

Sewage Treatment Plant Meeting – January 14, 2015

Presentation Slides are available at [//LPRA.clubexpress.com/docs.ashx?id=196450](http://LPRA.clubexpress.com/docs.ashx?id=196450)

Approximately 30 people attended the meeting, including Legislator Mary Jane Shimsky, Legislator Ken Jenkins, Councilperson Michael Sabatino, and Dayana Gomez, Legislative Aide representing Legislator Perez who was ill. Representatives from the County Department of Environmental Facilities (DEF) included Commissioner Thomas Lauro, First Deputy Commissioner G. Michael Coley, Plant Superintendent Jeff Bryant, and Supervisor of Maintenance Erwin Vazquez.

The meeting started with Dayana reading brief remarks prepared by Legislator Perez about the \$2.5 million included in the County capital budget for a pocket park on the waterfront. It is not known yet how much money will be required.

Legislator Mary Jane Shimsky, Chair of the Legislators Infrastructure Committee which has oversight over the Department of Environmental Facilities, spoke and talked about the work the Infrastructure Committee does and her commitment to making sure our needs are met. A Ludlow resident asked a question about sewage diversion from New Castle and what was happening with those efforts. She said nothing had yet come before her committee.

Commissioner Thomas Lauro delivered a presentation covering the agenda we requested, beginning with an update on the Odor Mitigation Projects. Phase I of the HVAC improvements is 98% complete. The new system was put into operation prior to last summer, but the final components are expected to be wrapped up by March 2015. Phase II was put out for bid in Q4 of 2014, as expected, with bids due in February and construction expected to begin this summer. In answer to a question about the potential impact on odors due to the project, the Commissioner said there was not expected to be any increase in odors since Phase II involves replacing equipment that is indoors. He said they would be reassessing the potential impact once the contractor was selected and they walked through their project plans. Phase II is expected to take 1 to 1.5 years to complete. The funding request to the Legislator for Phase III is planned for Q3 of 2015.

Commissioner Lauro emphasized that they include odor reduction as a factor in other improvements being made at the plant. As an example, they are looking to replace the gravity belt thickeners that are used to thicken the sludge and reduce its volume. The new technology reduces the surface area of the belts and they expect this will also contribute to a reduction in odors, although this is not classified as an odor reduction project.

The Commissioner then reviewed the Hydrogen Sulfide (H₂S) monitoring efforts. There are 9 monitoring stations and the threshold they use as an indicator of problems is 5 parts per billion. In answer to a question about the height of the monitors, the Commissioner said that some are 6-7 feet off the ground and others are on the deck or about 10 feet from the ground. I asked the Commissioner if they could look at raising the odor monitor at the south end of the plant to be on top of the digester and he agreed to do so. Given there seem to be more odor complaints to the south and southeast of the plant, this may help better detect odor issues affecting this area of Ludlow as well as the Leake and Watts and Mount St. Vincent campuses.

I also asked Commissioner Lauro if the County would undertake a follow-up odor study when Phase III is complete and he agreed that it would be a good idea to do so. He also said they are looking to replace the current monitors with more up-to-date equipment.

Commissioner Lauro then reviewed the 2014 flow and other performance data. This included the average monthly flows, with the month of May having the highest average flow of 107 MGD (Million Gallons per Day) and an annual average of 80 MGD. He reiterated that the permitted flow is 120 MGD based on a 12-month rolling average. He also provided a copy of the peak flows each month, which is posted on our website ([//LPRA.clubexpress.com/docs.ashx?id=197601](http://LPRA.clubexpress.com/docs.ashx?id=197601)). The maximum flows ranged from 124 MGD in August to 280 MGD in December.

