

Rating Update: MOODY'S DOWNGRADES TO A2 FROM A1 AND ASSIGNS STABLE OUTLOOK TO PITTSBURGH WATER AND SEWER AUTHORITY (PA) REVENUE BONDS

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DOWNGRADE AND STABLE OUTLOOK AFFECT \$385 MILLION OF OUTSTANDING RATED PARITY FIRST LIEN REVENUE BONDS

Water/Sewer
PA

Opinion

NEW YORK, Dec 17, 2010 – Moody's Investors Service downgraded to A2 from A1 and revised the outlook to stable from negative on Pittsburgh Water and Sewer Authority's (PA) \$385 million of outstanding parity first lien rated debt (includes 1998B, 2008A, 2008B-1, 2008B-2, 2008D-1, and 2008D-2 issues). All of the rated series are secured by a first lien pledge of the net revenues of the water and sewer systems. The authority has a total of \$764 million in debt outstanding, comprised of \$660 million of first lien revenue bonds, \$104 million of second lien revenue bonds, and \$14.2 million of Pennvest state loans outstanding, which are subordinate to the authority's first and second lien bonds.

RATINGS RATIONALE

The downgrade reflects the authority's narrow debt service coverage levels and liquidity position supported by weak legal provisions and a highly leveraged system (debt ratio 105%). The rating also incorporates the authority's large, diverse, and stable customer base.

The stable outlook reflects Moody's expectation that the authority's debt service coverage levels will improve slightly over the medium-term to be more in line with previous years and that more adequately offset the risks related to the authority's debt structure. These risks include: interest rate risk from the 53% of its debt that are variable rate demand bonds, all of which are swapped to fixed rate; the rollover risk associated with its liquidity providers, given that the letter of credit and liquidity agreements for 73% of their puttable debt expire in 2011; and counterparty concentration risk, given that all of the authority's surety bonds, swap insurance policies, and the majority of their variable and fixed rate bond insurance policies are provided by Financial Security Assurance, Inc. (FSA/Assured - insurance financial strength rated Aa3/negative).

WEAK LEGAL PROVISIONS FOR BONDHOLDERS

Legal protections for bondholders include a relatively weak rate covenant and additional bonds test. The rate covenant requires that the authority comply with one of two tests in any fiscal year: either (1) net revenues and other receipts, including any unreserved cash and reserves available at the beginning of the fiscal year, equal 1.2x debt service on all authority bonds and long-term indebtedness, or (2) net revenues, including interest income, equal 1x debt service on all authority bonds and long-term indebtedness. Additional bonds may be issued if gross revenues, including non-operating income, are sufficient to comply with the authority's rate covenant in any 12 consecutive months out of the 18 prior to the new bond issuance, utilizing the new bond's maximum annual debt service to calculate coverage. Although it may legally do so, the authority has no plans to issue additional new money debt under the second lien indenture. The first and second lien bonds are additionally secured by a debt service reserve that is funded with surety bonds at MADS, provided by FSA.

RATE DEPENDENT MATURE SYSTEM WITH NARROW DEBT SERVICE COVERAGE; OPERATING EXPENSES PROJECTED TO STABILIZE

Despite projected stable operating expenses through 2012, Moody's expects the authority's operations to narrow in the near-term, given increased total debt costs at or near MADS starting in 2010, limited new customers, uncertain near-term rate increases, and increasing variable rate debt-related costs. The mature system is heavily rate dependent given its mature customer base and minimal new growth. In the longer term, the system's growing capital needs will require new debt, further leveraging and pressuring the system. The authority ended fiscal 2009 with adequate unrestricted reserves at 45.8% of operating and maintenance (O&M) expenses however its net working capital as a % of O&M declined to a weaker 158% from a stronger 193.9% in 2008 due to a decline in restricted cash and investments.

