



THE GATEWAY ENGINEERS, INC.

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October 12, 2012  
C-17749-1208

ALCOSAN  
3300 Preble Avenue  
Pittsburgh, PA 15233

ATT: Tim Prevost, P.E.  
Manager of Wet Weather Programs

RE: Comments to the ALCOSAN Wet Weather Report  
Borough of Emsworth

Dear Tim,

On behalf of the Borough of Emsworth we reviewed the ALCOSAN Wet Weather Report, we have the following comments:

1. Section 1.3 Page 1-9 reads as follows – “This WWP addresses the elimination of sanitary sewer overflows and the control of combined sewer overflows from ALCOSAN’s Conveyance and Treatment Systems, including overflow structures located at the points of connection with the municipal collection systems. The Plan does not directly address the elimination or control of overflows within the municipal collection systems. However it provides for the hydraulic capacity to accept additional wet weather flows from the municipalities which may be conveyed to the ALCOSAN Conveyance and Treatment System pursuant to municipal feasibility studies to be complete under separate compliance orders”

Comment: The affordability analysis indicates that not all projects can be completed under the Selected Plan, and therefore not all connections from the municipal systems to the ALCOSAN system will be updated. How will additional flows sent to ALCOSAN be handled if the Municipalities update their systems, but ALCOSAN does not?

Current conditions at O-15 cause the lines connecting O-15-EMS-PS and O-15-EMS to surcharge and ultimately cause basement backups within Emsworth. The current \$0.5 million in proposed projects in Emsworth are to allow the flow to run unrestricted to the structure at O-15. If this structure is not upgraded with a higher capacity, the larger diameter sewerlines will still surcharge and defeat the purpose of any improvements planned in the Emsworth sewage collection system. Emsworth may need to consider an alternative to install grinder pumps and/or backflow preventers to protect against basement flooding rather than the current plans for upsizing if the Recommended Plan is approved by PADEP and the USEPA.



2. Section 9.3.3 Page 9-80 reads as follows – “In some cases, even after the follow-through coordination was completed, information from a particular municipality was still incomplete, was judged to be unreliable or a preferred control strategy could not be clearly identified. In these cases, the basin planner assumed a control strategy, assumed a level of control and the associated costs, and/or identified areas within the existing municipal sewer system that had adequate hydraulic capacity to convey peak wet weather flow to the ALCOSAN system and where no capital improvements or control facilities were required.” This same assumption is stated throughout the report.

Comment: ALCOSAN has acknowledged that Emsworth has provided a clearly identified plan for the municipal collection system.

3. Section 10.1 Page 10-2 reads as follows – “This 2026 Plan assumes municipalities will implement all of their planned improvements by 2026 to eliminate municipal SSOs and control municipal CSOs by 2026, bringing substantial improvement to local tributaries streams.”

Comment: The affordability analysis indicates that not all projects can be complete under the Selected Plan, and therefore not all SSOs will be eliminated in areas where no improvements are being made by ALCOSAN. How will these SSOs be handled? If every municipality decides to convey flows to ALCOSAN but no work is being completed in the basin, will new or increased SSOs be created?

Although we do not anticipate new SSOs in Emsworth, the proposed plan does not eliminate nor reduce the frequency of basement backups in Emsworth. SSOs may still occur if backflow preventers and/or grinder pumps are installed.

4. Section 11 indicates throughout that Municipalities will start construction immediately following the approval of the Feasibility Plans.

Comment: If the Municipalities complete their construction projects prior to ALCOSAN’s projects, how will the additional flows be handled? If ALCOSAN’s line cannot (due to not being constructed or not being part of the Recommended Plan) accept the flows, Municipal flows could create new hydraulic issues to their systems or downstream Municipalities.

If no improvements are planned for the ALCOSAN line along the Ohio River, if LROC upgrades or eliminates capacity restrictions, Emsworth may receive additional basement flooding issues as a result of increased flows from LROC entering the already overloaded O-15 structure. Is this being addressed?



5. We understand that there are currently no projects affecting Emsworth as part of the ALCOSAN Recommended Plan.
6. The assumption for \$210 annual cost for municipal improvements appears high for Emsworth's \$0.5 Million in construction costs, however this amount will be further verified as part of the Emsworth Feasibility Study financial analysis. In addition, Emsworth will need to verify the impact of no ALCOSAN project and if a reduced scope for Emsworth will be requested from the regulators based on the Recommended Plan and the remaining associated basement flooding issues that will not be alleviated by Emsworth's planned projects.

If you have any questions or need further information or clarification, feel free to contact us.

Sincerely,  
THE GATEWAY ENGINEERS, INC.



Ruthann L. Omer, P.E.  
Project Manager – Feasibility Study

cc: Borough Council  
Cathy Jones, Borough Secretary  
Robert McTiernan, Borough Solicitor