

DEC COMMENT No.1:

DEP did not commit to a particular floatables control technology for HP-024 and did not commit to any floatables control for HP-023. With respect to HP-024, the Department needs additional assurance that floatables control for the outfall is feasible and requests that a preliminary engineering report or predesign site investigation report be submitted within 18 months of approval of the LTCP. The report shall confirm that the floatables control is feasible and provide specific information on the possible sites and technology to be used. With respect to HP-023, the Department requests that DEP conduct further field studies to confirm the quantity of floatables discharges from this outfall and include that information in the preliminary engineering report for HP-024

DEP Response:

DEP agrees to provide a preliminary engineering report for Outfall HP-024 within 18 months of approval of the LTCP. Regarding the field studies to confirm the quantity of floatables discharges at Outfall HP-023, DEP notes that Outfall HP-023 has an LTCP baseline average annual overflow volume of 123 MG and an average annual activation frequency of 40. Within the Hunt's Point system, Outfall HP-023 has the 7th largest annual overflow volume, and 5th largest annual activation frequency. While DEP maintains that Outfall HP-023 is not a significant source of floatables, particularly in the context of other outfalls with substantially greater overflow volumes within the Hunt's Point system, DEP agrees to conduct a field study of floatables at Outfall HP-023. DEP has considered a range of options for conducting such an investigation, as follows:

1. ***Install temporary net to capture floatables.*** This approach would involve constructing a temporary net in the existing regulator, downstream of the weir in the tide gate chamber, and then quantifying the floatables captured during a series of storms. A netting frame could potentially be installed in the stop log grooves in the tide gate chamber. However, if debris clogged up the nets, there would be no opportunity for flow to bypass the nets, leading either to increased HGL upstream of the nets, or structural failure of the nets. If a single net were to be installed in one of the two sets of stop log grooves, blinding of that net would still create a potential hydraulic restriction. The Massachusetts Water Resource Authority attempted this type of approach for quantifying floatables in CSO discharges. The approach proved to be very labor-intensive, and ultimately unsuccessful due to repeated structural failure of the nets. Given the risk of HGL impacts and previous experience, this approach is not recommended.
2. ***Install a temporary floating boom.*** This approach would involve constructing a temporary floating boom in the Hutchinson River at Outfall HP-023. After a CSO discharge, material captured by the boom would be quantified. The collection system model could be used to develop estimates of the volume of overflow associated with each observed event. This approach would be contingent on the feasibility of suitably anchoring the temporary boom to the shoreline. If construction work is required in the Hutchinson River to install piles to anchor the floating boom, the design and permitting process for this construction would likely extend the implementation schedule beyond 18 months. The approach to quantification of material captured in the boom would need to be developed, as well as an approach to staffing the work. However, installation of a temporary floating boom may be a potentially feasible approach for temporarily quantifying floatables at Outfall HP-023.

3. **Install a digital camera to visually record observed floatables.** *This approach would involve installing a digital camera adjacent to the outfall that would be wired to activate during wet weather, when a CSO discharge is likely. Floatables quantities would be qualitatively assessed, using an approach similar to the floatables condition rating system currently used in the DEP's Floatables Monitoring Program. Drawbacks to this approach include the susceptibility of the camera to vandalism/theft/weather damage, and the inability to adjust the field of vision during the storm. For these reasons, this approach is not recommended.*

4. **Deploy staff to take video of discharge during storm.** *Under this approach, field staff would deploy to the outfall with a portable video camera and record the discharge. Mobilization of field staff would follow procedures similar to those being followed by the LTCP team for the field sampling programs, where rainfall is monitored for potential storms of a size sufficient to cause a discharge at that outfall. Staff would have the flexibility to record from different angles and perspectives to best record the conditions during the discharge. Floatables quantities would be qualitatively assessed, using an approach similar to the floatables condition rating system currently used in the DEP's Floatables Monitoring Program. Comparisons could be made of conditions just upstream and just downstream of the discharge. The collection system model could be used to develop estimates of the volume of overflow associated with each observed event. This approach would be contingent upon field staff being able to safely view the discharge during day-time only storm events, and a staffing plan would need to be developed. This alternative appears to be a second potentially feasible approach to quantifying floatables at Outfall HP-023.*

In summary, DEP agrees to conduct a floatables quantification study at Outfall HP-023, and has identified two potentially feasible approaches. DEP anticipates the first task of the floatables study will be to refine the approach to floatables quantification. DEP prefers that the floatable quantification for Outfall HP-023 be a stand-alone study, and not linked to the preliminary engineering report for Outfall HP-024. Hence, the floatables quantification study would not impact the milestones for the Outfall HP-024 LTCP alternative. In addition, DEP proposes to conduct the floatables study during the recreational season period of May 1st through October 31st for a single season.