budgeted | 2009 Projected | 2010 Projected | 2011 Projected | 2012 Projected |
|---|---|---|---|---|---|---|---|
| **Operating Revenues** | | | | | | | |
| Collections | $ 118,760,071 | $ 124,606,443 | $ 136,250,000 | $ 137,612,500 | $ 138,988,625 | $ 140,378,511 | $ 141,782,296 |
| Capital Reimbursement for Engineering | 1,158,458 | 1,430,186 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Tap Fee Collections | 1,423,875 | 1,312,070 | 1,200,000 | 1,212,000 | 1,224,120 | 1,236,361 | 1,248,725 |
| Other Collections | 538,993 | 1,366,523 | 758,000 | 758,000 | 758,000 | 758,000 | 758,000 |
| Subtotal | 121,881,397 | 128,715,222 | 139,208,000 | 140,582,500 | 141,970,745 | 143,372,872 | 144,789,021 |
| Less Customer Refunds | (1,412,390) | (2,002,776) | (1,000,000) | (1,010,000) | (1,020,100) | (1,030,301) | (1,040,604) |
| Net Collections | 120,469,007 | 126,712,446 | 138,208,000 | 139,572,500 | 140,950,645 | 142,342,571 | 143,748,417 |
| Interest Earnings | 4,181,127 | 4,006,485 | 1,980,500 | 2,000,305 | 2,020,308 | 2,040,511 | 2,060,916 |
| Reimbursement for Capital Projects | | 615,670 | - | - | - | - | - |
| Pennvest Loan Proceeds | 1,724,813 | 269,066 | - | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| **Total Operating Revenues** | **$ 126,374,947** | **$ 131,603,667** | **$ 140,188,500** | **$ 146,572,805** | **$ 147,970,953** | **$ 149,383,083** | **$ 150,809,333** |
| **Operating Expenses** | | | | | | | |
| Direct Operating | 33,444,008 | 37,341,395 | 42,293,954 | 42,716,894 | 43,144,062 | 43,575,503 | 44,011,258 |
| Cooperation Agreement | 7,150,000 | 9,650,000 | 9,650,000 | 9,650,000 | 9,650,000 | 9,650,000 | 9,650,000 |
| Other Operating | 35,925,906 | 38,398,746 | 49,450,000 | 49,944,500 | 50,443,945 | 50,948,384 | 51,457,868 |
| Capital Expenditures | 1,206,414 | - | - | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| Debt Service | 42,977,426 | 42,480,981 | 36,624,750 | 39,348,469 | 40,706,831 | 40,860,000 | 41,234,097 |
| **Total Operating Expenses** | **$ 120,703,754** | **$ 127,871,122** | **$ 138,018,704** | **$ 146,659,863** | **$ 148,944,838** | **$ 150,033,888** | **$ 151,353,223** |
| **Unrestricted Operating Cash (Beginning)** | **$ 26,235,144** | **$ 31,906,337** | **$ 35,023,212** | **$ 35,149,966** | **$ 35,062,908** | **$ 34,089,023** | **$ 33,438,218** |
| **Unrestricted Operating Cash (Ending)** | **$ 31,906,337** | **$ 35,023,212** | **$ 35,149,966** | **$ 35,062,908** | **$ 34,089,023** | **$ 33,438,218** | **$ 32,894,328** |

The Bonds will be issued under a Trust Indenture dated as of October 15, 1993, 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 and a Fifth Supplemental Indenture dated as of June 1, 2005 (collectively, the "Indenture" or "First Lien Indenture") between the Authority and J.P. Morgan Trust Company, as Trustee. The anticipated sources and uses of funds for the 2008 Bonds are outlined in the Official Statement.

## *TOTAL DEBT SERVICE REQUIREMENTS*

In addition to the 2008 Bonds, the Authority will also have outstanding under the Indenture 2007 Bonds, 2003 Bonds, 1998 Series A Bonds, 1998 Series B Capital Appreciation Bonds and 1993 Series A Bonds. The Authority also has outstanding under the 1995 Subordinate Trust Indenture 1998 Series C Bonds and loans from the Pennsylvania Infrastructure Investment Authority ("PENNVEST").

Table 2 outlines the existing debt service payments of the Authority's outstanding first lien and subordinate bond issues (excluding PENNVEST obligations).

Table 3 presents a forecast of future annual debt service payments, including existing bonded debt, existing PENNVEST debt, and projected refunding cash flows and capitalized interest.

## *DEBT SERVICE COVERAGE FACTOR*

The Authority's Trust Indenture provides for the fixing and charging by the Authority of rates, rents and charges for water and sewer service in accordance with the following Authority Rate Covenant. Under the Indenture, the Authority has covenanted with the owners of the bonds to adopt rates complying with either of the following in each Fiscal Year:

### *Method 1*

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;

## Table 2
## Existing Bonded Debt Service Payments

| Year | 1993 A | 1998 A | 1998 B | 1998 C* | 2003 | 2007 | Total |
|---|---|---|---|---|---|---|---|
| 2008 | $3,191,825 | $2,351,809 | $ 0 | $2,514,663 | 18,657,494 | $7,034,874 | $33,750,664 |
| 2009 | 3,191,825 | 0 | 0 | 0 | 18,655,231 | 10,532,674 | 32,379,730 |
| 2010 | 3,191,825 | 0 | 0 | 0 | 18,656,081 | 10,535,074 | 32,382,980 |
| 2011 | 18,541,825 | 0 | 0 | 0 | 3,307,831 | 10,536,274 | 32,385,930 |
| 2012 | 18,539,075 | 0 | 0 | 0 | 3,304,163 | 10,531,074 | 32,374,311 |

*Subordinated debt.

## Table 3
## Forecasted Debt Service Payments

| Year | Debt Service Existing Bond Issues | Debt Service PENNVEST Bonds | Estimated Debt Service 2008 Original Bond Delivery | Estimated Debt Service 2008 Bonds | Estimated Refunding Cash Flow, Capitalized Interest and SWAP Adjust. | Total |
|---|---|---|---|---|---|---|
| 2008 | $ 33,750,664 | $ 954,046 | $3,994,674 | $ 4,756,127 | $ (6,830.761) | $36,624,750 |
| 2009 | 32,379,730 | 960,270 | 8,010,347 | 19,024,508 | (21,026,386) | 39,348,469 |
| 2010 | 32,382,980 | 963,382 | 8,010,347 | 19,024,508 | (19,674,386) | 40,706,831 |
| 2011 | 32,385,930 | 963,382 | 8,010,347 | 19,024,508 | (19,524,167) | 40,860,000 |
| 2012 | 32,374,311 | 963,382 | 8,010,347 | 19,024,508 | (19,135,451) | 41,237,097 |

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

b. An amount equal to 120 percent of the Debt Service Requirements with respect to the bonds authenticated and delivered under the Indenture during the then current Fiscal Year of the Authority.

or

***Method 2***

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, 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 Fund 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 Fund and may be used to pay debt service on the Bonds or applied directly to payment of debt service of Bonds) 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 percent of the Debt Service Requirements with respect to the bonds authenticated and delivered under the Indenture during the then current Fiscal year of the Authority.

The Rate Covenant calculations included herein are based upon Method 1 above.

***Rate Covenant Calculations***

Based on the forecasts of 1) Water Sales, 2) Interest Earnings, 3) Operating Expenses, and 4) Debt Service Requirements presented in the proceeding sections of this report, the Coverage Factors for the years 2008 through 2012 are calculated as shown in Table 4.

The Debt Service Coverage Factor of 1.20 (minimum) required by Method 1 of the Authority Rate Covenant is satisfied in each year of the Report period (2008 through 2012).

## *OUTSTANDING LITIGATION*

To the best of our knowledge, there is no outstanding litigation at this time involving the Pittsburgh Water and Sewer Authority.

