



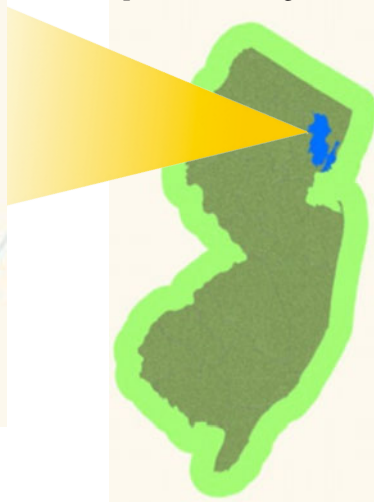
**PASSAIC VALLEY SEWERAGE COMMISSION**  
**PROTECT • RESTORE • PRESERVE**



**2011 Annual Report**



- City of Bayonne
- Township of Belleville
- Township of Bloomfield
- Township of Cedar Grove
- City of Clifton
- Borough of East Newark
- City of East Orange
- Borough of East Rutherford
- City of Elizabeth
- Borough of Elmwood Park
- Borough of Fair Lawn
- Township of Franklin Lakes
- City of Garfield
- Borough of Glen Ridge
- Borough of Glen Rock
- City of Hackensack
- Borough of Haledon
- Town of Harrison
- Borough of Hasbrouck Heights
- Borough of Hawthorne
- Township of Hillside
- City of Jersey City
- Township of Kearny
- Township of Little Falls
- Borough of Lodi
- Township of Lyndhurst
- Township of Montclair
- City of Newark
- Borough of North Arlington
- Township of North Bergen
- Township of North Caldwell
- Borough of North Haledon
- Township of Nutley
- City of Passaic
- City of Paterson
- Borough of Prospect Park
- Village of Ridgewood
- Borough of Rutherford
- Township of Saddle Brook
- Township of South Hackensack
- Township of South Orange
- Borough of Totowa
- City of Union City
- Borough of Wallington
- Township of West Orange
- Borough of Woodland Park
- Township of Wood-Ridge



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Aerial View of the Passaic Valley Sewerage Commission Facility



**Kenneth J. Lucianin**  
Commissioner

**Thomas F. Flanagan**  
Acting Clerk

**Wayne J. Forrest**  
Executive Director

**Gregory A. Tramontozzi**  
General Counsel



**Wayne J. Forrest**  
Executive Director

“...cuts amounting to more than \$3.1 million and a 0% increase in user charges.”

January 2011

Since my appointment as Executive Director in July of 2010, the **Passaic Valley Sewerage Commission (PVSC)** has been faced with many challenges. Most of my efforts have been concentrated on reviewing all aspects of the agency’s operations, reorganizing the agency and correcting any and all problems, ranging from simple mismanagement to illegal conduct.

In January of 2011, Governor Chris Christie suspended six of the seven sitting PVSC commissioners pending removal proceedings. As a result, all six of the suspended commissioners resigned. When he suspended the commissioners, Governor Christie also issued Executive Order No. 55 which vested most of the commissioners’ statutory powers with the PVSC Executive Director.

With the powers and authority of the commissioners to manage and lead this important agency, I immediately began reorganizing and restructuring the agency and its operations.

Beginning on February 1, 2011 through February 10, 2011, as part of our restructuring plan, 78 employees of the PVSC were terminated and the Special Services Department was eliminated. In total, since my appointment on July 1, 2010 through December 31, 2011, 186 employees were separated from the agency. There were 109 terminations, 56 retirements and 21 resignations. These now-separated employees were being paid more than \$15 million in salaries, not including benefits. In addition, prior to my appointment, the PVSC had approximately 625 employees (down from its all-time high of 758), 91 of whom were paid more than \$100,000.00 per year. One

was paid more than \$300,000.00 per year, four were paid more than \$200,000.00 per year and 10 were paid more than \$175,000.00 per year (the same salary as the Governor of the State of New Jersey). By the end of 2011 and going into 2012, the PVSC now has less than 500 employees, 59 of whom earn more than \$100,000.00 and none of whom earn more than \$175,000.00.

From February 1, 2011 through December 31, 2011, I issued 208 Executive Directives, beginning with the creation of a new Table of Organization, reductions in exorbitantly high salaries and changes to the Code of Ethics to prohibit certain political activities and the acceptance of gifts.

On February 1, 2011, as a result of information that was provided to the New Jersey Attorney General’s Division of Criminal Justice by the PVSC, three top-level officials of the PVSC were arrested:

- The Clerk to the Board of Commissioners, Director of Management Services and Ethics Liaison Officer;
- The Superintendent of Special Services; and
- The Assistant Superintendent of Special Services.

While taking into consideration the economic burdens encountered daily by the taxpayers and ratepayers within our 48 serviced municipalities in our five-county (Bergen, Essex, Hudson, Passaic and Union) district, I developed and introduced, in January 2011, an operating budget with cuts amounting to more than \$3.1 million and a 0% increase in user charges. This was accomplished by conducting a comprehensive line-by-line analysis of where cost

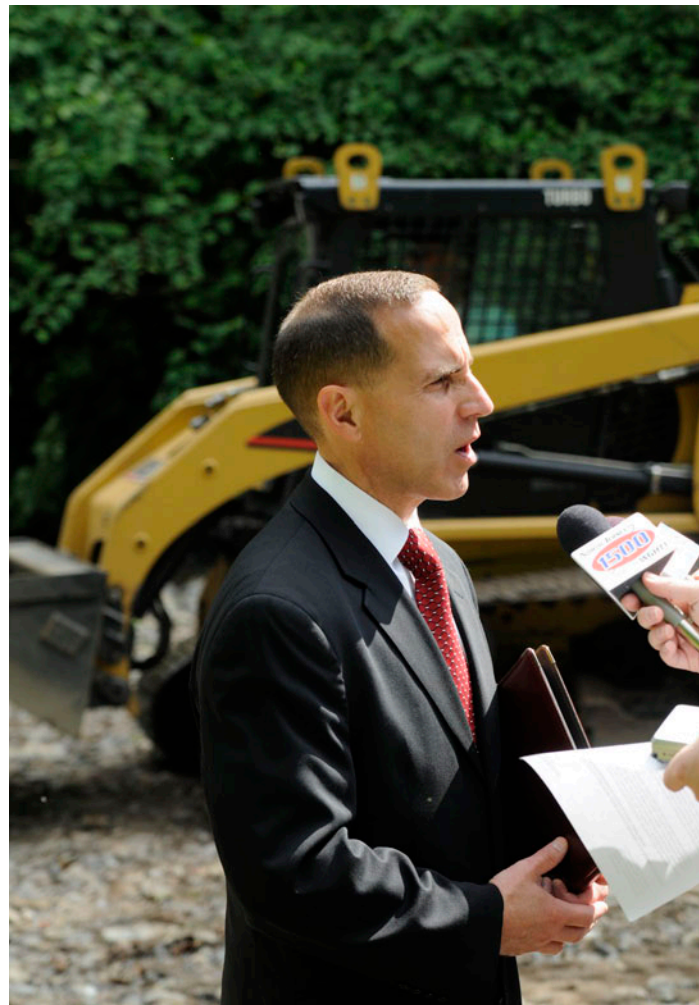


“...in December of 2011, I adopted our 2012 operating budget with further cuts which amounted to more than \$3.2 million and a decrease in user charges of 2.2%.”

December 2011

reductions could be made while maintaining the agency's extremely important mission involving public health and environmental safety. This was the first known instance in PVSC history wherein there was no increase in the user charge. Similarly, in December of 2011, I adopted our 2012 operating budget with further cuts which amounted to more than \$3.2 million and a decrease in user charges of 2.2%. This represented a first-ever known user charge decrease in PVSC history. In addition, for the first time in known PVSC history, along with the adoption of the 2012 budget in December 2011, we established a capital budget.

In order to keep the 48 municipalities in our service district better informed of all aspects of our operation, we



instituted the first-ever PVSC quarterly newsletter, which is distributed electronically to each municipality - and we are issuing an annual report, beginning with this one. We also upgraded our website to make it more informative and, in cooperation with the New Jersey Office of Information Technology (NJOIT), converted PVSC's website address from www.pvsc.com to the State's OIT website at www.nj.gov/pvsc.

