

Monongahela Basin

Overflow Control Facilities Demonstration Project Monongahela Basin Working Group March 12, 2007

Attendees

Larry Oleksa, Munhall Borough
Donna Dreshman, Citizen
Davitt Woodwell, Pennsylvania Environmental Council
Frank Carr, Mon Valley Initiative
Bob Macey, Allegheny County Council, District 9
Peter Wray, Sierra Club
Paul Eiswerth, Pennsylvania DEP
Richard Votedian, Munhall Borough Council
Patrick Earley, Allegheny Co. Economic Development
David Terrick, Marcegaglia
Greg Morgan, Swissvale Redevelopment Authority
Jean Warren, Whitaker Borough
Jim Hannan, West Mifflin Municipal Authority
Greg Scott, Chester Engineers/Munhall Borough
Ray Bodnar, Munhall Borough
Karl Seig, West Homestead Engineer

Presenters:

ALCOSAN staff: Arletta Scott Williams
Dave Borneman
ALCOSAN consultant: Greg Heath, Metcalf & Eddy

Presentation Overview

- Arletta Scott Williams, Executive Director of ALCOSAN, welcomed the members of the Working Group, thanked them for their participation, and explained the purpose of the meeting. Ms. Williams invited participants to introduce themselves.
- David Borneman explained that ALCOSAN provides wastewater treatment services to 83 communities, including the City of Pittsburgh, serving a population of almost 900,000. Mr. Borneman outlined the wet weather sewage overflow issue. He explained that combined sewer systems carry both sewage and storm water. During wet weather, excess water overloads the sewer system and results in sewage overflows into area creeks, streams and rivers. Sewage overflow must be controlled to ensure rivers that are safe for recreation and attractive for development as well as to comply with State and Federal environmental regulations. Mr. Borneman described the Overflow Control Facility demonstration project area and presented a series of potential project sites identified by the technical team.

- Greg Heath, of Metcalf & Eddy, presented an overview of the Combined Sewer Overflow technologies:
 - Screening and disinfection facilities which control floatables and bacteria in overflows;
 - Swirl/vortex facilities which control floatables, solids, and bacteria in overflows;
 - Underground tanks which store and treat overflows; and
 - Ballasted floc facilities which control floatables, solids, and bacteria in overflows.
- Mr. Heath explained that the consultant team is in the process of developing facility alternatives. In order to propose treatment facilities, the team must analyze the fit between the range of technologies and the siting options. That analysis involves the following steps to:
 - Assemble data for sizing technologies, including peak flows, overflow volumes, range of storm sizes and design/sizing criteria;
 - Determine the size of the various technologies;
 - Develop layouts for the various technologies;
 - Determine if the layouts “fit” the sites;
 - Assess the vertical layout of the various technologies; and
 - Assemble preliminary site data such as land use, ownership, zoning, future use, Brownfield status, access and suitability for Overflow Control Facility use, and potential impact on nearby uses.
- In order to further explain the process of analyzing the fit between technology and site, Mr. Heath presented a case study of the analysis undertaken to show the fit between a swirl/vortex facility and the site along Ravine Street. He presented a matrix showing a summary of the fit of the various technologies on the site relative to 0, 1, 2, 4, and 7 overflows per year. The matrix outlined whether, relative to those overflows, the technology would not fit, might fit, or probably would fit. Mr. Heath also presented a summary of all sites, their sizes, and their fit with the various technologies.
- Before inviting comments and questions, Mr. Heath presented the next project steps. He explained that the next round of Working Group meetings would focus on the evaluation and comparison of alternatives.

Questions/Comments

- Arletta Scott Williams fielded the following questions and comments from the Working Group members:
 - What is the volume of the flow in the New York City project versus the volume of flow in our case?
 - *The New York City overflow control facility was built as a demonstration project and includes three types of swirl/vortex units. They were tested over a range of flows.*
 - The New York City case study is totally underground; what sort of odor control system was employed?
 - *No odor control system was employed, although it is ventilated. Based on the modeling for the facility, the New York Environmental Protection Agency did not require odor control for the facility.*
- Will there be a choice in the kind of facility (technology) that gets built? Who makes the decision?
- *The consultant team will develop costs and performance measures for all of the sites and technologies to be able to identify the most cost effective solution(s). The decision will be made by ALCOSAN together with*

regulatory and other stakeholder input.