**Table 4**
**Debt Service Coverage Factor**

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Unrestricted Cash at Beginning of Year | 35,023,212 | 35,149,966 | 35,062,908 | 34,089,023 | 33,438,218 |
| **Revenues** | | | | | |
| Collections | 136,250,000 | 137,612,500 | 138,988,625 | 140,378,511 | 141,782,296 |
| Tap Fee Collections | 1,200,000 | 1,212,000 | 1,224,120 | 1,236,361 | 1,248,725 |
| Other Collections | 758,000 | 758,000 | 758,000 | 758,000 | 758,000 |
| Subtotal Collections | 138,208,000 | 139,582,500 | 140,970,745 | 142,372,872 | 143,789,021 |
| Less Customer Refunds | -1,000,000 | -1,010,000 | -1,020,100 | -1,030,301 | 1,040,604 |
| Net Collections | 137,208,000 | 138,572,500 | 139,950,645 | 141,342,571 | 142,748,417 |
| Interest Earnings | 1,980,500 | 2,000,305 | 2,020,308 | 2,040,511 | 2,060,916 |
| Capital Reimb for Eng | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Reimbursement for Capital Projects | - | - | - | - | - |
| Pennvest Loan Proceeds | - | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| Total Operating Revenues | 140,188,500 | 146,572,805 | 147,970,953 | 149,383,083 | 150,809,333 |
| Total Funds Available | 175,211,712 | 181,722,771 | 183,033,862 | 183,472,106 | 184,247,551 |
| **Operating Expenses** | 101,393,954 | 107,311,394 | 108,238,007 | 109,173,888 | 110,119,126 |
| **Funds Available for Debt Service** | 73,817,758 | 74,411,377 | 74,795,854 | 74,298,218 | 74,128,425 |
| Debt Service Requirements | 36,624,750 | 39,348,469 | 40,706,831 | 40,860,000 | 41,234,097 |
| **Debt Service Coverage Factor** | 2.02 | 1.89 | 1.84 | 1.82 | 1.80 |
| Required Coverage | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
| Cash at End of Year | 35,149,966 | 35,062,908 | 34,089,023 | 33,438,218 | 32,894,328 |

# *APPENDIX A*

# *PROJECT PRIORITIES AND PROBABLE COSTS*

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM**
**2008 SERIES BOND ISSUE AND PENNVEST**