As part of our efforts to generate revenue from outside sources, we negotiated with the New York City Department of Environmental Protection and executed an extension to its \$17.1 million contract with the PVSC for two years, beginning in April 2011 through 2013. We also negotiated and executed a three-

year contract with the Bergen County Utilities Authority for approximately \$3.8 million per year with an additional two-year option. (Both New York City and Bergen County transport their sewage sludge to the PVSC by either barge or ship and unload at our docks on the Newark Bay.) Another significant contract we negotiated and executed in 2011 was with the Rockaway Valley Sewerage Authority for \$2.1 million for three years.

After determining that our motor pool personnel were directed by a former PVSC superintendent

“...cost reductions could be made while maintaining the agency's extremely important mission involving public health and environmental safety.”

(presently under indictment) to discontinue the use of municipal and state bid towing services and only to use his personal friend's towing service, I issued a new policy terminating that unlawful practice and reinstating the appropriate procedures. In addition, it was determined that the PVSC also sold a number of our government vehicles, some with relatively low mileage, to that same individual at the direction of that same superintendent for \$50 per vehicle without any open public competitive bidding process. I have since implemented new policies and procedures to sell any unneeded surplus equipment and vehicles utilizing New Jersey State-approved vendors to conduct auctions, including online auctions. I also discovered that the sale of scrap metal, precious metals and surplus motors were neither being sold through a State-approved vendor nor RFP process. This practice was also discontinued, an RFP was issued and a contract has since been properly awarded.

In February 2011, I requested that the New Jersey State Police (NJSP) oversee and evaluate the PVSC Security Department. As a result of the NJSP's review, it was determined that significant changes and upgrades needed to be made to our Security Department and the physical security of our facility. Accordingly, on May 3, 2011, I terminated 11 individuals in the Security Department, including the chief, and transferred two others. I then hired a retired NJSP Major to serve as the new Director of Security, along with other retired sergeants, a lieutenant and a captain as supervisors, and 12 laid-off Newark Police Officers to comprise our

new Security Department. Current Security Department personnel are trained, experienced law enforcement officers, and several are certified Emergency Medical Technicians. In less than eight months of operation in 2011, our new Security Department has: developed a strategic plan; completed numerous upgrades to the physical security of our facility; developed and implemented an already successful Integrity Testing Program; established partnerships with the U.S. Homeland Security and Coast Guard, NJ State Police, and Newark Police and Fire Departments; registered with the State Regional Operations Intelligence Center (ROIC) and the Office of Homeland Security and Preparedness (OHSP) to receive intelligence; and became a voting member of the Water Sector Security Working Group of the OHSP.

On June 27, 2011, I created the PVSC's first-ever in-house Legal Department, which resulted in more than \$1 million in savings in legal-related spending in the second half of 2011 alone. In addition, we adopted the Attorney General's RFQ/RFP process for selecting outside legal counsel and we adopted our first-ever "Special Legal Counsel Guidelines", modeled after the Attorney General's guidelines. Similarly, I discontinued the commissioners' former practice of appointing a select group of engineering firms who would then be awarded contracts. Instead, I developed and implemented a public, open and competitive RFQ/RFP process for every individual project.

On July 11, 2011, a new Chief Financial Officer was hired, who is both a Certified Public Accountant and a Registered Municipal Accountant. Additionally, based on





his background, experience and credentials, he is able to assume many of the functions and duties that were previously contracted for with an outside financial advisor agency.

On August 28, 2011, all of New Jersey was severely impacted by Hurricane Irene. Many utilities throughout the State sustained damage and their customers experienced interruption in their service or complete outages. Although the PVSC also experienced some storm-related damage and other operational

problems, the men and women of the PVSC were able to provide uninterrupted service to all of our customers while treating a record high maximum flow of 727 mgd (million gallons per day) of influent.

As I continued my review of various PVSC functions, I determined it was appropriate to abolish the Industrial Department. The necessary functions of that department were either transferred to the Finance Department (User Charge and Billing Section) or were incorporated into the

newly established Inspection and Compliance Bureau.

In 2011, I terminated an insurance broker previously hired by the commissioners and enrolled all of our active and retired employees in the State Health Benefits Program (SHBP), including prescription benefits, saving the PVSC more than \$2.5 million. We also pursued reimbursements through the Federal Early Retirement Reinsurance Program (ERRP) and received more than \$500,000.00.

In 2011, we issued an RFP for new energy contracts for electricity and gas. We then executed new contracts for both which will reduce PVSC's energy expenditures by approximately \$7 million per year for each of the next three years. In 2011, the PVSC participated in the PSE&G Standard Offer Payments Program. Through this program we received approximately \$5 million. Similarly, in 2011, we participated in the Pennsylvania, Jersey, Maryland (PJM) Electricity Demand Response Program, which provided the PVSC with approximately \$200,000.00 for the year. Finally, through the Large Energy Users Pilot Program sponsored by the New Jersey Clean Energy Program, the PVSC was awarded more than \$426,000.00 for our implementation and use of energy-efficient equipment and technologies.

As a result of an audit conducted by the New Jersey Department of Environmental Protection (NJDEP), in March 2011, the PVSC received the NJDEP's highest rating under its Industrial Pretreatment Program. The PVSC

also received a Platinum Award in 2011 from the National Association of Clean Water Agencies (NACWA) for perfect compliance with its permit. In addition, the PVSC received NACWA's 2011 National Environmental Achievement Award for our Municipal Rebate Incentive Program. As part of this program, for a 12-month period, the PVSC collected more than \$1.9 million for new connection fees, with the assistance of the municipalities in our service district, and disbursed \$195,375.00 in rebates back to those participating municipalities.

The PVSC is in the process of making additional upgrades to its facility after being awarded a loan by the State of New Jersey for approximately \$22 million. The PVSC applied for this loan from the New Jersey Environmental Infrastructure Trust (NJEIT) and funding for this loan will be provided through the 2010 Clean Water Financing Act. The PVSC will use these funds to install new automatic scum removal systems in all of the PVSC's 12 clarifiers. These funds will also be used to upgrade the facility's electrical system to accommodate the new scum removal systems along with improving the sludge withdrawal mechanisms. Also, these funds will be used for plant-wide improvements to increase its wet weather treatment capacity to reduce municipalities' combined sewer overflows to the Passaic River. In compliance with the U.S. Environmental Protection Agency's (U.S. EPA) Pollution Prevention Programs to Reduce Contaminants in CSO's (Combined Sewer Overflows) Sections 7.3 (Methods for Removing Floatables from the Surface of the Receiving Water Body) and 8.1.2 (Public Education Programs), we expanded our River Restoration

Program and our Environmental Educational Awareness Program. In 2011, our River Crews removed more than 700 tons of debris from rivers in our district. In addition, we sponsored 76 volunteer river and shoreline cleanups, including participating in the NJDEP and New Jersey Department of Corrections (NJDOC) "Clean Shores" Program. We also presented 194 Educational Awareness Programs to more than 32,000 students in 109 schools in 2011. We also developed a new water sampling program to be implemented in 2012 for Worldwide Water Monitoring Day.

Our most important asset, however, is our workforce. To ensure we hire only the best, brightest, most talented and skilled personnel for every position, we eliminated the "Commissioners' Rounds List" employment process. Instead, we created an employment application and posted it on the PVSC website for the first time ever. We established a formal, multi-step hiring process that never existed before, which includes advertising available positions, conducting panel interviews, background investigations, drug screening, medical examinations and job-related physical testing.

I hope the actions taken during my first full year as Executive Director will begin to restore the public's trust and confidence in the PVSC, as well as ensure greater accountability of the agency. It is my intent to continue my comprehensive review of every function of this agency to carry out its core mission to improve local ambient water quality.

I feel confident the work accomplished in 2011 will yield great success in the coming years.



“...will begin to restore the public's trust and confidence in the PVSC...”

”





PVSC's treatment facility in Newark. Construction of the original facilities as recommended in the 1908 report was completed in 1924. The original plant contained a 21-mile long interceptor with pumping stations located at Wallington and Clifton, as well as a primary treatment facility in Newark along the western shoreline of the

Newark Bay containing a steam plant pumping station and a 5-mile long outfall that discharged into New York Harbor.