On a net revenue basis, debt service coverage declined in 2009 to a narrow 1.07 times from a more satisfactory 1.42 times in 2007, while total debt service coverage, including subordinate debt and Pennvest loan obligations, declined to 1.07 times in 2009 from an already narrow 1.12 and 1.2 times in 2008 and 2007, respectively. Notably, post-sale MADS coverage from 2008 net revenues was slightly below a very narrow 1.0 times, but is projected to increase to an improved, but still-narrow 1.2 times over the next five years. Management projects fiscal 2010 will yield a still-narrow 1.28 times coverage of all debt service in 2010. Coverage is inflated, however, due to a \$14.5 million donation of property; without donated property included, coverage is expected to be an inadequate .91 times. Despite a budgeted and adopted 9.6% increase in rates for 2011, the authority's total debt service coverage is expected to be at or near a 1.11 times. Current projections indicate debt service coverage assuming no additional rate increases will be a very narrow 1.04 times. Management has communicated its commitment to future rate increases that will improve the current coverage projections, although additional rate increases have not yet been adopted. Going forward, Moody's expects the authority will improve the debt service coverage levels that provide adequate financial flexibility, and this expectation has been heavily factored into the authority's credit rating.

The authority's combined water and sewer rates are average for the region, given slightly above average water rates and below average sewer rates. The authority had a history of annual rate increases since at least 2002, with the exception of 2008 and 2009, years in which rates were not increased. Reportedly the authority was reluctant to increase rates during these years due to the economic downturn. The authority adopted rate increases in each year from 2004 to 2007. Moody's believes the 2010 and 2011 rate increases demonstrate the authority's return to annual rate growth.

The system's operating ratio increased to 70% in fiscal 2009 from 47% in 2005, primarily due to a change in financial reporting related to ALCOSAN's treatment services. The services were formerly reported net of the revenue collected, essentially a pass through, but as of fiscal 2007, the full ALCOSAN-related revenues and expenditures are reported. Despite this change, PWSA's operating ratio increased by 5% in 2008

compared to 2007, but is projected to stabilize at an average level in the low-60% range over the next five years.

O&M expenses include fees paid to the City of Pittsburgh (GO rated A1/negative outlook) for certain support functions (including engineering, communications and financial service) under a Cooperation Agreement signed in 1995. The expenses related to the cooperation agreement peaked at \$9.65 million in 2007 and 2008, but are expected to incrementally decline to \$7.15 million by 2012.

NARROW DEBT SERVICE COVERAGE HEIGHTENS RISK OF DEBT PROFILE

Moody's notes that the authority maintains pronounced risks associated with its debt profile in the face of already-narrow coverage levels. Of the authority's \$764 million of debt outstanding, 46%, or \$351 million, are variable rate demand obligations (VRDO), with or \$51.9 million (6.8% of total debt) consisting of subordinate lien VRDO debt. In addition, \$51.9 million (6.8% of total debt) is in a term rate mode all of which is under a subordinate lien. The authority's exposure to FSA bond insurance on all of its outstanding variable rate debt is a still-elevated 60%. FSA also insures all of the authority's swaps and provides the surety policy for all debt service reserve funds. This counterparty concentration may adversely impact the authority should FSA's credit quality deteriorate. In addition, the authority's VRDO and term mode debt requiring liquidity and credit support will be provided by J.P. Morgan Chase Bank, N.A. (33%), Bank of America (18%), PNC (36%), Federal Home Loan of Pittsburgh (6% - rated Aaa) wrap of three smaller LOC providers; no liquidity support (6%) has been obtained for approximately \$26 million of the authority's subordinate 2008 C-1D term mode bonds.