| | | TOTAL | | 2008 BOND | | PENNVEST |
|---|---|---|---|---|---|---|
| A1 WATER - WATER DISTRIBUTION | | 19,300,000.00 | | 9,300,000.00 | | 10,000,000.00 |
| A2 WATER - PUMPING AND STORAGE | | 7,800,000.00 | | 7,800,000.00 | | - |
| A3 WATER - TREATMENT PLANT | | 48,287,000.00 | | 36,147,000.00 | | 12,140,000.00 |
| **TOTAL WATER SYSTEM** | **$** | **75,387,000.00** | **$** | **53,247,000.00** | **$** | **22,140,000.00** |
| | | | | | | |
| B2 SEWER - COMBINED SEWER | | 12,445,000.00 | | 8,445,000.00 | | 4,000,000.00 |
| B4 SEWER - PUMP STATION | | 5,060,000.00 | | 3,360,000.00 | | 1,700,000.00 |
| **TOTAL SEWER SYSTEM** | **$** | **17,505,000.00** | **$** | **11,805,000.00** | **$** | **5,700,000.00** |
| | | | | | | |
| **C1 CITY/URA/SEA/PORT AUTHORITY** | **$** | **18,225,000.00** | **$** | **18,225,000.00** | **$** | **-** |
| | | | | | | |
| **D1 ENGINEERING** | **$** | **9,215,000.00** | **$** | **9,215,000.00** | **$** | **-** |
| | | | | | | |
| **E1 TOOLS AND EQUIPMENT** | **$** | **5,550,000.00** | **$** | **5,550,000.00** | **$** | **-** |
| | | | | | | |
| **Z1 CONTINGENCY** | **$** | **2,000,000.00** | **$** | **2,000,000.00** | **$** | **-** |
| | | | | | | |
| **TOTAL** | **$** | **127,882,000.00** | **$** | **100,042,000.00** | **$** | **27,840,000.00** |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**A1 WATER - WATER DISTRIBUTION**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Water Valve and Hydrant Replacement | - | 500,000 | 500,000 | 500,000 | - | **1,500,000** | Includes Design, CM & Constr. |
| Small Meter Replacement Program | - | 1,000,000 | 2,000,000 | 2,000,000 | - | **5,000,000** | |
| Purchase Fire Hydrants | 50,000 | 50,000 | 50,000 | 50,000 | - | **200,000** | |
| Automated Meter Reader Program | 100,000 | 100,000 | 100,000 | 100,000 | - | **400,000** | |
| Water Line Re-Lays | - | 1,000,000 | - | - | - | **1,000,000** | |
| Ligonier Street | - | - | - | - | - | **-** | |
| Lothrop Street | - | - | - | - | - | **-** | |
| Harcum Way | - | - | - | - | - | **-** | |
| Langtry Street | - | - | - | - | - | **-** | |
| Buena Vista Street | - | - | - | - | - | **-** | |
| Bates Street | - | - | - | - | - | **-** | |
| Dithridge Street | - | - | - | - | - | **-** | |
| Negley Avenue | - | - | - | - | - | **-** | |
| 60" Transmission Main Improvements-PennDOT | - | - | - | - | - | **-** | Includes Design, CM & Constr. |
| Fort Duquesne Boulevard | - | - | - | - | - | **-** | |
| Valve Inspections and Mapping | 200,000 | 500,000 | 500,000 | - | - | **1,200,000** | |
| | | | | | | | |
| **Total** | **350,000** | **3,150,000** | **3,150,000** | **2,650,000** | **-** | **9,300,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**A2 WATER - PUMPING AND STORAGE**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Howard and Lincoln Pump Station | 100,000 | 500,000 | 300,000 | - | - | **900,000** | Includes Design, CM & Constr. |
| Water System Modeling Support | 29,167 | 50,000 | 50,000 | 20,833 | - | **150,000** | |
| Water Tank Painting and Improvements | - | 2,000,000 | 1,000,000 | - | - | **3,000,000** | Includes Design, CM & Constr. |
| Highland No. 2 Cover | - | 3,000,000 | - | - | - | **3,000,000** | Includes Design, CM & Constr. |
| Herron Hill Pump Station - Replacement of Rising Mains | 250,000 | 500,000 | - | - | - | **750,000** | |
| | | | | | | | |
| **Total** | **379,167** | **6,050,000** | **1,350,000** | **20,833** | **-** | **7,800,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**A3 WATER - TREATMENT PLANT**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Bruecken Pump Station Standby Power | - | 2,400,000 | 2,325,000 | 3,040,000 | - | **7,765,000** | Includes CM and Constr.. Design Funded by 2005 BI |
| Filter and Clarifier Improvements | - | 4,495,944 | 7,707,333 | 7,707,333 | 3,211,389 | **23,122,000** | Includes CM and Constr.. Design Funded by 2005 BI |
| Clarifier Improvements | - | - | - | - | - | **-** | |
| Filter Backwash Equalization Tank Construction | - | - | - | - | - | **-** | |
| Filter Backwash Equalization Tank Construction - CM And ENG | | 256,667 | 403,333 | - | - | **660,000** | Design Funded by 2005 BI |
| Highland No. 1 Reservoir - Membrane Expansion | | 1,100,000 | - | - | - | **1,100,000** | |
| Clearwell Improvements | - | - | - | - | - | **-** | |
| Design | - | - | - | - | - | **-** | |
| Construction | - | - | - | - | - | **-** | |
| Construction Management | - | - | - | - | - | **-** | |
| SCADA System Improvements | - | 1,000,000 | 1,000,000 | - | - | **2,000,000** | |
| Switchgear Replacement | - | 150,000 | 1,350,000 | - | - | **1,500,000** | Includes Design, CM & Constr. |
| Ross Pump Station - Standby Power | - | - | - | - | - | **-** | |
| Design | - | - | - | - | - | **-** | |
| Construction | - | - | - | - | - | **-** | |
| Construction Management | - | - | - | - | - | **-** | |
| Traveling Screen | - | - | - | - | - | **-** | |
| | | | | | | | |
| **Total** | **-** | **9,402,611** | **12,785,667** | **10,747,333** | **3,211,389** | **36,147,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**B2 SEWER - COMBINED SEWER**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| COA Sewer Televising and Cleaning | - | 750,000 | 750,000 | 750,000 | - | **2,250,000** | Includes Design, CM & Constr. |
| CSO/COA Management Support | - | 250,000 | 250,000 | 250,000 | - | **750,000** | |
| Manhole, Catch Basin & Sewer Line Point Repair | - | 750,000 | 750,000 | 750,000 | - | **2,250,000** | Includes Design, CM & Constr. |
| Sewer Rehabilitation - Gunite | - | - | - | 750,000 | - | **750,000** | Includes Design, CM & Constr. |
| Sewer Rehabilitation - Lining | - | - | - | 650,000 | - | **650,000** | Includes Design, CM & Constr. |
| Sewer Improvements - Planned | - | 350,000 | 350,000 | 350,000 | - | **1,050,000** | Includes Design, CM & Constr. |
| MS4 Stormwater Compliance | 25,000 | 125,000 | 125,000 | 125,000 | - | **400,000** | |
| Sewer Flow Monitoring | - | 15,000 | 15,000 | 15,000 | - | **45,000** | |
| Colby Chapin | - | 200,000 | - | - | - | **200,000** | |
| Berkshire | - | - | - | - | - | **-** | |
| Jacob Street | - | - | - | - | - | **-** | |
| 12th Street | - | - | - | - | - | **-** | |
| 44th Street | - | - | - | - | - | **-** | |
| 52nd Street | - | - | - | - | - | **-** | |
| South 6th Street | - | - | - | - | - | **-** | Includes CM and Constr.. Design Funded by 2005 BI |
| Brown's Hill Road Sewer Separation | 100,000 | - | - | - | - | **100,000** | |
| | | | | | | | |
| **Total** | **125,000** | **2,440,000** | **2,240,000** | **3,640,000** | **-** | **8,445,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**B4 SEWER - PUMP STATION**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Sewage Pump Station Improvements | - | 1,860,000 | 1,500,000 | - | - | **3,360,000** | |
| Pump Station Force Main Construction - Mifflin Road to Interboro Avenue | - | - | - | - | - | **-** | |
| | | | | | | | |
| **Total** | **-** | **1,860,000** | **1,500,000** | **-** | **-** | **3,360,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**C1 CITY/URA/SEA/PORT AUTHORITY**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| URA - S.S. Industrial Development | 500,000 | 750,000 | 350,000 | - | - | **1,600,000** | 1,000,000 Budgeted in 2005 Bond Issue |
| URA - Nine Mile Run Development | 2,000,000 | 1,250,000 | 600,000 | 600,000 | - | **4,450,000** | |
| URA - Allequippa Terrace | 500,000 | 1,250,000 | 1,250,000 | 250,000 | 500,000 | **3,750,000** | |
| URA - Bedford Dwellings | - | - | - | - | - | **-** | |
| URA - South Side Riverfront Housing | - | - | - | - | - | **-** | |
| URA - Liberty Park | - | - | - | - | - | **-** | |
| URA - Manchester housing | - | 200,000 | - | - | - | **200,000** | No Funding Approved by PWSA Board |
| URA - Strip District / Lawrenceville | - | - | - | - | - | **-** | No Funding Approved by PWSA Board |
| URA - Uptown, Larimer, Hazelwood | - | - | - | - | - | **-** | No Funding Approved by PWSA Board |
| URA - Proposed Development Projects | - | 300,000 | 550,000 | 1,350,000 | 675,000 | **2,875,000** | No Funding Approved by PWSA Board |
| URA - Garfield Housing | 500,000 | 1,500,000 | 500,000 | 1,500,000 | - | **4,000,000** | No Funding Approved by PWSA Board |
| URA - Pittsburgh Technology Center | 625,000 | 725,000 | - | - | - | **1,350,000** | No Funding Approved by PWSA Board |
| SEA - New Arena | - | - | - | - | - | **-** | No Funding Approved by PWSA Board |
| SEA - North Shore Riverfront Park | - | - | - | - | - | **-** | |
| Forbes and Market Water and Sewer | - | - | - | - | - | **-** | |
| | | | | | | | |
| **Total** | **4,125,000** | **5,975,000** | **3,250,000** | **3,700,000** | **1,175,000** | **18,225,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**D1 ENGINEERING**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Surveys | 25,000 | 50,000 | 50,000 | 50,000 | - | **175,000** | |
| Construction Management for Private Development | 60,000 | 125,000 | 125,000 | 125,000 | - | **435,000** | |
| Miscellaneous Engineering Services | 250,000 | 400,000 | 300,000 | 300,000 | - | **1,250,000** | |
| Temporary Staffing | 300,000 | 500,000 | 500,000 | 500,000 | - | **1,800,000** | |
| Developer Reviews | 40,000 | 85,000 | 85,000 | 85,000 | - | **295,000** | |
| Consulting Engineer Additional Services | 50,000 | 100,000 | 100,000 | 100,000 | - | **350,000** | |
| Construction Manager Additional Services | 30,000 | 60,000 | 60,000 | 60,000 | - | **210,000** | |
| Construction Management for URA Projects | 100,000 | 200,000 | 200,000 | 200,000 | - | **700,000** | |
| Engineering Department Reimbursement | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | - | **4,000,000** | |
| | | | | | | | |
| **Total** | **1,855,000** | **2,520,000** | **2,420,000** | **2,420,000** | **-** | **9,215,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**E1 TOOLS AND EQUIPMENT**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| Street Repaving Sewer Risers and Lids | - | 400,000 | 400,000 | 400,000 | - | **1,200,000** | |
| Purchase Water Meters / UMEs | - | 250,000 | 250,000 | 250,000 | - | **750,000** | |
| Vehicles | 300,000 | 600,000 | 600,000 | 600,000 | - | **2,100,000** | |
| Miscellaneous Tools and Equipment | - | - | - | - | - | **-** | |
| Central Warehouse / Facility Improvements / Fencing | - | 750,000 | 750,000 | - | - | **1,500,000** | |
| | | | | | | | |
| **Total** | **300,000** | **2,000,000** | **2,000,000** | **1,250,000** | **-** | **5,550,000** | |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**CAPITAL IMPROVEMENT PROGRAM - LIST OF PROJECTS**
**2008 SERIES BOND ISSUE**

**Z1 CONTINGENCY**

| Description | 2008 | 2009 | 2010 | 2011 | 2012 | **Total** | Comments |
|---|---|---|---|---|---|---|---|
| 2008 Bond Contingency | 325,581 | 558,140 | 558,140 | 558,140 | - | **2,000,000** | |
| | | | | | | | |
| **Total** | **325,581** | **558,140** | **558,140** | **558,140** | **-** | **2,000,000** | |

# *APPENDIX B*

# *PROJECT TASK DESCRIPTIONS*

**Business Area: A1 Water – Water Distribution**

**Project Title: Water Valve and Hydrant Replacement**

## Project Description

1. Install fire hydrants to replace existing hydrants that are obsolete and pose safety risks.
2. Install valves to replace inoperable valves.

## Improvement to System

1. New fire hydrants provide better flow allowing for increased fire protection, and are safer for vehicular accidents by having shear bolts.
2. By installing new valves along the water line it provides access points so that the line can be isolated for repairs or help minimize a water line break.