The Passaic Valley Sewerage Commission (PVSC) was established in 1902 by a special act of the State Legislature, N.J.S.A. 58:14-1 et seq. The PVSC was formed as an agency of the State "for the purpose of relieving the streams and rivers," within its five-county district (Bergen, Essex, Hudson, Passaic and Union), "from pollution, and to provide a plan for the prevention thereof..." N.J.S.A. 58:14-2. PVSC's early anti-pollution activities actually predated the adoption of the New Jersey Sewerage Authority Law.

Since the completion of the original treatment plant and interceptor in 1924, numerous plant expansions have been made to increase capacity. In the 1930's and 1940's, two additional sedimentation basins were constructed. In the 1950's and 1960's, the sedimentation basins were mechanized, the steam pumps in the main station were replaced with electric and diesel drives, and their capacity was increased. Sludge handling facilities were added and modifications were made to the grit chambers and screenings facility.

A report completed in 1908 provided the conceptual plan for a primary treatment plant and pumping station to be located in the City of Newark near the Newark Bay and for an intercepting sewer to be built parallel to the Passaic River between the Great Falls in the City of Paterson and



The facility originally provided only primary treatment for an average sewage flow of approximately 150 mgd. Additional construction was initiated in the early 1970's as an important step toward improving treatment, increasing capacity and implementing the U.S. Environmental Protection Agency's (U.S. EPA) requirements concerning chlorination. Those projects consisted of the construction of a grit and screenings chamber, grit and screenings incinerator facilities, chlorination facilities and an Administration and Control Building containing an analytical laboratory.

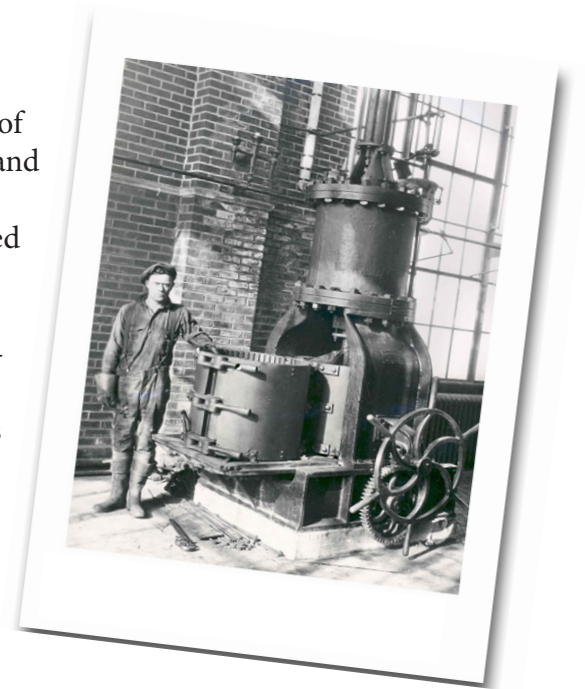
In order to bring the plant into full compliance with more stringent U.S. EPA requirements with respect to water quality, an upgrading to secondary treatment levels was undertaken. Plant design for this upgrade began in 1969, with a 1973 report initiating the preparation of construction drawings and specifications. Field construction

began in 1977 and secondary plant start-up began in October 1981. The new secondary facilities were constructed alongside the original existing primary clarifier tanks. The first few years of secondary plant operation did not have the benefits of the primary settling facilities. After start-up, all flows passed directly into the secondary system while the old primary basins were demolished during the summer of 1982 and new ones were constructed in their place.



Consequently, start-up of the new primary clarifiers in December 1985 resulted in many process and operational changes. Presently, the PVSC services 48 municipalities in Bergen, Essex, Hudson, Passaic and Union Counties with a residential population of about 1.4 million. The plant's design flow is 330 mgd and it is estimated that the PVSC service area represents about a

fourth of the total wastewater generated in all of New Jersey. The 162-acre plant, consisting of properties in Newark, Clifton and Wallington, is the fifth-largest wastewater facility in the United States. It contains more than eight miles of access roads, more than one mile of 15-foot-wide utility tunnels, miles of sewers and storm drains, miles of process pipes, thousands of instruments and valves, hundreds of pumps, and a



leaving only Commissioner Kenneth J. Lucianin. On January 25, 2011, Governor Chris Christie issued Executive Order No. 55 declaring a state of emergency within the Passaic Valley Sewerage District and authorizing and directing the Executive Director to perform all the necessary and appropriate operational functions assigned by law to the commissioners, with some exceptions as set forth in the Executive Order.

450-foot-long bridge over Doremus Avenue. The PVSC is one of the oldest and largest, in terms of operational capability, regional sewerage commissions in the United States and by statute is to be directed by a Board of Commissioners appointed by the Governor and confirmed by the State Senate. However, in January of 2011, six of the seven sitting commissioners resigned,



Kenneth J. Lucianin  
Commissioner






**Operations  
and  
Process Control**



The Operations and Process Control staff work to ensure PVSC continues to meet the required effluent permit limits, despite challenges in handling industrial wastewater, dilute waste and other sources. PVSC has proven it is ready to meet – and even exceed – environmental standards. In 2011, PVSC received its second Platinum Award from the National Association of Clean Water Agencies (NACWA), a national award that recognizes treatment plants with zero violations of their permits to discharge for five consecutive years. In August 2011, Hurricane Irene hit New Jersey, dumping record amounts of precipitation, and the PVSC provided uninterrupted service and treated a maximum flow of 727 mgd of influent, the most in the history of the PVSC.

In 2009, PVSC initiated \$49 million in construction contracts. PVSC applied to the New Jersey Environmental Infrastructure Trust (NJEIT) for low-interest loans and also received \$5 million in the form of a principal forgiveness grant from the American Recovery and Reinvestment Act (ARRA) funds for these projects. Again in 2010, PVSC applied for a low-interest loan from NJEIT and received \$2.5 million in principal forgiveness grant funds through the ARRA stimulus act.

Among the construction projects initiated in 2009 and still ongoing are the purchase and installation of a new thickening centrifuge, improvements to the sludge thickening facility, oxygenation tank improvements, the rehabilitation of PVSC's effluent pumps and installation of a skimming

system for removal of nocardia foam on its final clarifiers.

In 2010, PVSC awarded a contract to transform its influent forebay. The project has been partially funded by a grant from the New Jersey Department of Transportation (NJDOT) and through a NJEIT low-interest loan. Upon completion in 2012, PVSC will increase its ability to treat wet weather flows from the current 400 mgd to approximately 550 mgd.

In an effort to increase the plant's wet weather treatment capacity to 720 mgd, process control embarked on a modeling study of the final clarifiers. A computerized fluid dynamic (cfd) model will enable PVSC to determine structural changes that can be undertaken to allow additional flow through the final clarifier tanks and still meet effluent permit limits.

The Process Control Department has been extensively researching ways in which PVSC can conserve energy and reduce energy costs within the plant. This has been an ongoing effort that PVSC believes will help the environment as well as lower user charges. Due to these efforts, PVSC received \$5 million as part of the Standard Offer Energy Rebate program between 2009 and 2011 for its oxygenation tanks facility equipment upgrades and thickening centrifuge facility.

Line Operations personnel operate, inspect, repair, and maintain both the Wallington and Yantacaw Lift Stations, as well as remove rags, debris, and grit from the hundreds of chambers throughout approximately 186,000

linear feet of main interceptor and 12 branch interceptors within the collection system. The Line Instrumentation personnel maintain the scores of community flow meters by obtaining readings and verifying calibration on a frequent basis. These flow data are used in the calculation of user charges. Satellite Monitoring Stations, located at key locations along the district-wide sewer system, allow PVSC to gather samples from large sewers, to determine baseline characteristics for each area and assist in locating sources of illegal discharges or identify characteristic changes. The Line Operation

Department's staff also operates a sophisticated and advanced camera truck that is used to conduct in-line sewer inspections and manhole assessments. By televising and identifying areas in need of repair or maintenance, PVSC can greatly reduce the possibility of sewer line blockages or failures which translates directly into cost savings related to proper line operation and maintenance. The Line Operations Department is in the process of streamlining and integrating related tasks to improve its efficiency and help keep down the costs related to its necessary functions.