- How does ballasted floc work?
- *This technology uses a microsand that attaches to the wastewater solids and settles the solids at a greatly accelerated rate.*
- Would you envision marrying two technologies such as storage and ballasted floc?
- *That is a possibility.*
- Since the technologies do not fit on the current configuration of the Ravine Street site, will that site be eliminated?
- *There has been no final decision yet, but, unless there's a way to expand the boundaries, that site is unlikely.*
- Marcegaglia is unwilling to grant access to their site (west and east of the building) given they have plans for future expansion.
- Does the overflow control facility have to be close to the river or could it be higher up Ravine Street?
- *Ravine Street gets steep quickly, so it might be expensive to site the facility further up.*
- What is the contingency plan?
- *We are looking at the overall system. Overflow control facilities would be one aspect of the comprehensive strategy to bring the system into compliance.*
- Munhall may look favorably at redeveloping the Ravine Street site in conjunction with the sewer tunnel reconstruction.
- Is there currently a large line/tunnel across the Monongahela?
- *There is currently an 18" line. A new larger pipe would be needed to cross to the Carrie Furnace site.*
- There is a vote coming up in Congress soon to make Carrie Furnace a national park. Is ALCOSAN prepared to build the overflow control facility in a national park?
- *We may need to treat the Carrie Furnace side of the river. There were plans ten years ago that proposed that overflows on the north side of the Mon would go to ALCOSAN's Woods Run wastewater treatment plant, but we would reexamine that if a river crossing is needed. It should also be noted that the facility can blend into almost any setting. For example, in Washington, D.C., some CSO control facilities may go in national park land.*
- The entire Carrie Furnace site is not proposed to be a national park. What can be built over these facilities? Could an office building be built over it, for example?
- *There are obvious implications for digging, repairs, etc. that might preclude a building on top of the facility. We also need input from the Health Department and the Department of Environmental Protection on the level of treatment. We are seeking a long-term solution.*
- There is a cost associated with "masking" or blending. Because nothing is built on the Carrie Furnace site yet, there is concern that there won't be any blending, dollars would be saved, and it would be up to future development on the Carrie Furnace site to mask or blend.

- *ALCOSAN is very sensitive to development plans, historic status, etc.*
- *Is there the political will to look at more sites?*
- *Yes.*
- *What is the timeline for construction of this project?*
- *It would be at least two years from the end of the study to the start of construction.*
- *Why were the particular sites for the demonstration project chosen in the Monongahela and Allegheny basins?*
- *These sites were chosen because of each area's emphasis on riverfront development. They were chosen for the biggest "payback," with high visibility, recreational uses, and place a spotlight on these areas.*
- *Is it possible to install two smaller facilities on two sites rather than one larger one?*
- *This is not preferred, but we may need to look at more options. In fact, although we are on schedule, if nothing works, the project could stop.*
- *If this project stops, Munhall may be forced by the Department of Environmental Protection (DEP) to move ahead with a 42" line in the tunnel in advance of the ALCOSAN project. This month, Munhall will be running a video through the tunnel to learn its conditions. Staff of DEP has stated that they are willing to delay the tunnel sewer work to coordinate with the overflow control facility. However, if the ALCOSAN project is delayed, Munhall must move ahead with the sewer work.*
- *Time is of the essence for Munhall. Could the site that is currently too small be part of an economic redevelopment package to make it happen?*
- *As of now, there is too little detail to rule out sites on a technical basis; we will complete the evaluations, keeping the sites in play for now.*
- *What types of deliveries, hauling, etc. do these overflow control facilities require? What is the impact on traffic, road capacity, etc.?*
- *Deliveries vary depending on the selected alternative. We do not expect any major impacts on traffic and/or road capacity.*
- *Are these facilities staffed 24/7?*
- *None of these facilities would be staffed 24/7. The amount of staff varies by technology. Most of the facilities are not staffed in dry weather. People are on stand by for deployment in wet weather. The ideal wet weather facility is simple, rugged, and dependable.*

FOR MORE INFORMATION CONTACT:

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