**Inoperable 48-inch Valve 1**

**Older Style Hydrant**

**Newer Style Hydrant**

**Business Area: A1 Water – Water Distribution**

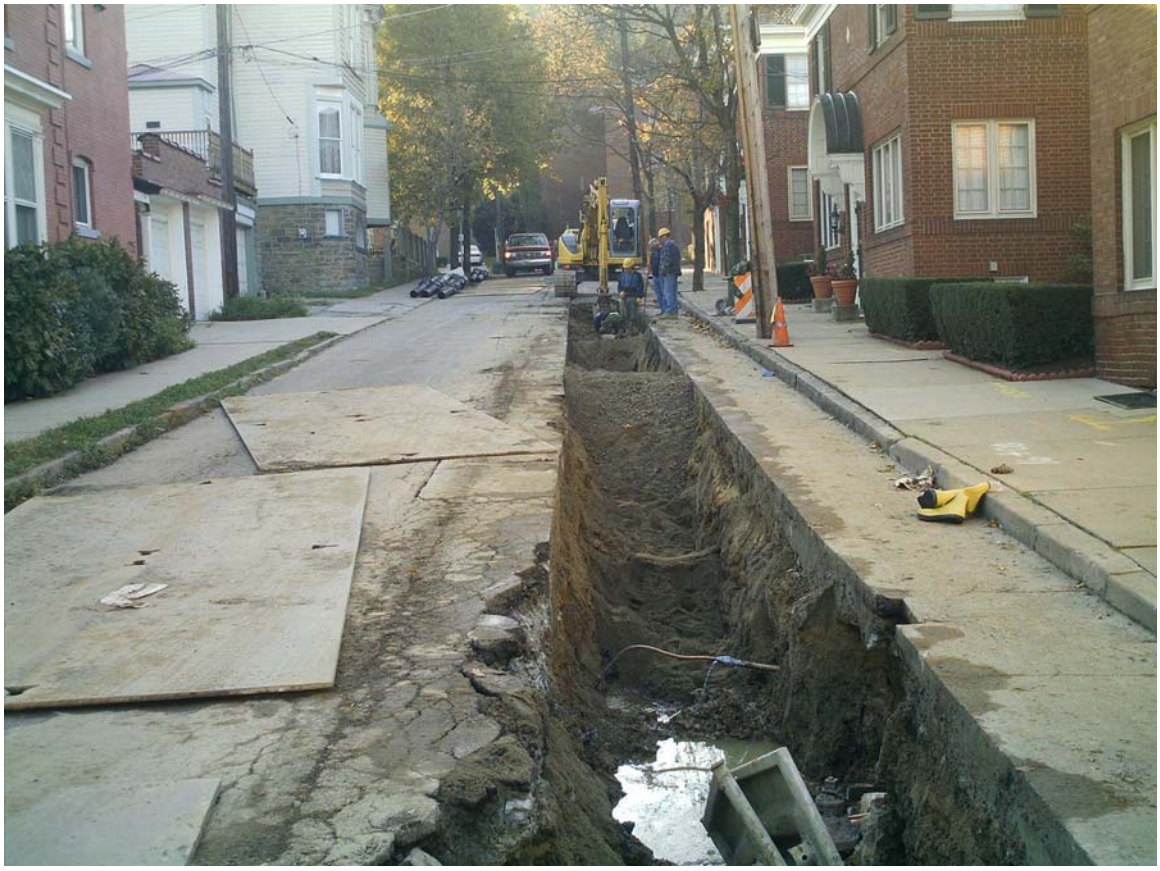
**Project Title: Water Line Re-Lays**

## Project Description

1. Install new water lines to replace older lines that are prone to breaking and require extensive maintenance to keep operational.
2. Install new water services, curb boxes and stops, and fire hydrants as needed while replacing water line.

## Improvement to System

1. New water lines provide stability to the water system by requiring less maintenance and prevent persistent leaks in the line which cause service disruptions and street closures.
2. Increase in public safety due to the fact of road icing when a line breaks during winter conditions and sink holes caused by undermining.



**New Waterline Construction**

**Broken Waterline**

**Icing on Roadway Due to Waterline Leak**

**Business Area: A1 Water – Water Distribution**

**Project Title: 60" Transmission Main Improvements - PennDOT**

## Project Description

1. Line existing 60" water main with new plastic pipe as the existing pipe is deteriorating and becoming inundated with repairs.

## Improvement to System

1. New water line will provide stability to the water system by requiring less maintenance and prevent persistent leaks and blow outs of the line that was replaced.
2. Increase in public safety due to the fact of road icing when a line breaks during winter conditions and sink holes caused by undermining.

**60-inch Water Main Leak**

**Business Area: A2 Water – Pumping and Storage**

**Project Title: Howard and Lincoln Pump Station Improvements**

## Project Description

1. Howard Pump Station – Replace existing Pump Nos. 6 and 7 with new pumps and motors. Each pump assembly consists of a 500 HP motor driving two horizontal split case pumps in a series pumping arrangement. Each pump assembly is rated for 2900 GPM at 480 feet TDH. The proposed work will include valve/piping modifications and electrical wiring necessary to implement the installation of the new equipment. The existing ball-centric check valves will be replaced with cone valves.
2. Lincoln Pump Station – Replace existing Pump No. 2 with new pumps and motor. The pump assembly consists of a 150 HP motor driving two horizontal split case pumps in a series pumping arrangement. The pump assembly is rated for 1800 GPM at 275 feet TDH. The proposed work will include valve/piping modifications and electrical wiring necessary to implement the installation of the new equipment.

## Improvement to System

1. Howard Pump Station – This project is necessary to insure the reliability of adequate water supply to the Brashear Tank District, which is supplied by Pump Nos. 5, 6 and 7 from the Howard Pump Station. Pump No. 5 has a capacity of 1750 GPM and alone is unable to meet the peak demands of the Brashear Tank District.
2. Lincoln Pump Station – This project is necessary to improve the reliability of adequate water supply to the Lincoln Tank District, which is supplied by three identical pumps of equal capacity from the Lincoln Pump Station. The manufacturer of these pumps is no longer in business and replacement parts for the pumps are no longer manufactured. Pump No. 2 has been out of service for several years.