The 2008 C-1D term mode bonds, are structured with a soft put (09/01/2012), whereby the authority would pay a penalty interest rate if the bonds are unable to be successfully remarketed at the end of the term. In addition, the 2008 C1-A, B and C bonds are also in term mode and are subject to a mandatory tender September 1, 2011, however these bonds are supported by a confirming letter of credit through the Federal Home Loan of Pittsburgh. Of note, the authority's indenture contains a cross default provision, whereby a default on any debt will trigger a default on all debt. The inability to obtain credit support on this subordinate bond series highlights the potential rollover risk PWSA faces should the credit markets tighten. The current liquidity facilities were at higher costs than previously experienced which increased PWSA's debt costs, reducing overall debt service coverage. Notably, 72.8% of the authority's variable rate and term mode bond liquidity facilities expire during 2011 with the balance expiring in 2012.

The authority has entered into floating-to-fixed rate swaps in connection with all of its variable rate debt (\$403.2 million) under two ISDA Master Agreements with JPMorgan (61%) and Merrill Lynch (39%), whereby the authority pays a fixed interest rate semi-annually (4% on average) and receives SIFMA monthly. FSA provides swap insurance for all swaps and, despite a negative \$53.9 million aggregate mark-to-market as of November 30, 2010, no collateral is required to be posted unless an Insurer Event occurs (including the downgrade of FSA to below A2 and A). The amortization schedule for each swap mirrors that of the corresponding bonds and the swaps terminate at bond maturity. For all of the swaps, the regularly scheduled swap payments are parity to debt service, early termination is optional for the authority only, and termination by the counterparty depends upon specified termination events occurring, including the downgrade of PWSA's underlying rating below investment grade. An authority termination payment would be subordinate to first and second lien debt service payments.

While the authority's recent weekly resets on its VRDOs are down to pre-credit crisis levels, uncertain future resets and the risk of higher interest costs remain. The authority's primary risk stems from the spread between SIFMA and PWSA's weekly resets on its variable rate bonds given the SIFMA-based floating-to-fixed rate swaps on all of PWSA's variable rate bonds. If the authority's VRDOs reset at 1% above SIFMA for a full year, the authority would incur approximately \$4.5 million of additional interest costs. Future rating reviews will heavily factor the authority's management of its derivative and variable rate debt exposure.

LARGE AND STABLE PITTSBURGH SERVICE AREA WITH DIVERSE ECONOMY

The authority provides water distribution and wastewater collection and transmission to the City of Pittsburgh (GO rated A1/negative outlook) and neighboring municipalities. Although the city has experienced ongoing population loss, the population is expected to stabilize. The city benefits from strong higher education and healthcare sectors which provide stability to the service area. The new Penguins arena and riverfront casino are new large customers of the system, providing both one-time connection fees and ongoing annual service charges (\$2.2 million estimated). Socioeconomic indices within the city are below average, with per capita and median family incomes that are 90% and 79% of the state average. The city's 2000 census poverty rate was a high 20%, but the unemployment rate of 8.7% as of August 2010 continues to remain below both state (8.9%) and national (9.5%) levels, reflecting the city's diverse economy.

WATER SYSTEM HAS MAJORITY COMMERCIAL CUSTOMERS WITH AMPLE SUPPLY

Water is provided to a population of approximately 250,000, including about 84% of residents within the city limits. The remaining city residents are serviced by an independent water purveyor, and these customers receive a rate subsidy from the authority for the difference between the authority's water rate and that of their respective water provider. Of approximately 79,000 customer accounts, 48% are commercial, 37% are residential, and 6% are industrial. Approximately 10% of the authority's water sales are to wholesale customers (five municipalities, three authorities, and two private entities), who obtain water from the authority for different purposes, including for emergencies only, as a partial provider, or as the sole provider. Four bulk customers have take-or-pay contracts, including Fox Chapel Water Authority (rated Aa3), the authority's largest customer (3.27% of 2008 total usage and 1.2% of total revenues). The authority is the sole water provider for Fox Chapel Water authority and has a 30-year contract for a maximum of 10 million gallons per day (MGD) that expires in 2025.