The Engineering Department provides services for analyses, repairs, and improvements of PVSC facilities, including mechanical equipment, electrical systems, heating, ventilating and air conditioning systems, process piping and pumping systems. The Engineering Department also oversees ongoing capital repairs and improvements to the agency's 21-mile main interceptor sewer line and many miles of branch interceptor sewer lines. The department's goals and objectives are proactive, with functions aimed at maximizing equipment performance, reliability and efficiency throughout the plant.

One initiative the Engineering Department has implemented dealt with an Electricity Demand Response Program for partial electricity load curtailments based on electricity grid conditions. The program results in average revenue payments to PVSC of approximately \$200,000 annually, as well as helping to ensure regional electricity grid reliability, reduce wholesale pricing, and reduce carbon emissions by avoiding the need to

dispatch additional electric generating plant capacity. Also, between January 2011 and January 2012, the PVSC received approximately \$5 million from PSE&G through its Standard Offer Payments Program.

Additional cost-saving measures include the execution of new energy contracts for electricity and

natural gas which will reduce PVSC's energy expenditures by approximately \$7 million per year for each of the next three years. The PVSC also employed and incorporated the use of energy-efficient equipment and technologies and was awarded \$426,632.40 as part of the Large Energy Users Pilot Program which is sponsored by the New Jersey Clean Energy Program. In 2010, the PVSC also initiated the design of a heat recovery system on our Zimpro boilers in order to reduce the cost of natural gas consumption by approximately \$250,000 per year.

Keeping energy efficiency a priority, the PVSC replaced the air handling units at the Sludge Thickener Facility with new units containing the latest energy recovery technology, resulting in a savings of approximately \$100,000 annually in energy costs to PVSC. The PVSC also upgraded its Regenerative Thermal Oxidizer Odor Control System, resulting in savings of approximately \$100,000 annually in reduced natural gas energy costs to PVSC. Additionally, the PVSC initiated a study to explore the economic feasibility of utilizing solar panels to generate electricity, which is ongoing.

Additional completed projects that are indicative of the type of work performed by the Engineering Department include upgrades to the PVSC plant security system; the replacement of the 36 mechanical drive mechanisms at the PVSC final clarifier tanks which will significantly increase service life, reliability and decrease maintenance costs; and the replacement of the cooling towers at the Oxygen Production Facility with new units.

The Infrastructure Repair and Overhaul (IRO) Department consists of licensed Electricians, highly skilled and trained Mechanics, Pipefitters, Welders, Machinists, Instrumentation and Control Technicians and HVAC Technicians responsible for managing, maintaining and providing operational service 24 hours a day, 365 days a year of 48,000 maintainable assets available at PVSC.

IRO's primary focus is on preventive maintenance, which has considerably increased efficiency of plant operations by reducing the amount of reactive maintenance work to the minimum possible level, thereby reducing the work order urgency rate. A new method of work planning was implemented, which re-defines the scope of maintenance to include work identification, work planning, work scheduling, work in progress, work documentation, equipment repetitive failure analysis and maintenance of equipment and work history records. IRO performs quality-based maintenance in the plant resulting in increased productivity, equipment reliability and performance. IRO completed 2,310 work orders in 2011.

IRO also manages, assists Operations staff and updates the PVSC SCADA (Supervisory Control And Data Acquisition) system. Providing integrated, centralized, real-time monitoring and process control, the SCADA system is utilized to facilitate supervisory control and monitoring of the electronic, electrical, mechanical equipment and HVAC Building Automation Systems. The SCADA system is a valuable analyzing tool extensively utilized by the Plant Engineering and Process Control

staff. The process status and data are monitored and recorded for analyzing the operation and reliability of the Plant equipment.

Other responsibilities handled by IRO include the calibration and tuning of the Process High Pressure Steam Boilers (800 PSIG) and the Regenerative Thermal Oxidizer Odor Control System to maintain performance and compliance with U.S. EPA air emissions regulations, and preventive and event-driven maintenance of the PVSC main collection system interceptor and combined sewer overflow (CSO) regulator chamber.

IRO is in the process of reviewing and updating preventive maintenance plans generated automatically through CMMS (Computerized Maintenance Management Systems). Preventive maintenance continues to be implemented plant-wide in order to accomplish better availability, reduce downtime and eliminate unplanned equipment shutdowns. In order to further streamline maintenance, IRO partnered with the PVSC Inventory and Asset Management Department to upgrade the CMMS program and make it more user-friendly.







Historically, PVSC has retained outside legal counsel to address the complex legal issues with which the PVSC is confronted on a regular basis, including contract negotiations and related disputes, employment issues, environmental/regulatory concerns, requests for government records made pursuant to the New Jersey Open Public Records Act (OPRA) and litigation involving, among other things, the New Jersey Tort Claims Act and enforcement of PVSC's regulations. In an effort to streamline the process by which it responds to its legal needs, and reduce the significant expense associated with the engagement of outside counsel, PVSC appointed its first in-house General Counsel in June 2011. With the assistance of outside counsel, the newly-formed Legal Department – comprised of PVSC's General Counsel, a paralegal and a legal assistant – will attend to and oversee all of PVSC's multifaceted legal needs.

The Legal Department's first order of business was to revamp the system by which outside counsel are selected and retained. To that end and consistent with the Attorney General's process, Requests for Qualifications (RFQ) for Special Legal Counsel were issued in the following practice areas: (1) Bankruptcy Law; (2) Bond Counsel; (3) Collections Law; (4) Employment Litigation; (5) Environmental Law; (6) General Litigation; (7) Intellectual Property Law; (8) Labor Negotiations; (9) Motor Vehicle Accident Litigation; (10) Real Estate Law; (11) Transactional Law; and (12) Workers' Compensation Litigation.

The PVSC was extremely pleased with the response to its RFQ for Special Legal Counsel. In that regard, the Legal Department received 261 responses, in 12 practice areas, from 81 law firms located throughout the State of New Jersey. Even more gratifying to PVSC than the number of responses submitted was the high quality of the submissions and the knowledge that so many extremely qualified law firms are interested in assisting PVSC with its legal needs. An Evaluation Committee conducted a comprehensive examination of all proposals submitted, and the Legal Department designated approved counsel in its 12 practice areas.

The Legal Department has addressed the issue of how it will manage and supervise outside counsel through the creation of comprehensive "Special Legal Counsel Guidelines" which govern the handling and billing of PVSC legal matters by outside counsel. The guidelines, modeled after the Attorney General's guidelines, are designed to ensure an efficient and collaborative working relationship between the Legal Department and outside counsel.

The establishment of the Legal Department resulted in a savings of more than \$1 million during the second half of 2011 alone. It is anticipated that the PVSC will save more than \$1 million per year by handling its own legal work.



The Finance Department is responsible for managing the financial operations of the PVSC. Major functions of the department include the development of the annual budget, investment of capital, long-term debt management and financial reporting. Daily, weekly and monthly duties include the processing of payroll, accounts payable, billing and accounts receivable and general ledger information in order to generate the financial statements and monthly financial reports. In addition to responding to external requests from financial institutions and rating agencies, the department also oversees

the annual external audit of all PVSC operations. During 2011, the PVSC issued Requests for Proposals (RFP) for banking and payroll services. These services had not recently been put to competitive proposal. After careful consideration, contracts were awarded to J.P. Morgan Chase for banking services and Automatic Data Processing (ADP) for payroll services. Both of these new relationships will employ new technology and will be more beneficial to the PVSC financially.