**Howard Pump Station Pump No. 7**

**Lincoln Pump Station - Pump No. 2**

**Business Area: A2 Water – Pumping and Storage**

**Project Title: Water Tank Painting and Improvements**

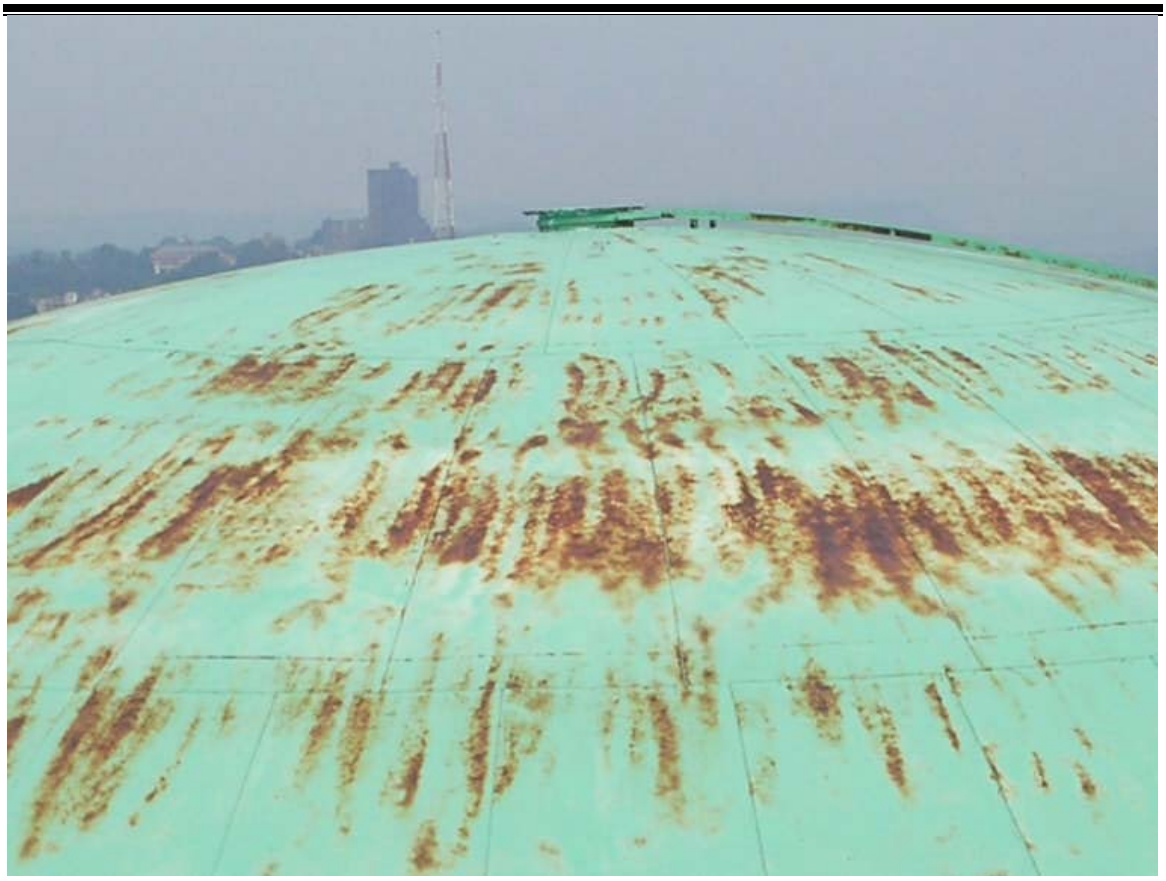
**Project Description**

1. Several water storage tanks were recently inspected. The purpose of the inspection was to assess the condition of the coatings, visual inspect the sanitary, safety, operational and structural condition of each tank.
2. The improvements will include painting and repair / replacement of any structural deficiencies.

**Improvement to System**

1. The tanks were painted or constructed in the early to mid 1980's. The proposed improvements will ensure continued satisfactory use for the next 25 to 30 years.
2. The safety improvements will include replacing existing ladders with OSHA compliant ladders.

**Exterior Corrosion at Brashear Tank**



**Corrosion of Allentown Tank Roof**

**Business Area: A2 Water – Pumping and Storage**

**Project Title: Herron Hill Pump Stations – Replacement of Rising Mains**

## Project Description

1. Install new rising mains from the Herron Hill Pump Station that help feed the Herron Hill Reservoir.

## Improvement to System

1. New rising mains help stability to the water system by requiring less maintenance and prevent persistent leaks and blow outs of the line that was replaced.
2. Increase in public safety due to the fact of road icing when a line breaks during winter conditions and sink holes caused by undermining.
3. The Herron Hill Reservoir feeds a large distribution system, and by replacing the rising mains ensures a constant supply of water to the reservoir.

**Waterline Break from Rising Main**

**Waterline Break from Rising Main**

**Surface Restoration**

**Business Area: A3 Water – Treatment Plant**

**Project Title: Bruecken Pump Station Standby Power**

**Project Description**

1. Install three standby generators with capacity to operate any two pumps during a complete power outage at the Bruecken Pump Station.
2. Install a 21-MGD high service "trim" pump.

**Improvement to System**

1. Provide the capability of meeting the peak demand of the Highland No. 1 Reservoir service district in the event that the Bruecken Pump Station or the Microfiltration Plant is out of service due to a power outage or water quality issues at the Highland No. 1 Reservoir that preclude the use of the reservoir's water supply.

**Business Area: A3 Water – Water Treatment**

**Project Title: Filter Backwash Recycle System**

## Project Description

Install a filter backwash water recycle system including:

1. The construction of a new two-chamber filter backwash holding tank.
2. Piping and valving modifications to interconnect the new holding tank to the existing filter backwash drain line.
3. The construction of a recycle pump station to return the filter backwash water to the suction header of the plant's raw water pumps.

## Improvement to System

Meet regulatory requirements by eliminating a direct discharge of filter backwash water to the Allegheny River.

**Unpermitted Filter Backwash to River**

**Business Area: A3 Water – Water Treatment**

**Project Title: Water Treatment Plant Filtration and Clarification Improvements**

## Project Description

1. Rehabilitate 18 filters including new underdrains with Integral Media Support cap, anthracite (18-inch) and sand (12-inch) media, air scour and backwash pump improvements, level the backwas troughs, piping / valve modifications and new controls to allow the filters to operate in a fully automated manner.
2. Install a filter backwash water recycle system by constructing a new backwash water holding tank, piping / valve modifications and recycle pump station.
3. Rehabilitate Clarifiers by installing a new high-strength loop chain and scraper system, and replacing the clarifier building's obsolete motor control center equipment.
4. Install high strength chains on flocculator drives.

## Improvement to System

1. Optimize performance and minimize actual backwash water volume requiring treatment.
2. Reduce outages and mechanical maintenance costs, improve water treatment, sludge thickening and reduce volume to ALCOSAN.
3. Meet regulatory requirements associated with direct discharge of filter backwash water to Allegheny River.
4. More consistent and better overall water treatment.

**Broken Clarifier Chain**

**Existing Filter Media**

**Business Area: A3 Water – Treatment Plant**

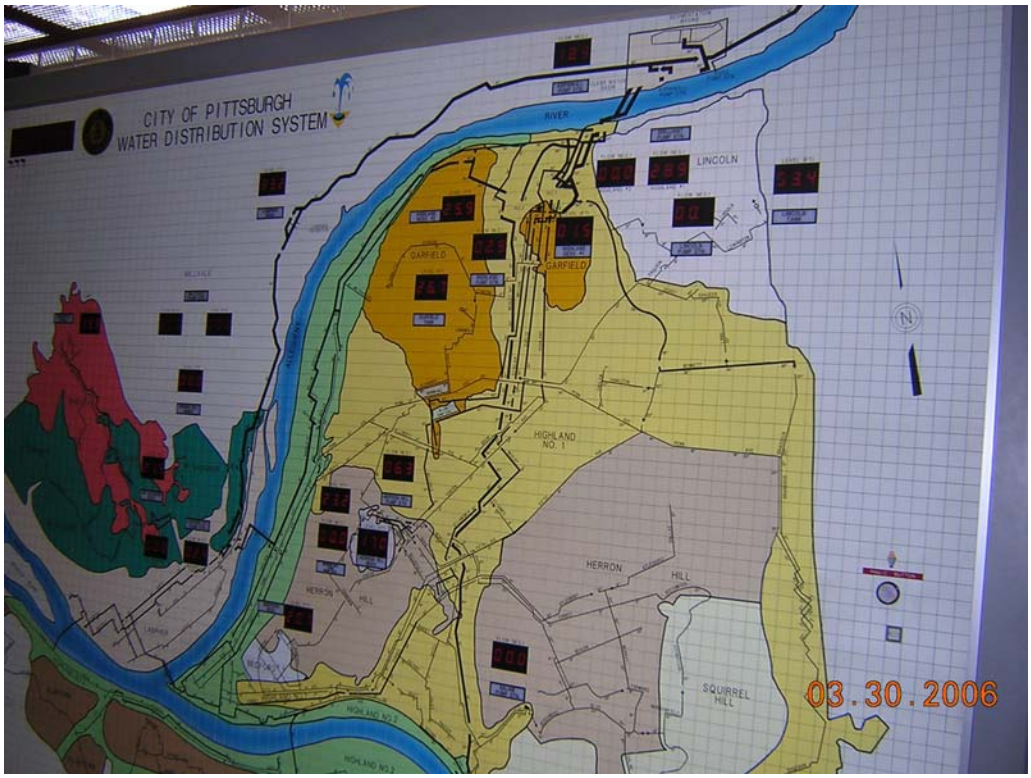
**Project Title: SCADA System Improvements**

## Project Description

1. To enable an operator to monitor the operating status of the water treatment and distribution systems and detect overall alarm conditions from a central location.
2. To modernize the SCADA system so it will be consistent with those of most comparable urban water systems in North America.