Commissioner Lauro then addressed the methane gas produced by the plant operations and currently being flamed off in three different burners. While we commonly refer to it as methane, the correct term is digester gas and it is about 65% methane with the remainder carbon dioxide (CO₂). The plant is in the process of replacing one of the engines driving the blowers used to pump air for plant operations. The new engine will drive a generator and will use digester gas as the primary fuel with natural gas as the back-up fuel. This engine will be operational in March and is expected to generate 40% of the electricity required to run the entire plant while decreasing the amount of digester gas flared off. In addition, the plant has a 5-phase project to replace the other diesel/digester gas dual fueled engine driven blowers with cleaner, more efficient natural gas/digester gas dual fueled engines and new energy-efficient turbo blowers. By the end of the project, they expect to be able to generate 60-70% of the plant's power needs. The goal is to eliminate the need to flame off the digester gas. This work is required in order to meet the Title V consent order with NY State Department of Conservation to eliminate the use of diesel fuel at the plant.

A Ludlow resident asked about installing solar panels. Commissioner Lauro said one roof does have solar panels, but it is first-generation equipment and needs replacement. Other roofs have equipment on them that prevents the installation of solar panels.

Commissioner Lauro asked for neighborhood reaction to two proposals that are being discussed. One was an inquiry from the City of Yonkers regarding burning food waste from the city schools. Residents in the audience expressed concern about odors released from the food wastes and the trucking involved in bringing it to the plant. The other proposal was to burn spent de-icing fluid (propylene glycol) from the Westchester County airport. It currently goes to the Blind Brook plant but it is the smallest plant and they don't have capacity to use all the fuel it provides. Residents in the audience expressed concern about the trucking required to bring the fluid to the plant, as well as potential storage requirements given the seasonal peaks.

Commissioner Lauro then summarized the current violations and consent orders. This include the Title V consent order connected to the diesel powered engines, a fine for missing a storm water sample, and others not directly in Yonkers, but part of the overall district (e.g. the Tarrytown force main break). He then discussed the fact that they are going to begin to do flow monitoring on the Hudson side of Westchester, similar to that already underway on the Long Island sound. Municipalities operate under a

theoretical cap of 150 gallons/capita/day of inflow and infiltration (I&I), however there is no municipality that is currently meeting this standard. The flow monitoring will occur over two years and will result in municipalities having to address their I&I issues, but the effort will take a minimum of 5 years. Commissioner Lauro said that half of the flow coming to the plant is non-sewage. A ½ inch rain fall that is short but intense can give rise to a combined sewage overflow event at the plant. When this occurs, the sewage does get primary treatment, but is discharged directly into the Hudson River instead of going through the secondary treatment processes at the plant.

Commissioner Lauro addressed the question of what the County DEF is doing to plan for sewage and wastewater treatment needs in Westchester County over the next 20 years. Among the programs underway are Vulnerability Analyses for all county facilities, planning for the best use of wastewater residuals, and an Asset Management Program that allows careful assessment and monitoring of the assets in place in order to assure timely maintenance and replacement.

Commissioner Lauro finished by addressing the question of other issues that will impact the flows to the Yonkers Wastewater Treatment Plant. He noted that the former General Motors site in Sleepy Hollow has a site plan that calls for 345,000 gallons per day, which will result in a noticeable impact on the plant daily flows. When the General Motors Plant was in operation it generated 560,000 gallons per day, so the new development will generate lower flows, but the General Motors Plant has not been in operation for years. Commissioner Lauro contrasted these flows with the expected flows from North Castle that will be 120,000 to 140,000 gallons per day.

Follow-ups for Sewage Treatment Plant Working Group/Board of Directors

- Schedule a plant tour in the spring/early summer with the Department of Environmental Facilities (DEF)
- Contact City of Yonkers regarding manhole cover maintenance to ensure the carbon filters are being replaced on schedule
- Research propylene glycol burning to better understand the proposal Commissioner Lauro discussed
- Ask Councilman Sabatino to follow-up on Commissioner Lauro's report of a City of Yonkers request to burn school food waste at the plant
- Follow up with the DEF on Commissioner Lauro's statement that they would consider movement of the H₂S monitor at the south end of the plant to the top of the digester
- Follow-up with Legislators Perez and Shimsky and DEF regarding funding for follow-up Odor Study upon completion of Phase III of the Odor Mitigation projects