2010 - 2012 Budgets

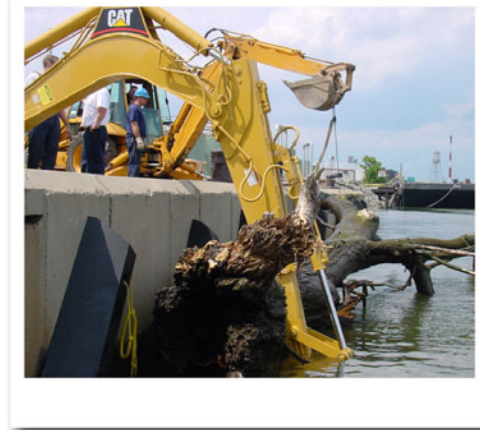
ACCOUNT DESCRIPTION	2010 AMOUNT	2011 AMOUNT	2012 AMOUNT
<b>SALARIES</b>	\$52,170,880	\$48,069,750	\$43,929,386
PAYROLL TAXES AND UNEMPLOYMENT	3,882,360	3,634,100	4,193,411
<b>HEALTH PLAN</b>	18,888,230	17,730,080	15,232,894
PENSION EXPENSES	4,731,190	5,808,550	5,487,242
SUPPLIES, POSTAGE, AND SOFTWARE	1,095,430	940,450	1,237,337
REPLACEMENT PARTS	3,893,400	3,750,570	4,959,609
MATERIALS	5,995,540	5,719,550	5,913,632
<b>UTILITIES</b>	27,927,530	27,664,110	21,835,997
RENTALS	174,010	154,440	152,440
INSURANCE	1,847,420	2,008,600	1,823,750
EQUIPMENT & IMPROVEMENTS	1,176,580	1,044,800	3,650,022
OUTSIDE SERVICES	4,719,080	4,308,720	5,552,962
PROFESSIONAL FEES	1,170,000	1,314,000	1,155,000
GOVERNMENT ASSESSMENTS	1,060,960	1,053,960	1,053,954
BIOSOLIDS REUSE	4,974,100	5,119,540	5,601,083
SUNDRY EXPENSES	860,690	3,782,590	2,992,551
ADVERTISING	99,900	103,250	82,350
INTERCEPTOR LEASE	975,000	- 0	- 0
REAL ESTATE TAXES	700,050	836,950	901,522
RESERVE FOR REPAIRS AND IMPROVEMENTS	396,550	400,000	2,400,000
DEBT SERVICE	27,428,650	27,615,530	29,684,807
TOTAL APPROPRIATIONS	164,167,550	161,059,540	157,839,949
LESS: ANTICIPATED INCOME	(33,966,899)	(30,858,889)	(33,882,601)
<b>USER CHARGES DUE</b>	<b>\$130,200,651</b>	<b>\$130,200,651</b>	<b>\$123,957,348</b>





The PVSC created the Passaic River/Newark Bay Restoration Program to promote the recreational and economic uses of the Newark Bay, the Passaic River and its tributaries. The Program is comprised of three elements - floatables removal and shoreline cleanups, water quality assessment and reduction of combined sewer overflows (CSO's). The PVSC assists volunteer groups including schools, Boy Scout and Girl Scout troops and other community organizations in conducting shoreline cleanups to remove litter and other debris from along waterways within its service area.

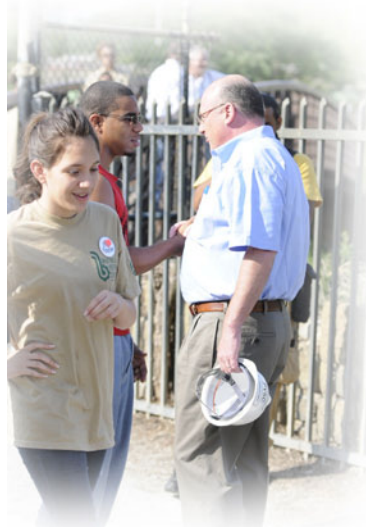
After using grant monies to purchase an innovative 50-foot surface skimmer vessel, the PVSC added floatables removal to the Program. Christened the S.V. Newark Bay, this vessel embarks on daily patrols on the Newark Bay and Passaic River, removing floating debris and litter. The PVSC also has a smaller skimmer vessel which conducts daily



patrols in shallow water that had been inaccessible to the larger vessels. In 2011 the skimming program was expanded by launching the full-time operation of the PVSC Skimmer Vessel Operations and Maintenance Facility in North Arlington, allowing the PVSC to patrol more northern reaches of the Passaic River. To further expand this program, the PVSC will be purchasing a third skimmer vessel in 2012.

The PVSC also conducts "in-house" riverbank cleanups using the services of its employees. These projects are in response to requests for assistance

**Passaic River/  
Newark Bay  
Restoration  
Program**



Commissioner Lucianin and Executive Director Forrest with volunteers at The Great Falls, Paterson



from members of the community as well as governing officials from PVSC member municipalities. PVSC River Restoration crews are deployed to clean and restore specific problem areas within the PVSC service area. The PVSC also partners annually with NJDEP and the NJDOC for an extensive shoreline cleanup as part of NJDEP Clean Shores, a statewide program that removes debris from tidal shorelines with the use of NJDOC inmate labor.

Since the creation of the PVSC's River Restoration Program in 1998, which is charged with preserving and protecting over 100 miles of area waterways, the PVSC has removed over 9,000 tons of debris from the Newark Bay, the Passaic River and its tributaries, and sponsored over 700 individual cleanups along shorelines and in communities. In 2011, PVSC sponsored 76

volunteer cleanups with local schools and community groups, making it the most successful cleanup season to date. In compliance with the U.S. EPA's Pollution Prevention Programs to Reduce Contaminants in CSO's Section 7.3.2 (Skimmer Boats), in 2011, the PVSC removed more than 1.4 million pounds of debris from area waterways.



**Passaic River/  
Newark Bay  
Restoration  
Program**



PVSC's Long-Term Ambient Water Quality Monitoring Program in the NY/NJ Harbor began as a PVSC effort alone, monitoring only the waters of the Passaic River, the Hackensack River, and Newark Bay. In PVSC's interactions with the New Jersey Department of Environmental Protection (NJDEP) and the U.S. Environmental Protection Agency (U.S. EPA) through the NY-NJ Harbor Estuary Program (HEP), it became evident that there is a lack of water quality data throughout the NJ waters of the NY/NJ Harbor Estuary. In order to fill this data gap, PVSC enlisted the New Jersey Harbor Dischargers Group (NJHDG), a consortium of nine sewage treatment agencies in Northern New Jersey, to expand the program to include the Hudson River, Arthur Kill, Raritan River, and Raritan Bay, as well as sites on the Elizabeth and Rahway Rivers.

The NJHDG's program monitors 33 locations throughout the region for a list of conventional water quality parameters: temperature; pH; dissolved oxygen (DO); salinity; secchi depth; total suspended solids (TSS); 5-day carbonaceous biochemical oxygen demand (CBOD-5); total kjeldahl nitrogen (TKN); nitrite; nitrate; ammonia; total phosphorus; orthophosphate; dissolved organic carbon (DOC); chlorophyll-a; Fecal coliform bacteria; Enterococcus bacteria; and E.coli bacteria only in freshwaters. Monitoring is performed for all parameters at each station weekly from May through September, and monthly from October through April.

Passaic River sites are accessed from bridges by PVSC's mobile laboratory and are sampled at one depth in mid-stream. Deep-water sites throughout the Harbor are accessed by PVSC's 27-foot research vessel, the "R.V. Passaic River", and are sampled at two discrete depths (1 meter below the surface and 1 meter above the substrate). Remote tributary sites are sampled from bridges twice monthly in summer and monthly in winter by tributary field sampling crews from Middlesex County Utilities Authority (MCUA), Rahway Valley Sewerage Authority (RVSA), and Joint Meeting of Essex and Union Counties (JMEUC).

NJHDG member agencies contribute to the Long-Term Ambient Water Quality Monitoring Program by providing additional personnel for sampling, by monitoring tributary sites, or by providing laboratory services. All chemical analyses performed on NJHDG Harbor samples are the responsibility of the NJDEP-certified laboratories of the PVSC, Middlesex County Utilities Authority (MCUA), and Bergen County Utilities Authority (BCUA).

The main objectives of the Long-Term Ambient Water Quality Monitoring Program are to develop a data set of existing water quality in the New Jersey portion of the NY/NJ Harbor, and to track seasonal changes and long-term trends in regional water quality. The data collected by PVSC and the NJHDG are utilized by the NJDEP to determine water quality compliance with State Surface Water Quality Standards (SWQS), and has been used to calibrate and

validate water quality models used in the development of Total Maximum Daily Loads (TMDLs). The program has effectively served to eliminate the data gap for the New Jersey waters of the NY/NJ Harbor estuary system by monitoring waterbodies that are not currently monitored by the NJDEP Surface Water Quality Monitoring Network, the United States Geological Survey (USGS) Surface Water Quality Gages, or the U.S. EPA New York Bight Water Quality Monitoring Program. Additionally, the NJDEP has added the Long-Term Ambient Water Quality Monitoring Program to its long-range Water Monitoring and Assessment Strategy, and PVSC has recently been invited to represent the NJHDG on the NJ Water Monitoring Coordinating Council.