## Improvement to System

1. To increase communication, maintenance, expansion and flexibility of the system.
2. The new system will also restore functionality, security and reliability to the system.
3. PWSA is responsible for delivering safe drinking water to over 300,000 people and providing fire protection for billions of dollars worth of property, and this new system will help meet those obligations.




**Existing Water Sys Monitoring Board 1**

**Antiquated Equipment 1**

**Business Area: B2 Sewer – Combined Sewer**

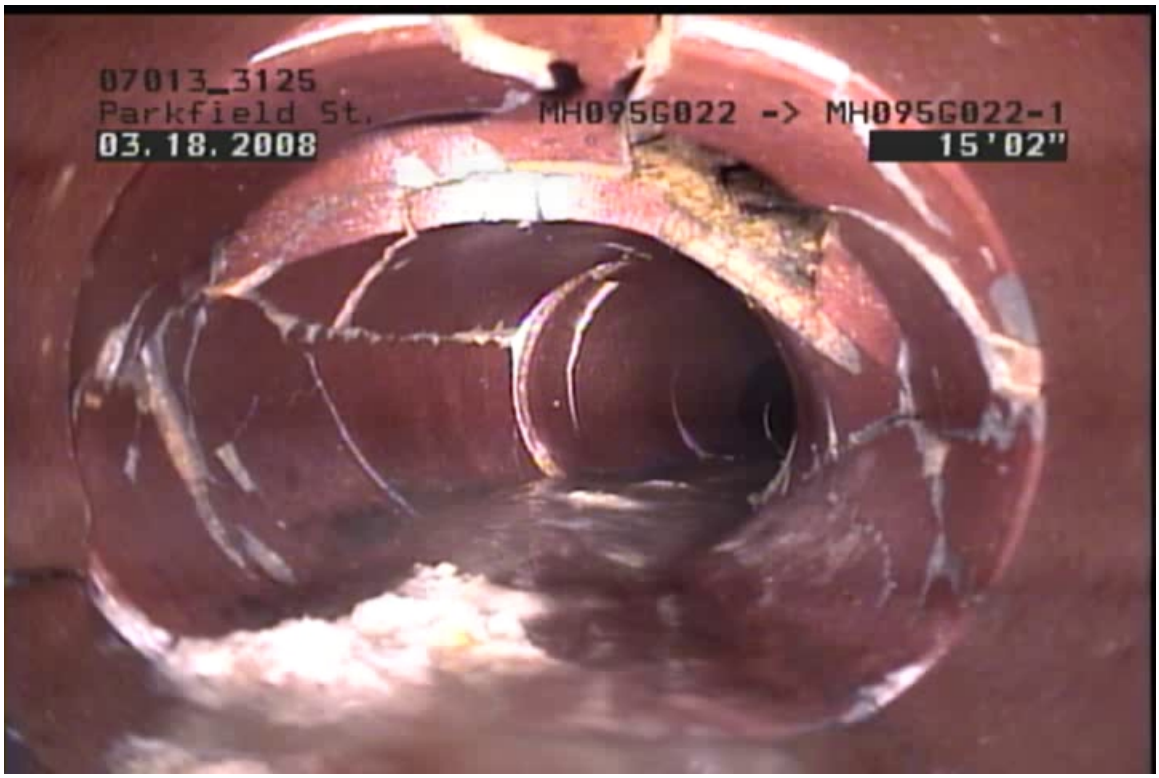
**Project Title: COA Sewer Televising and Cleaning**

## Project Description

1. Televise sewers to determine their condition and locate any possible defects.
2. Sewer cleaning helps reduce buildup of debris from inside the sewer.

## Improvement to System

1. By locating defects in the sewer it allows for exact location of the problem to be known, and repairs can be made without excess excavation.
2. Cleaning helps to restore existing flow line and allows for greater capacity by reducing the amount of build up within the sewer.




**Cracked VCP Sewer Discovered by TVing**

**Business Area: B2 Sewer – Combined Sewer**

**Project Title: Manhole, Catch Basin & Sewer Line Point Repair**

## Project Description

1. Specifically repairing isolated problems that need to be done to the sewer and water systems.
2. Manholes and catch basins will be repaired, replaced or raised to grade and sewer lines will have sections replaced or repaired.

## Improvement to System

1. Manhole and catch basin repair and replacement allow for better flow and increased storm flow to be removed from impervious areas.
2. Raising structures to grade allows for access for the system to have routine maintenance performed.
3. Targeting small sections of pipe that need to be repaired or replaced permits overall system performance by maintaining a good flow line and no obstructions.

**Catch Basin in Need of Replacement**

**Completed Point Repair**

**Business Area: B2 Sewer – Combined Sewer**

**Project Title: Sewer Rehabilitation - Gunite**

## Project Description

1. Larger diameter sewers that are deteriorating or have a partial failure will have a layer of reinforced concrete placed on top of the existing pipe material for added strength.

## Improvement to System

1. The gunite procedure improves strength and longevity of the existing sewer with out excavating and replacing it.
2. The procedure also improves normal sewer flow by creating a better channel for the flow.
3. These repairs are required under the COA.

**Existing Damaged Brick Sewer 1**

**Brick Sewer Aftr Gunite Application**

**Business Area: B2 Sewer – Combined Sewer**

**Project Title: Sewer Rehabilitation – Lining**

## Project Description

1. Smaller diameter sewers that are deteriorating or have a partial failure will have a plastic pipe installed within.

## Improvement to System

1. The Lining procedure improves strength and longevity of the existing sewer with out excavating and replacing it.
2. The procedure also improves normal sewer flow by creating a better channel for the flow.

**Installation of Liner**

**Business Area: B2 Sewer – Combined Sewer**

**Project Title: Browns Hill Road Sewer Separation**

## Project Description

1. To eliminate the storm water flow from the sanitary sewer system by creating a separate sewer for each.

## Improvement to System

1. The elimination of storm flow from the sanitary sewer will allow for less sewage to be treated because the storm water is no longer going through the treatment process.
2. The elimination of storm water from the sanitary system will also ease CSO events during wet weather events.

