

Passaic Valley Sewerage Commission sets upgrades for sewage facility

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The agency that handles sewage for dozens of town in North Jersey announced it will make more than \$3 million in improvements to its Newark treatment facility that could translate into annual energy savings of half a million dollars.

The Passaic Valley Sewerage Commission's four energy-saving projects would upgrade some of the key equipment that treats sewage, as well as heat and cooling systems in the facility's administration building.

The low-lying facility on Newark Bay was hit hard by Superstorm Sandy, and the agency decided to use the rebuilding process to include more energy-efficient upgrades, said Michael DeFrancisci, the agency's executive director. Some of the projects qualify for reimbursement through the state's Clean Energy Program, which provides financial incentives to residents, agencies and businesses to improve their energy efficiency.

"This is a tremendous savings, money that can be reinvested into other areas of the plant," said Kenneth J. Lucianin, an agency commissioner.

The agency also said it will spend \$572,000 to upgrade the part of its facility that converts noxious fumes containing organic solvents, hydrocarbons and odors into water vapor and carbon dioxide through a process called thermal oxidation. New motors and other equipment will allow more energy-efficient operation of fans in the facility, the agency said. About \$360,000 of the cost will be covered by the state's Clean Energy program, and the rest through the commission's capital budget.

Another project will upgrade the pumps used to send treated sewage — or effluent — out of the plant to an outfall in New York Harbor. The \$1.7 million project would be covered with \$427,000 from the state's Clean Energy Program and the rest with a low-interest loan through the New Jersey Environmental Infrastructure Trust.

The state will also pay for a \$100,000 energy audit for the entire Newark facility. The commission has awarded the audit contract to CDM Smith.

Finally, the agency will install geothermal heat pumps in the main administration building to recover and transfer heat or cooling within the building and utilizing the facility's wastewater effluent. This \$800,000 upgrade eliminates the need for traditional boilers or chillers, the agency said. This project may be reimbursable by the Federal Emergency Management Agency as a result of Sandy plant rehabilitation work, commission spokeswoman Hollie Gilroy said.

The energy efficiency upgrades should save the facility \$500,00 a year in energy cost, officials said. The commission's budget for fiscal 2013 is nearly \$160 million.

The sewerage commission has bigger upgrades in mind, however. It has asked FEMA for nearly \$800 million in grants to harden the Newark facility against the impact of future intense storms. Sandy knocked out power to the facility for days and flooded equipment. As a result, millions of gallons of raw sewage spilled into the Passaic River.

The commission's facility is the state's largest and the fifth-largest in the country. It handles wastewater treatment for nearly 1.5 million residents in towns along the Passaic River in Bergen and Passaic counties as well as the city of Newark — about a quarter of all the state's sewage.

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