**Water  
Quality  
Monitoring**



**Water  
Quality  
Monitoring**





**PVSC  
Educational  
Outreach  
Program**



The Educational Outreach Program was formed to introduce students within the PVSC service area to steps they can take to help protect the Passaic River and our environment. The program also uses the service-learning model by allowing students to take what they learn in the classroom and apply it to an actual stream bank cleanup, further reinforcing the importance of protecting our environment. Educational Outreach staff provide an hour-long presentation about the potential harmful effects our daily actions can have on local waterways. The presentation is free of charge to any elementary or high school (public or private) within PVSC's 48-municipality service area. Each presentation is appropriately tailored

to reach grades K through 12, using PowerPoint and DVD presentations to give students a visual of how careless littering is one of the main components of our waterways' debris. For the younger students, a 12-minute DVD of "Messy Marvin" is shown. The cartoon entertains while teaching children about a "messy" character who learns that his actions can add to the pollution of the waters. The presentation is followed by a hands-on demonstration of a model environment that exemplifies waterways' pollution by everyday activities. For older students, PVSC staff offer videos of the River Restoration Volunteer Program in action. These videos show how young people can play a proactive role in the effort to restore local waters, while also demonstrating what students can expect when participating in one of PVSC's volunteer stream bank cleanups.



Staff recently added the capabilities for students in the classroom to interact live via the Internet with the PVSC Skimmer Boat Captain, allowing students to ask him questions through a webcam as he operates the boat in the Passaic River and Newark Bay. As a result of these presentations, students often inquire about how they can help out and start their own volunteer groups. To date, this program has educated nearly 200,000 students on how they can help protect the Passaic River and our environment. In compliance with the U.S. EPA's Pollution Prevention Programs to Reduce Contaminants in CSO's Section 8.1.2 (Public Education Programs), in 2011, PVSC presented 194 Educational Awareness programs to more than 32,000 students in 109 schools.



**PVSC  
Educational  
Outreach  
Program**







## User Charge and Permit Management

User Charge and Permit Management oversees the PVSC's User Charge system which includes the preparation and billing of municipalities along with tax-exempt, industrial and non-industrial users. This information is obtained by reviewing and processing Industrial User Charge Self-Monitoring Reports and municipal water consumption data.

The department oversees the administrative responsibilities for PVSC regulatory mandates. They also issue all PVSC Sewer Use Permits for both Industrial and Contractual Indirect Discharger (CID) users. Staff receives, reviews and processes both Sewer Use and CID applications and issues Letters of Authorization for the processing of waters other than industrial wastewater such as groundwater, construction and contaminated rainwater.

User Charge and Permit Management ensures that industrial user discharge requirements are met, so that the PVSC plant is protected from upset and pass-through of pollutants. Staff reviews and processes all monthly monitoring reports for determining compliance with federal categorical and PVSC local limits. Personnel initiate Notices of Violation and legal action when necessary to return users to compliance. They also initiate Notices of Violation of PVSC Rules & Regulations, or applicable state and federal regulations.

Other functions include adjusting the Tax Assessed Values (TAV) and issuing Ad Valorem Tax Adjustments for all users located in the Ad Valorem communities, fielding daily calls from customers and municipalities regarding User Charge Invoices and permitting issues, and obtaining all required information relative to the Division for the Open Public Records Act (OPRA). The department is also responsible for the issuance of three Annual Reports to the NJDEP - The Industrial Pretreatment Program (IPP) Annual Report, the Clean Water Enforcement Act (CWEA) Annual Report and the Grace Period Annual Report.



## Inspection and Compliance

The Inspection and Compliance Bureau (ICB) is the regulatory and enforcement branch of the PVSC. Collectively, the ICB ensures that industrial users' discharge requirements are met, so that the PVSC plant is protected from interference and pass-through of pollutants. These efforts have greatly reduced, for example, incoming heavy metals loadings over the last two decades, resulting in an exceptional quality (EQ) or Class A bio-solids product that is beneficially re-used. The PVSC continues to receive the NJDEP's highest rating for audits of its Industrial Pretreatment Program, which the NJDEP routinely conducts.

The ICB inspection staff oversees industrial users for compliance with local, State and Federal regulations by reviewing their pre-treatment system design plans, analyzing compliance reports, sampling industrial discharges and performing on-site inspections. In fact, of the 218 current industrial users alone, the ICB performed over 2,600 inspections and conducted over 3,350 sampling visits in 2011. An on-call Inspector is assigned around-the-clock, which provides for effective and timely responses to spill events or illegal discharge activities. Personnel issue hundreds of Notices of Violation each year, and initiate dozens of legal actions when necessary to return users to compliance. While the ultimate goal of these actions is to ensure compliance, the resultant penalties assessed exceeded \$172,000 in 2011. The ICB assists in the preparation of three separate Annual Reports to the U.S. EPA and NJDEP.

The ICB goes beyond regulatory requirements and incorporates a proactive approach to protecting the treatment works. It institutes non-traditional, innovative methods to

reduce the discharge of pollutants from non-industrial, non-permitted users. The program requires approximately 500 photo developers to utilize silver recovery units, and requires approximately 5,000 food processing establishments to install grease traps or grease interceptors. Both requirements are known as Best Management Practices (BMP's). These users are all inspected each year, and must submit an annual certification that they are complying with the BMP's. Notices of Violation are issued to these users when necessary as well.

ICB staff also review and approve applications for sewer connections, ensuring that these connections are legal and that the treatment works has the capacity to treat the discharges. They processed 481 Connection Fee applications in 2011. Connection Fees are collected to ensure that new dischargers pay their fair share towards the treatment works infrastructure costs. The fees ultimately assist all ratepayers, as PVSC collected more than \$1.9 million in 2011 for these purposes. Our Sewer Connection Municipal Rebate Incentive Program provides for a rebate to municipalities that assist the PVSC in collecting sewer connection fees. Participating municipalities receive a rebate of up to 15% of the connection fees collected in their respective town. This provides them with a revenue stream while ensuring that the PVSC properly tracks sewer hook-ups (fees which help offset user charges). In fact, the program rebated nearly \$200,000 to municipalities in 2011.

Finally, the ICB issues authorizations and Notices of Violation to hauled waste entities that bring non-hazardous wastewater into the PVSC treatment works via truck or barge.







The Safety Department performs a variety of administrative, technical, and professional duties critical to PVSC's mission. Some of these tasks include health and safety audits of plant facilities, planning and promoting safety programs, benchmarking plant safety performance against industry standards, identifying physical and work practice hazards and providing training, guidance, and support for plant staff to eliminate these hazards. Engineering controls, administrative controls, work practice adjustments and/or personal protective equipment are recommended as necessary.

The department focuses on leading indicators to proactively address areas of concern and help prevent injuries from occurring. Extensive employee safety training programs are conducted in many relevant areas such as Confined Space Entry, Control of Hazardous Energy (Lockout/Tagout), Electrical Safety, Hazard Communication, Fire Safety, and more. The Safety Department also provides the services of a full-time Registered Nurse to respond

to medical emergencies, provide assessments, administer vaccinations, and provide health education and wellness information to all PVSC's employees.

The PVSC continued making safety a priority by instituting an Incident Investigation Program to determine root causes of incidents and near misses and installed Hazardous Material Information System (HMIS) and Personal Protective Equipment (PPE) guide posters throughout the facility. The Safety Department also mandated a ten-hour Occupational Safety and Health Administration (OSHA) training course for more than 100 employees, greatly increasing their safety awareness and enforcement of safety rules and regulations.

Through continuous efforts to recognize and eliminate hazards, provide education and training, and foster a strong and supportive safety culture among all employees, the Safety Department helps to achieve PVSC's goal for each employee to be able to return home safely every day.



In the post-9/11 era, the PVSC Security Department is tasked with providing a safe working environment for plant personnel while protecting the fifth largest wastewater treatment facility in the country. As a designated national critical infrastructure, the Security Department employs an overlay approach of physical barriers, uniformed personnel and technology to support its mission.