**Combined Sewer Outfall**

**Business Area: B2 Sewer – Combined Sewer**

**Project Title: South 6th Street**

**Project Description**

1. Replace existing collapsed sewer beneath CSX railroad tracks and install a new casing pipe.

**Improvement to System**

1. This repair will prevent sewage from backing up onto the railroad tracks during heavy flow periods.

**Collapsed Sewer Beneath S. 6th Street RR**

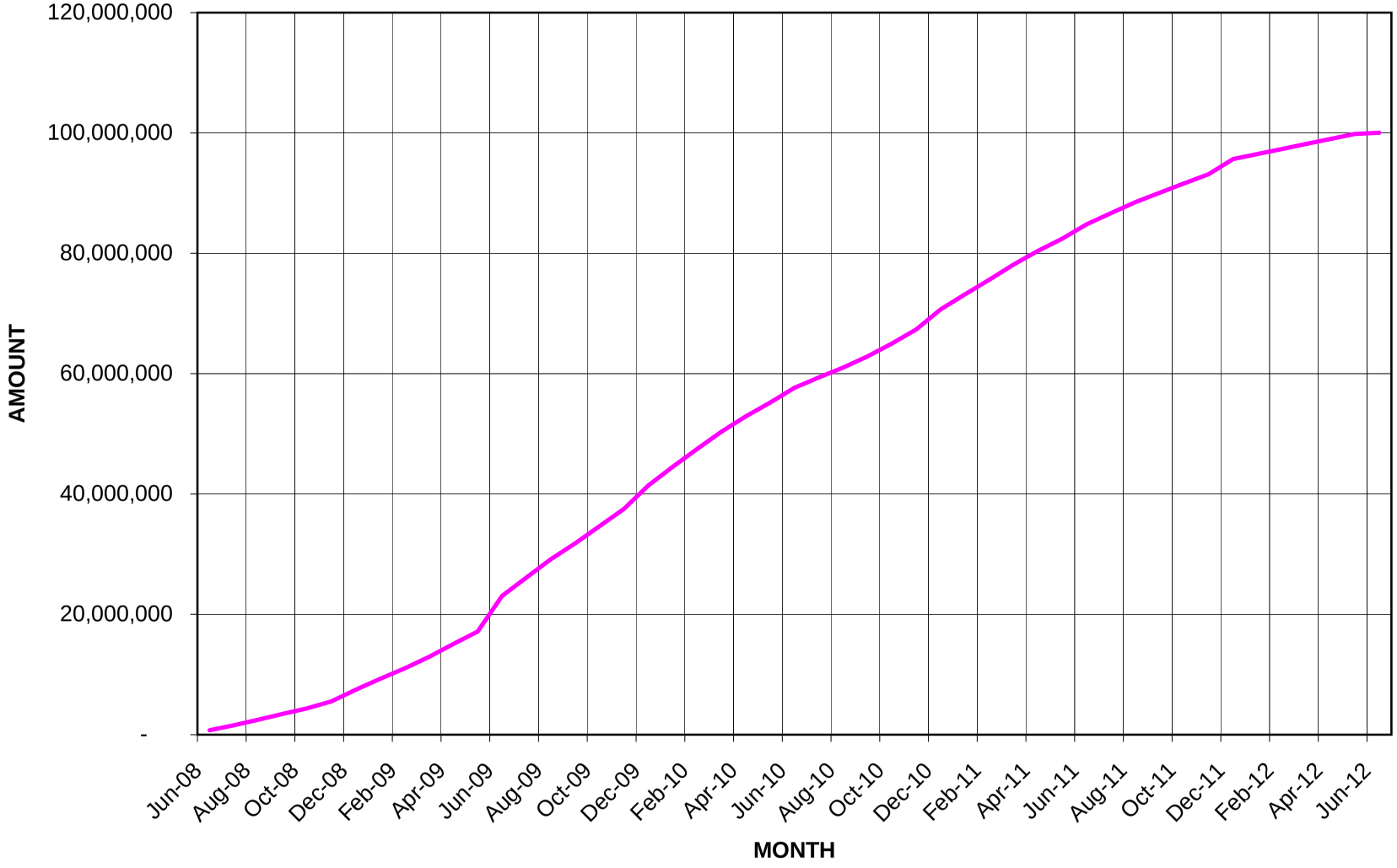
# *APPENDIX C*

## *ESTIMATED BOND DRAWDOWN SCHEDULE*

**2008 Bond - Estimated Drawdown**

| Period | Month | Incremental | Cumulative |
|---|---|---|---|
| 1 | Jun-08 | 742,821 | 742,821 |
| 2 | Jul-08 | 832,821 | 1,575,642 |
| 3 | Aug-08 | 917,821 | 2,493,463 |
| 4 | Sep-08 | 952,821 | 3,446,285 |
| 5 | Oct-08 | 917,821 | 4,364,106 |
| 6 | Nov-08 | 1,182,821 | 5,546,927 |
| 7 | Dec-08 | 1,912,821 | 7,459,748 |
| 8 | Jan-09 | 1,826,095 | 9,285,843 |
| 9 | Feb-09 | 1,716,095 | 11,001,938 |
| 10 | Mar-09 | 1,916,095 | 12,918,033 |
| 11 | Apr-09 | 2,151,095 | 15,069,128 |
| 12 | May-09 | 2,076,095 | 17,145,223 |
| 13 | Jun-09 | 5,905,039 | 23,050,262 |
| 14 | Jul-09 | 3,055,039 | 26,105,302 |
| 15 | Aug-09 | 3,045,039 | 29,150,341 |
| 16 | Sep-09 | 2,632,539 | 31,782,880 |
| 17 | Oct-09 | 2,882,539 | 34,665,420 |
| 18 | Nov-09 | 2,842,539 | 37,507,959 |
| 19 | Dec-09 | 3,907,539 | 41,415,499 |
| 20 | Jan-10 | 3,092,956 | 44,508,455 |
| 21 | Feb-10 | 2,952,956 | 47,461,411 |
| 22 | Mar-10 | 2,867,956 | 50,329,367 |
| 23 | Apr-10 | 2,552,956 | 52,882,323 |
| 24 | May-10 | 2,292,956 | 55,175,279 |
| 25 | Jun-10 | 2,467,956 | 57,643,235 |
| 26 | Jul-10 | 1,727,956 | 59,371,191 |
| 27 | Aug-10 | 1,642,956 | 61,014,147 |
| 28 | Sep-10 | 1,867,956 | 62,882,103 |
| 29 | Oct-10 | 2,127,956 | 65,010,059 |
| 30 | Nov-10 | 2,342,956 | 67,353,016 |
| 31 | Dec-10 | 3,316,289 | 70,669,305 |
| 32 | Jan-11 | 2,523,789 | 73,193,094 |
| 33 | Feb-11 | 2,428,789 | 75,621,884 |
| 34 | Mar-11 | 2,528,789 | 78,150,673 |
| 35 | Apr-11 | 2,268,789 | 80,419,463 |
| 36 | May-11 | 2,028,789 | 82,448,252 |
| 37 | Jun-11 | 2,389,623 | 84,837,875 |
| 38 | Jul-11 | 1,854,623 | 86,692,497 |
| 39 | Aug-11 | 1,824,623 | 88,517,120 |
| 40 | Sep-11 | 1,559,623 | 90,076,743 |
| 41 | Oct-11 | 1,549,623 | 91,626,366 |
| 42 | Nov-11 | 1,514,623 | 93,140,988 |
| 43 | Dec-11 | 2,514,623 | 95,655,611 |
| 44 | Jan-12 | 838,111 | 96,493,722 |
| 45 | Feb-12 | 838,111 | 97,331,833 |
| 46 | Mar-12 | 838,111 | 98,169,944 |
| 47 | Apr-12 | 838,111 | 99,008,056 |
| 48 | May-12 | 838,111 | 99,846,167 |
| 49 | Jun-12 | 195,833 | 100,042,000 |

**THE PITTSBURGH WATER AND SEWER AUTHORITY**
**2008 BOND ISSUE**
**ESTIMATED DRAWDOWN**



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# APPENDIX F

# FORM OF BOND COUNSEL OPINION

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June __, 2008

The Pittsburgh Water and Sewer Authority
Pittsburgh, Pennsylvania

Re: $216,720,000 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 (together the "2008 Variable Rate First Lien Bonds"); 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 (the "2008 Variable Rate Subordinate Bonds")

You have requested our opinion as to the legality of the above designated series of 2008 Variable Rate First Lien Bonds, issued by The Pittsburgh Water and Sewer Authority (the "Authority") under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. Cons. Stat. §§ 5601-5623, as amended (the "Act"), and pursuant to a Trust Indenture by and between the Authority to The Bank of New York Trust Company, N.A., as successor trustee (the "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 and March 1, 2007 (collectively, the "Original First Lien Indenture") and as further supplemented by a Seventh Supplemental Indenture thereto dated as of June 1, 2008 (the "Seventh Supplemental First Lien Indenture"; together with the Original First Lien Indenture, the "First Lien Indenture"); and our opinion as to the legality of the above designated series of 2008 Variable Rate Subordinate Bonds and together with the 2008 Variable Rate First Lien Bonds, the "2008 Variable Rate Bonds"), issued by Authority under the provisions of the Act, and pursuant 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 (collectively, the "Original Subordinate Indenture") and as further supplemented by a Second Supplemental Subordinate Indenture thereto dated as of June 1, 2008 (the "Second Supplemental Subordinate Indenture"; together with the Original Subordinate Indenture, the "Subordinate Indenture"; and the Subordinate Indenture together with the First Lien Indenture, the "Indentures").

