

COMMENTS ON *ACCIDENTAL WASTEWATER DISCHARGE RESTORATION PLAN: BREAK OF 42" SEWER FORCE MAIN AT NW 15TH STREET AND I-95, POMPANO BEACH, FL*

On January 31, 2019 APTIM provided a Restoration Plan that is to address the impacts due to the accidental wastewater discharge due to the break in 1 42" sewer force main in Pompano Beach. The following comments are offered in response to the draft for agency review plan.

- The initial effort of the plan should be to estimate the extent of the potential influence of the spill on the canal system. This effort is proposed to be completed by examination of fecal coliform and turbidity data collected by the City of Pompano Beach (COPB) and Broward County Environmental Protection Department (BCEPD) on a daily basis. No documentation is offered in the plan to define the means which these data will be used to estimate the extent of the influence of the spill within the canal system.
- The proposed plan fails to recognize that the appropriate bacteriological analytes should have included E. coli in the freshwater portions of the canal system and Enterococci in the portions of the canal system with higher conductivity. Also, the plan fails to recognize that the beyond the bacteriological issues caused by the spill that another major effect would likely occur due to the decomposition of the organic matter and the resulting reduction in dissolved oxygen. No DO data have been collected nor envisioned in assessing the extent of the spill effects.
- Another significant shortcoming in the proposed plan is the lack of recognition of the effects of the spill on nutrient concentrations in the canal system. Excessive nutrients often result in reduced DO and the increased probability of the development of harmful algal blooms.
- The plan proposes to use sediment core sampling, or if this method prove infeasible, use a dredge to determine the extent the effects of the spill on bottom sediments. There is no documentation as to how the post-spill organic matter would be discriminated from pre-spill accumulated organic matter. Also, there is no mention as to the number of either core or dredge samples would be taken to achieve this task. Given the expected spatial variability in the sediment characteristics this is a significant shortcoming and results in the very likelihood of a defensible sediment removal plan. Also, information regarding the total amount of organics due to the spill, their distribution, and thickness will be necessary to derive an effective removal plan. No documentation on how this information will be provided by the proposed sampling plan can be found.
- The proposed sediment removal method can be especially difficult to apply and there is no mention as to the likelihood of obtaining permits for this purpose.