In order to maintain a more secure facility, the Security Department developed a strategic plan; performed a security needs assessment; began addressing perimeter access control, commercial vehicle access, waterfront access and general operations; registered with the Regional Operations Intelligence Center (ROIC) and the Office of Homeland Security and Preparedness (OHSP) to receive intelligence, and initiated an Integrity Testing Program at PVSC. In addition to the myriad of secure fence line, concrete barriers, electronic gate and door controls and 24/7 video surveillance supported by a well-trained security staff, the PVSC Security Department has partnered with Federal, State, and local law enforcement to assist in their efforts to protect the entire region. Also, numerous structural upgrades have been made to physical security of the plant after receiving recommendations from the NJ State Police Infrastructure Security Unit.

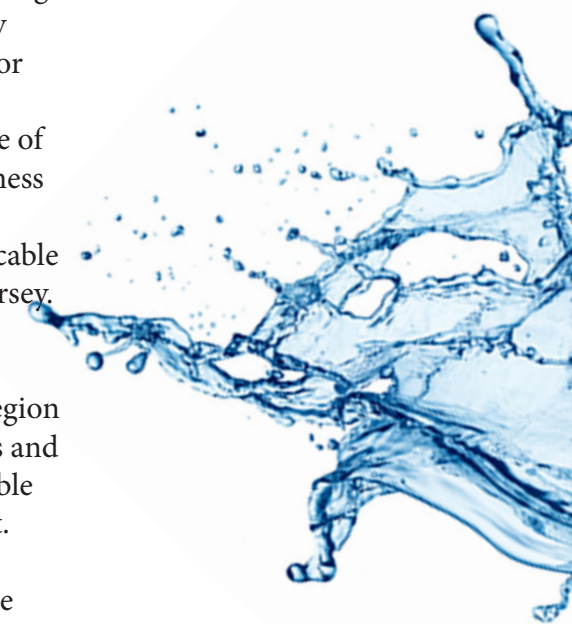
The PVSC's unique location with waterfront exposure to the Newark Bay and its proximity to Port Newark and Newark Liberty International Airport allows for real-time delivery of pertinent information as well as a staging platform for law enforcement assets in the event of a critical incident. A new and robust investigative component incorporated

into the Security Department provides the ability to follow up on and clarify information both within the facility and from outside information sources. A new PVSC identification card to be used in conjunction with our new identification and scanning technology will be completely implemented in 2012 and will provide greater employee accountability.

In order to assist local law enforcement and fire fighters in protecting the NY/NJ Harbor, PVSC has partnered with the Newark Police Department, Newark Fire Department, New Jersey State Police and the U.S. Coast Guard by offering those agencies the use of PVSC's dock facilities for their marine assets. Additionally, PVSC has placed a secure office trailer on PVSC's property to be accessible to and utilized by its law enforcement and fire fighting partners so they can more readily complete their mission of securing the region and protecting its citizens.

The PVSC Security Department embraces its responsibility of assisting in securing our region and state by being a member of the Water Sector Security Working Group, a group tasked under the New Jersey Office of Homeland Security and Preparedness to identify and bring solutions to safety and security concerns applicable to the Water Sector within New Jersey.

The PVSC Security Department remains focused on improving its ability to protect the facility and region by continuously testing its systems and personnel while exchanging valuable information with law enforcement. These enhanced abilities and dedication to excellence have made the PVSC a leading partner in overall security practices.





The Management Information Services (MIS) Department oversees the computer technology infrastructure for the PVSC and facilitates the secure collection, processing, storage, and integrity of all electronic data. The department provides technical assessments and recommendations, coordinates all technology purchases, manages and maintains all computer-related assets, and delivers these services in an efficient and cost-effective manner, while maintaining high availability of systems.

Network security is preserved utilizing redundant firewalls, intrusion detection and prevention, Internet web and email filtering, and anti-virus protection and scanning. Voice, data, and security video is routed over this secure fiber optic Internet Protocol (IP) network, providing fast, reliable, and cost-effective service. Data is backed up and archived in compliance with State and Federal guidelines.

At the hub of PVSC's core business applications is our Work and Asset Management System. This enterprise business suite provides PVSC employees with the corrective and preventive work orders to manage and keep operational the more than 48,000 equipment assets that run this

complex operation. Permits and procedures for confined space entry and the lock-out of hazardous energy sources help keep our employees safe while performing critical maintenance tasks. Inventory control and an integrated contract management and purchasing system assist with the efficient and cost-effective management of our plant.

Other systems that aid in the safe and reliable operation of the plant include Human Resources, Employee Timekeeping / Workforce Optimization, Industrial Pretreatment Compliance, Pollution Prevention, Liquid Waste Acceptance, Laboratory Management, Budgeting and Finance, Chemical Delivery Notification, Geospatial Information System (GIS), and Employee Emergency Notification.

The MIS Department provides these services and systems to meet the day-to-day business requirements of the plant and results in ongoing streamlined operation and reduced operational costs.



**Management Information Services**

The PVSC Purchasing, Records and Inventory Management Department is charged with developing and instituting accepted procurement methods in accordance with prescribed State and Federal laws, the maintenance and organization of PVSC records and archival documents, and the management of the PVSC warehouse facility and general inventory.

Purchasing is responsible for seeking appropriate sources of supply, reviewing and processing all purchase requisitions and stock re-order reports, following up on each order, advertising and performing bid evaluations, conducting RFP processes for professional services, and maintaining contracts for procurement. The Purchasing unit has reviewed an average of over 9,000 requisitions for goods and services per year that were processed into an average of over 8,500 purchase orders annually over the past five years. Also, Purchasing implemented new procedures to sell unneeded surplus equipment and vehicles utilizing New Jersey State-approved vendors to conduct online auctions. As a result of the PVSC's first online auction of

18 older surplus vehicles, the PVSC netted \$35,193.00.

The department strives to improve the efficiency and cost-effectiveness of procurement by participation in the New Jersey State Cooperative Purchasing Program and the Morris County Cooperative Pricing Council. PVSC has also joined with six other wastewater treatment plants in Northern New Jersey to form the North Jersey Wastewater Pricing System in order to seek ways to combine purchasing power and lower costs. The PVSC serves as the lead agency of this cooperative.

The Inventory and Asset Management unit of the department uses the Oracle Work and Asset Management system to track work orders more effectively, procure and inventory spare parts more efficiently, and better manage its overall efforts. The unit maintains a \$7 million dollar inventory of spare parts and general inventory that resides in a 42,000-square-foot warehouse located within the plant. Presently the asset management system tracks the repair and bill of materials for 48,000 assets for the entire organization.



**Purchasing, Records and Inventory Management**





Since the resignation of six of the PVSC’s commissioners and the issuance of Governor Christie’s Executive Order No. 55, the Human Resources Department has concentrated its efforts on ensuring that PVSC is hiring “the best and the brightest” when filling open positions. It does this through a more comprehensive hiring process, which was not the case in the past, including the development of an employment application and posting it on the PVSC website, the use of a comprehensive panel interview process, a thorough medical examination, background investigation and job-related physical testing to help make sure that the people selected to work at PVSC are able to meet all of the requirements of the job. Once an applicant is selected and begins employment, they participate in a two-day orientation process, and Human Resources oversees the Personnel Evaluation process to ensure that individuals are properly and consistently evaluated in terms of their job performance. A Title Review Committee was also developed to properly determine appropriate job titles, compensation and job descriptions for all positions at the PVSC.

Human Resources successfully transferred active and retired employees to the State Health Benefits Plan (SHBP), saving over \$2.5 million in costs. In addition, Human Resources applied for and received reimbursements totaling \$517,547.19 from the Federal Early Retiree Reinsurance Program (ERRP), and another \$176,000 from the Federal

Retiree Drug Subsidy (RDS) program.

Human Resources has also issued a new Personnel Policy and Procedures manual, including amending the “Sick Time” section to establish a call-in procedure and compliance and integrity checks to prevent misuse of sick time and provide better accountability, and is actively involved in other agency-wide policies and procedures such as the Ethics Policy, Dress Code Policy, Harassment Policy, etc. On the medical front, Human Resources actively manages Family Medical Leaves to meet employee needs, and also manages other types of leaves such as military leaves. Through the active involvement of the department, it is able to closely monitor leaves while still maintaining employee confidentiality.

