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**THE MCCANDLESS TOWNSHIP SANITARY AUTHORITY**  
VIA CERTIFIED MAIL /RETURN RECEIPT

Ms. Arletta Scott Williams, Executive Director  
ALCOSAN  
3300 Preble Avenue  
Pittsburgh, PA 15233-1092

**RE: THE MCCANDLESS TOWNSHIP SANITARY AUTHORITY  
MTSA COMMENTS ON THE ALCOSAN WET WEATHER PLAN**

Dear Ms. Williams:

The McCandless Township Sanitary Authority is in receipt of the ALCOSAN Draft Wet Weather Plan and respectfully offers the following comments with respect to that document:

We understand the plan does not eliminate all discharges but targets controls to those discharges that would appear to preclude attainment with water quality standards. Although other parameters are discussed the stated primary objective is the attainment of fecal coliform standards for primary recreational contact. The plan does not answer the question of whether water quality standards will be achieved following the investment in \$3.6 billion or an investment of \$2.2 billion under the alternatives to be implemented in by 2026. If not, will further local investments be required to address the remaining significant sources of fecal coliform.

We are concerned that there is no federal or state participation in funding of this huge program. This will be financed by banks or bonds to be paid back by rate payers. It is not clear in our minds as to the degree that economic benefits of such large infrastructure expenditures would remain in Allegheny County.

The plan does not adequately address recreation of the rivers with respect to fecal coliform levels. If the majority of the use is secondary contact, the plan fails to argue for less stringent fecal coliform standard limits. The recreational survey is disappointing as it fails to identify the number of annual recreational users of the region's rivers and creeks who would potentially benefit by this \$3.6 billion control program.

Significantly, the ALCOSAN plan does not provide an end point for the region's sewer compliance expenditures. If performance standards are not met then additional investment is required. Although the implementation of the plan is said to carry to 2046, the control facilities must be in place by 2026 for SSO control. It is also not clear how course corrections are to be made with respect to the communities to accommodate future contingencies.

The recommended plan only implements some of the facilities of the selected plan as the initial phase. Unless ALCOSAN can control its system hydraulics and provide conveyance at all points of connection, the communities whose point of connection hydraulics cannot be controlled will not realize the benefits of their investment in upgraded sewer facilities. In this case, any upstream capacity enhancements would result in greater volumes delivered to the points of connection and increase the frequency and volumes of overflows at those points.

ALCOSAN correctly points out that there is insufficient time for implementing the selected plan. Given the scope and magnitude of the recommended plan, there is also the potential for schedule and budget issues to arise. As Table 9-80 shows the Consent Decree timeline is atypical of other metropolitan Wet Weather plans compliance timeframes. The question is how this region was issued a compressed schedule given the protracted negotiations and spending millions in legal fees.

The recommended plan does not address two of the larger points of discharge to the Allegheny River- Washington Boulevard and Pine Creek. It is hard to understand why the conditions leading to the recent and past tragedies at the Washington Boulevard area will not be addressed for more than a decade.

There is also a potential point of inconsistency between the ALCOSAN 2-year event regional level of control and other, higher levels of service requirements that may be needed or desired by customer municipalities. We did not see how these will be reconciled under the plan.

The coordination problems that existed and continue between the ALCOSAN CD and ACO/COA facilities studies schedules are an example of the disconnect between the service area and the ALCOSAN efforts. Consequently, ALCOSAN expects local regulatory agencies to establish firm and enforceable flow rate projections at each ALCOSAN point of connection, and will be used by ALCOSAN to establish the basis of design for all ALCOSAN improvements. How are flow reduction efforts to be incentivized when there are potential penalties? As the same ratepayers will foot the bill, isn't there a mutual responsibility for ALCOSAN and the Service area communities to right size facilities?

ALCOSAN use of AAES Class 4 standards means that estimates carry a +50%/-30% accuracy. By those criteria, it could be argued that \$3.6 billion cost of the selected plan might actually be 50% higher of actual. Our own sensitivity/cost analysis indicates that there exists certain inherent bias with the costing tool assumptions that appear to result in greater deviations in single point estimates. The study also makes extensive use of single point estimates where use of a range of likely cost outcomes is better practice, given the present uncertainties.

Cost numbers used for secondary satellite plants at Lowries Run, Pine Creek and elsewhere do not seem credible. From our recent experience, it is difficult for us to believe that a 5 mgd SBR satellite plant will cost \$141 million even factoring in condemnation land costs and future inflation.

ALCOSAN's need for organic loading is an apparently important and determining factor in its evaluation of secondary satellite plants. It is not clear from the plan that satellite bacteria and floatable controls were considered in tandem with Alt 3F-Mod SSO as a long term control scheme beyond 2026.

We share ALCOSAN's concern on its ability to obtain sufficient funding and successfully manage such a large scale project within a tight time frame. The limited number of contractors nationally with the capabilities needed to execute large tunnel projects would also exert an upward pressure on prices and would likely impact implementation.

The plan heavily relies on large tunnels and this creates a high potential for unforeseen conditions to cause over runs based on the local and national tunnel project experience.