The system is permitted to draw up to 100 MGD from its sole water source, the Allegheny River, but its treatment capacity is 120 MGD. In 2008, the average demand was approximately 70.5 MGD and the peak was 99 MGD. The authority's storage capacity of 455 million gallons would last five to seven days based on average use and 372 million gallons of water is stored in three primary reservoirs. The system's water loss is above average at 20% to 25%, but management continues to target 15% for the long-term.

ALCOSAN TREATS PWSA WASTEWATER; LONG-TERM CAPITAL NEEDS

Wastewater within city boundaries is conveyed to the Allegheny County Sanitary Authority's (ALCOSAN, rated A1) wastewater treatment plant for processing before being discharged into the Ohio River. PWSA's wastewater accounts for approximately one-third of ALCOSAN's treatment capacity. Wastewater conveyance and transmission services are provided by the authority to approximately 550,000 residents, of whom nearly 325,000 live in Pittsburgh. The city comprises more than two-thirds (69%), or 55 square miles, of PWSA's 80 square mile drainage area. The authority also services 24 other municipalities and has service contracts with each municipality to convey its wastewater to ALCOSAN for treatment. The sewer system has about 1,400 miles of sewer lines and the average age of the lines is approximately 65 years, although portions of the system are up to 150 years old, reflective of the system's aging infrastructure. Officials project essentially flat customer growth over the medium-term, although over the longer-term, the authority may focus on providing service to more city residents and acquiring smaller,

neighboring systems. Given an environmental decree for the region, PWSA will likely take on additional debt costs in the long-term to comply with the DEP requirements (see debt section below for detail).

HIGHLY LEVERAGED SYSTEM; AGING INFRASTRUCTURE AND CONSENT DECREE WILL REQUIRE ADDITIONAL LONG-TERM CAPITAL NEEDS

PWSA operates a mature system with aging infrastructure requiring ongoing maintenance and line replacement. Moody's expects system to remain highly leveraged (109.4% debt ratio in 2009), despite fully funding its capital plan through 2013, given slow amortization of principal (23% retired in 10 years) and longer-term capital needs related to a regional environmental decree. The authority is under a consent decree by the US Environmental Protection Agency Combined Sewer Overflow (CSO) Policy, and pursuant to a January 2004 Consent Order and Agreement, the authority developed a long-term plan to comply with the CSO policy. Project costs are not yet determined, and a significant portion is expected to be attributable to ALCOSAN. Authority officials report that PWSA's actual costs will depend on the final regional plan, developed in coordination with neighboring systems and ALCOSAN.

Outlook

The stable outlook reflects Moody's expectation that the authority's debt service coverage levels will improve slightly over the medium-term to be more in line with previous years and that more adequately offset the risks related to the authority's debt structure.

What could make the rating go up:

- Improved and sustained total debt service coverage and liquidity.
- Effective restructuring of the authority's debt profile to reduce counterparty, interest rate, and rollover risks.
- Multi-year adopted rate increases that improve system flexibility.

What could make the rating go down:

- Reduced debt service coverage and liquidity.
- Sustained higher interest or other costs related to variable rate debt portfolio.
- Significant new debt borrowings that further leverage the system

KEY FACTS:

Security: First lien on water system net revenues

System: Water enterprise and wastewater collection & transmission

Source: Allegheny River - 100 MGD permitted draw

Service Area Population (est.): 550,000

Water System Accounts: 83,000

Wastewater System Accounts: 113,000

2009 Operating Ratio: 69.9%

2009 Debt Ratio: 105.3%

2009 Total Debt Service Coverage Ratio: 1.07x

All Debt Payout of Principal:

10 years: 23%

20 years: 56%

31 years: 100%

Senior Lien Debt Outstanding: \$660 million (\$385 million of rated debt)

Subordinate Lien Debt Outstanding: \$103.8 million

PennVest Loans Outstanding: \$14.2 million

The principal methodology used in this rating was Analytical Framework For Water And Sewer System Ratings published in August 1999.

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