The department also administers both an initial drug testing program for new employees and a random drug testing program for PVSC’s safety-sensitive employees and for those drivers who hold a commercial driver’s license (CDL). It is also actively involved in disciplinary matters, collective bargaining negotiations, and any complaints lodged by current or former employees. Along with our attorneys, Human Resources represents PVSC in all employment-related hearings or suits before the courts, the Public Employment Relations Commission (PERC), the Equal Employment Opportunity Commission (EEOC), the Department of Labor, and similar bodies. Also, the PVSC Code of Ethics was abolished and the State Code of Ethics was adopted.

Human Resources instituted a competitive summer intern program which included publically-advertised interning opportunities, seeking interns with appropriate education and skills (i.e., engineering and chemistry students) and prohibiting the employment of employees’ and commissioners’ family members, a

group that previously comprised the majority of PVSC summer interns.

The department remains closely attuned to any and all matters which involve the hiring, evaluation, promotion, transfer, discipline or termination of the members of the employee work force.



“  
Our most important asset, however, is our workforce.”

Wayne J. Forrest  
Executive Director



The PVSC Laboratory is an NJDEP-certified Wastewater Pollution Testing Facility. It routinely performs hundreds of analyses on various industrial, surface water, and in-plant samples, and meets all quality control and quality assurance requirements of said certification. The lab results are critical to the proper and efficient operation of the PVSC Plant, and ensure Plant and Discharger compliance with permit limits. Since the PVSC remains a contributing member of the New Jersey Harbor Dischargers Group (NJHDG), water quality analyses of the Passaic and Hackensack Rivers, Newark Bay and other local waterways are also performed for the NJHDG by the PVSC Laboratory.

At this time the PVSC Lab staff includes a lab director, five chemists and nine technicians trained in



analyses of environmental samples, pertaining specifically to wastewater treatment. The PVSC lab analyzes for cyanides, nitrogens, BOD, CBOD, COD, TSS, VSS, TS, VS, O&G, Petroleum Hydrocarbons, metals, and microbiological counts on a regular basis and other tests when needed. On a monthly basis, the PVSC Lab performs over 7,500 individual analyses.




**Laboratory**

The PVSC Liquid Waste Acceptance program (LWA) manages non-hazardous hauled waste into the PVSC treatment works via truck or barge. Trucks and barges from approved, outside entities deliver wastewaters and sludges to the PVSC, not only providing a site for these materials to be properly treated, but also generating bills for the collection of significant revenue that is used to offset user charges.

Since its inception, LWA has continually grown, and currently accepts approximately 200 trucks per day, as well as two barges per week. LWA has served clients from 11 different states, extending from Maine to Virginia. Inter-local / inter-agency agreements also assist other agencies in dealing with proper waste disposal. LWA Permits are issued to industrial customers where applicable. Enhancements made to LWA in 2011 include the addition of a second discharge point at the PVSC

dock which allows two ships to offload simultaneously, and upgrades to the potable water sludge receiving station.

In 2011, LWA billed \$19.8 million, an increase of more than \$1.3 million (6.62%) over 2010. LWA recently negotiated with New York City DEP and executed an extension to its \$17.1 million contract with the PVSC for two years and also negotiated and executed a contract with Rockaway Valley Sewerage Authority for \$2.1 million for three years. LWA also negotiated and executed a three-year contract with the Bergen County Utilities Authority for approximately \$3.8 million per year with an additional two-year option.




**Liquid Waste Acceptance**

The PVSC Facilities Department is responsible for maintaining all PVSC buildings and grounds including all snow removal and internal road maintenance of the 162-acre site, as well as recycling operations, non-contractual infrastructure repairs and heavy equipment operations. In a continuous effort to reduce the budget, over the past few years PVSC's maintenance staff has taken on work that had previously been performed by outside contractors. These include hauling of the grit material to the

landfill for disposal and office cleaning services. The Facilities Department also maintains PVSC's Motor Pool, which includes 295 motor vehicles and pieces of heavy equipment. In 2011, a computerized card access fuel dispensing system was installed, thereby eliminating the need to have personnel perform the function and optimizing the tracking of the agency's fuel usage.



**Facilities**



## Awards presented to the region's leader in environmental progress:

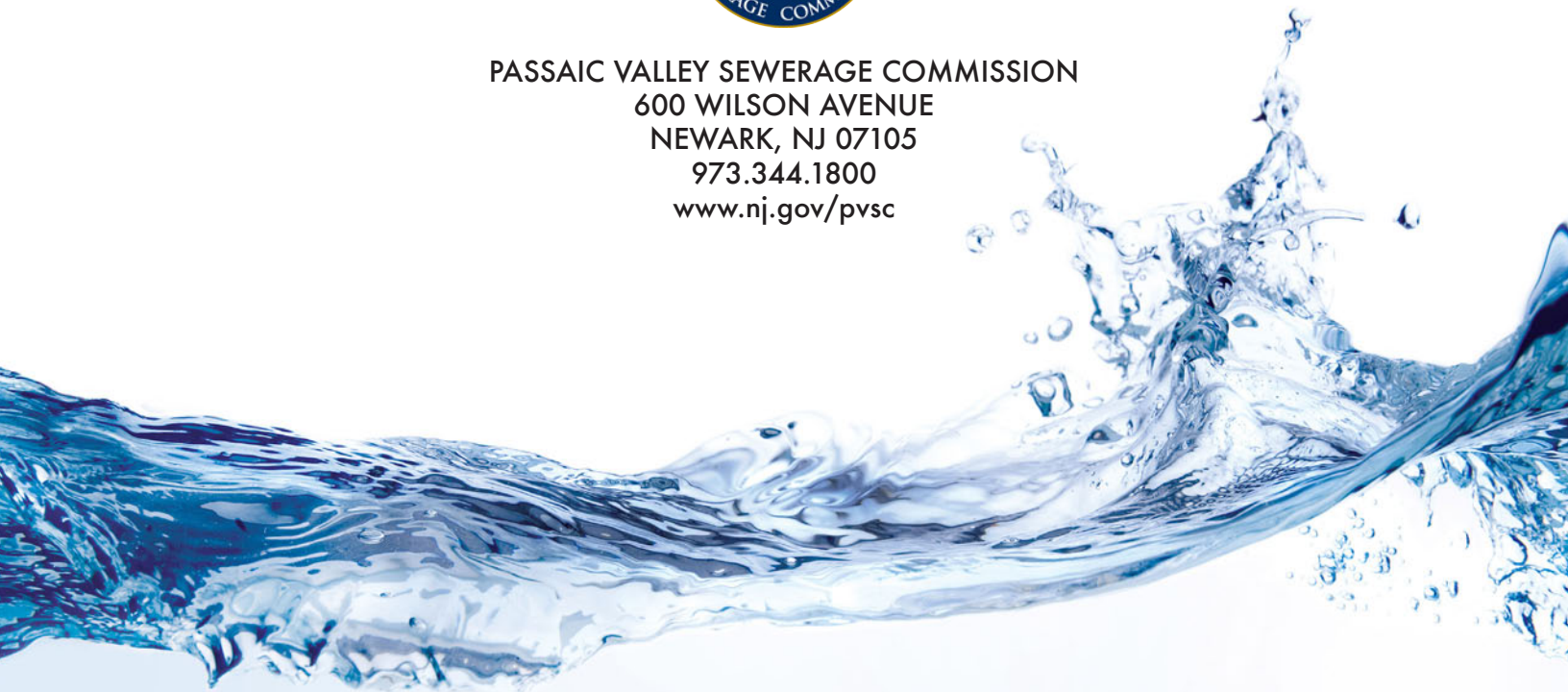
- In July 2011, PVSC received its second Platinum Compliance Award from the National Association of Clean Water Agencies (NACWA), a national award that recognizes treatment plants with zero violations of their permit to discharge for five consecutive years.
- NACWA also recognized PVSC with two additional awards in July 2011, presenting PVSC with an Operations and Environmental Excellence Award for its Municipal Rebate Incentive Program. Between July 2010 and June 2011, the PVSC collected more than \$1.9 million through this program and disbursed \$195,375 in rebates to our participating municipalities. In addition, the PVSC received the NACWA's Public Service Award in 2011.
- Since 2000, PVSC has received eight Gold Compliance Awards for zero permit violations in a one-year period and one Silver Compliance Award for less than five violations in a year.







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Prepared by:  
PVSC Office of Public Affairs  
In Cooperation with:  
New Jersey Office of Information Technology  
Printed In-House by the PVSC