The 2008 Variable Rate Bonds are additional bonds being issued under the Indentures. The net proceeds of the 2008 Variable Rate Bonds, together with other available funds of the Authority, will be applied pursuant to the Indentures to the (i) advance refunding of certain maturities of the Authority's outstanding Water and Sewer System 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 C of 1993; (ii) current refunding of certain maturities of the Water and Sewer System First Lien Revenue Bonds, Series A of 1998, Water and Sewer System First Lien Revenue Bonds, Series of 2003, Water and Sewer System First Lien Revenue Bonds, Series B of 2007 and Water and Sewer System Subordinate Revenue Bonds, Series C of 1998 (as defined in the Indentures); (iii) funding of the costs of certain Capital Additions; and (iv) payment of the costs of issuing and insuring the 2008 Variable Rate Bonds.

All bonds issued under the Indentures, except as may otherwise be provided therein, are equally and ratably secured by the assignment and pledge to the Trustee of all Receipts and Revenues, as defined in the Indentures.

In addition, payment of the principal of, and interest on, the 2008 Variable Rate Bonds will be insured under a municipal bond insurance policy (the "Bond Insurance Policy") issued by Financial Security Assurance, Inc.

As Bond Counsel for the Authority, we have examined such law and such certified proceedings and other documents as we have deemed necessary to express this opinion.

In rendering this opinion we have examined and relied upon the opinions of counsel to the Authority with respect, *inter alia*, to the due organization, existence and good standing of the Authority; the authorization, execution and delivery of the documents to which the Authority is a party; the validity and binding effect thereof on the Authority; and the accuracy of the statements and representations and the performance of the covenants of the Authority set forth in the Indentures and in the Authority's Non-Arbitrage Certificate, each as delivered on this date in connection with the issuance of the 2008 Variable Rate Bonds.

As to questions of fact material to our opinion, we have relied upon the representations of the Authority contained in the Indentures and in the certified proceedings and other certifications of public officials and others furnished to us without undertaking to verify the same by independent investigation.

Based upon the foregoing, we are of the opinion that, under existing law:

1. The Authority has been duly and legally incorporated and validly exists under the Act and has corporate power and lawful authority to execute and deliver the Seventh Supplemental First Lien Indenture and the Second Supplemental Subordinate Indenture and to issue and deliver the 2008 Variable Rate Bonds.

2. The purposes for which the 2008 Variable Rate Bonds have been issued are authorized purposes for which additional bonds may be issued under Section 3.04 of the Original First Lien Indenture and Section 3.02 of the Original Subordinate Indenture.

3. The Seventh Supplemental First Lien Indenture and the Second Supplemental Subordinate Indenture have been duly authorized, executed and delivered by the Authority and, assuming the due authorization, execution and delivery thereof by the other parties thereto, is a valid and binding obligation of the Authority, enforceable in accordance with its terms.

4. All conditions precedent provided for in the Original First Lien Indenture, the Seventh Supplemental First Lien Indenture, the Original Subordinate Indenture and the Second Supplemental Subordinate Indenture relating to the authentication and delivery of the 2008 Variable Rate Bonds have been complied with by the Authority.

5. The 2008 Variable Rate Bonds have been validly authorized, executed and delivered by the Authority and, when authenticated by the Trustee, constitute valid and binding limited obligations of the Authority entitled to the benefits and security of the Indentures and are enforceable in accordance with their terms.

6. Under the laws of the Commonwealth of Pennsylvania, as currently enacted and construed, the 2008 Variable Rate Bonds are exempt from personal property taxes in Pennsylvania and

the interest on the 2008 Variable Rate Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax.

7. Interest on the 2008 Variable Rate Bonds is excluded from gross income of the owners of the 2008 Variable Rate Bonds for federal income tax purposes under existing law, as currently construed. Interest on the 2008 Variable Rate Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed upon individuals and corporations. Interest on a 2008 Variable Rate Bond held by a corporation (other than an S corporation, regulated investment company, real estate investment trust or real estate mortgage investment conduit) may be indirectly subject to alternative minimum tax because of its inclusion in the earnings and profits of the corporate holder. Interest on a 2008 Variable Rate Bond held by a foreign corporation may be subject to the branch profits tax imposed by the Code (as defined in the Indentures).

Ownership of the 2008 Variable Rate Bonds may give rise to collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, S corporations with Subchapter C earnings and profits, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry the 2008 Variable Rate Bonds. We express no opinion as to such collateral federal income tax consequences.

In providing this opinion, we advise you as follows:

a. It may be determined in the future that interest on the 2008 Variable Rate Bonds, retroactively to the date of issuance thereof or prospectively, will not be excluded from the gross income of the owners of the 2008 Variable Rate Bonds for federal income tax purposes if certain requirements of the Code are not met subsequent to the issuance of the 2008 Variable Rate Bonds. The Authority has covenanted in the Indentures to comply with all such requirements.

b. The enforceability (but not the validity) of the documents mentioned herein may be limited by bankruptcy, insolvency, reorganization, moratorium or other laws now or hereafter enacted by any state or the federal government affecting the enforcement of creditors' rights generally, and "enforceable in accordance with its (their) terms" shall not mean that specific performance would necessarily be available as a remedy in every situation.

c. The obligations of the Authority under the Indentures and the 2008 Variable Rate Bonds do not create an indebtedness or pledge the credit or taxing power of the United States of America, the Commonwealth of Pennsylvania or any political subdivision thereof, and the 2008 Variable Rate Bonds are limited obligations of the Authority payable solely from the moneys pledged therefor under the Indentures and from payments under the Bond Insurance Policy.

We express no opinion herein as to the accuracy, adequacy or completeness of the Official Statement relating to the 2008 Variable Rate Bonds.

PEPPER HAMILTON LLP

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# APPENDIX G

# FORM OF MUNICIPAL BOND INSURANCE POLICY

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**FINANCIAL SECURITY ASSURANCE®**

# MUNICIPAL BOND INSURANCE POLICY

ISSUER:

Policy No.: -N

BONDS:

Effective Date:

Premium: $

FINANCIAL SECURITY ASSURANCE INC. ("Financial Security"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of Financial Security, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which Financial Security shall have received Notice of Nonpayment, Financial Security will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by Financial Security, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in Financial Security. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by Financial Security is incomplete, it shall be deemed not to have been received by Financial Security for purposes of the preceding sentence and Financial Security shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, Financial Security shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by Financial Security hereunder. Payment by Financial Security to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of Financial Security under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless Financial Security shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment

SPECIMEN

made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to Financial Security which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

Financial Security may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to Financial Security pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to Financial Security and shall not be deemed received until received by both and (b) all payments required to be made by Financial Security under this Policy may be made directly by Financial Security or by the Insurer's Fiscal Agent on behalf of Financial Security. The Insurer's Fiscal Agent is the agent of Financial Security only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of Financial Security to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, Financial Security agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to Financial Security to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of Financial Security, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, FINANCIAL SECURITY ASSURANCE INC. has caused this Policy to be executed on its behalf by its Authorized Officer.

[Countersignature]

FINANCIAL SECURITY ASSURANCE INC.

By _____

By _____
Authorized Officer

A subsidiary of Financial Security Assurance Holdings Ltd.
31 West 52nd Street, New York, N.Y. 10019
(212) 826-0100

Form 500NY (5/90)

SPECIMEN