We see a challenge in not only building the tunnel system but also maintaining it. The challenge that ALCOSAN faces will be cleaning debris from an active 12 foot or larger diameter tunnel located 90 feet underground. It seems that the additional tunnels amplify ALCOSAN's existing tunnel maintenance issues which have reduced capacity because of accumulated debris already observed in the existing deep tunnel system.

The regional nature of the ALCOSAN plan affordability analysis obscures the real household financial impacts by spreading the municipal costs over the whole system. In reality they would fall unevenly depending on the individual municipal system upgrade requirements. Therefore some poorer communities may bear disproportionately heavy financial impacts due to their system upgrades. However, this cannot be determined from the report. This factor may also complicate scheduling if combined system municipalities over the 2% threshold similarly avail themselves of the CSO regulation.

ALCOSAN Selected Control Plan Alt 3F-Mod BAL relies on expanded centralized treatment with an expanded conveyance system that includes new tunnels. All three alternative "half a loaf" plans basically mix and match facility components for similar outcomes with similar water quality outcomes in 2027. All assume that the municipal system improvements will be implemented by 2026. However in choosing among competing plans, cost only comprises 30% and WQ 25% of the ranking system for alternatives yet the remaining 45% of evaluation points are attributable to other considerations. This obviously provides great subjective latitude in the selection process.

The plan schedule leaves the municipal improvements on the same compressed schedule while providing ALCOSAN with relief. The Municipal and ALCOSAN schedule should coordinate rather than run on parallel tracks to ensure the ALCOSAN improvements are in place and fully functional in a manner consistent with the municipal program of upgraded collection and conveyance systems.

If the plan narrative is any indication, MTSA is disappointed that Regional and Sewershed Satellite Treatment facilities did not receive a fuller consideration as a stand alone plan. There are many potential advantages to a plan that uses distributed satellite treatment to control wet weather events such as:

- Additional surge capacity could be incorporated into plants by providing an extra basin in either the SBR plants or above ground or in-ground tanks.
- Building new sanitary collection systems and updating existing systems using proven technology utilizing local available work forces and contractors.
- Building new treatment plants uses proven technology with local contractors.
- New plants are at ground level and cause less disruption to build, operate and maintain.
- Distributed sanitary collection and treatment systems provide local facilities with quick response to localized wet weather events.
- They require fewer, new, long-distance, sanitary sewers.
- They do not require new deep tunnels and the many uncertainties in building and maintaining them. The cost for these proposed tunnels, dwarf all other costs in the ALCOSAN plan.
- They would free up capacity in the ALCOSAN plant
- They would free up capacity in the ALCOSAN interceptor sewers.
- They would potentially cost less than the ALCOSAN Plan.

- Money for the necessary work would be spent locally, providing jobs locally and benefit our local economy.
- This approach stimulates our economy with the money raised from our residents in our community and the money stays in our community.
- The plan can be implemented incrementally with greater flexibility on a sewershed basis.

However, since we were limited to choosing among the three alternatives, Alt 3F-Mod SSO would be preferred as it avoids tunnels, controls all SSOs, and presents a more flexible scheme of distributed facilities. This addresses the needs of the greater part of the ALCOSAN service area: the plan points out that roughly 17 percent of the area is served by combined sewer systems (where wastewater and storm water runoff are conveyed through a single sewer pipe system) whereas 52 percent of the ALCOSAN service area is served by separate sanitary sewer systems. The plan also carries the most potential for the most beneficial use of source reduction by CSO communities. Importantly it eliminates "illegal" SSOs thus avoiding third party lawsuits while offering comparable WQ benefits to other alternatives.

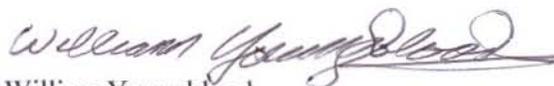
In the future, should ALCOSAN's program stall for financial or political reasons, the improvements to city sewers and the only ALCOSAN treatment plant, being last on the schedule, may never occur. In the meantime, the outlying communities will have upgraded collection and conveyance systems at their rate payers expense contributing to a system that is incomplete and unable to accommodate the flow during wet weather events and may actually result in greater overflows.

It is ironic that after investing more than \$50 million in engineering and monitoring, ALCOSAN is relying on chalk and bobbin methods to measure overflow activations. Recording level loggers are available for less than \$1500. Given the importance of post implementation evaluation, remote reading loggers would appear a better cost effective choice for documented monitoring purposes.

The McCandless Township Sanitary Authority appreciates the opportunity to comment on this important project. If there are questions or you want to discuss our comments further please feel free to contact me.

Sincerely,

**THE McCANDLESS TOWNSHIP SANITARY AUTHORITY**



William Youngblood  
Executive Director

cc: MTSA Board of Directors  
David McGuigan, US EPA Region III  
Geoffrey Butia, ACHD  
Sam Harper, PADEP  
Tobias Cordek, Town of McCandless  
Ambrose Rocca, Borough of Franklin Park  
Charles Perry, Girty's Run Joint Sewer Authority  
Donald Newman, P.E., Buchart Horn Inc.