Solving Philadelphia's Litter and
Combined Sewer Overflow (CSO) Floatables Discharge Problems

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The City, as part of Appendix C of the PaDEP-Philadelphia 6/1/11 Consent Order and Agreement (COA), is required to continue implementing EPA's CSO Nine Minimum Controls (NMC), including NMC #7 Pollution Prevention Programs to Reduce Contaminants in CSOs.

EPA's 1995 CSO NMC Guidance document (Chapter 8) outlines 10 nonstructural options that EPA encouraged CSO cities to consider in addressing solids and floatables pollution prevention. These 10 NMC #7 techniques are:

- Street Cleaning (more frequent in high litter areas)
- Public Education Programs
- Solid Waste Collection and Recycling (including trash receptacles, more frequent pick-ups in litter problem areas)
- Product Ban/ Substitution (fast food packaging)
- Control of Product Use
- Illegal Dumping
- Bulk Refuse Disposal
- Hazardous Waste Collection
- Water Conservation
- Commercial/ Industrial Pollution Prevention

Philadelphia has not adequately considered EPA's 1995 guidance for NMC #7 floatables pollution prevention because the City was under the mistaken impression that the City did/ does not have a CSO floatables discharge problem. This is what the City said in 1995:

> *"Pollution prevention programs can help to reduce the amount of contaminants and floatables that enter the CSS* [Combined Sewer System]. *Such measures include street sweeping, catch basin cleaning, litter control, public education, etc. Philadelphia has implemented a number of pollution prevention programs and established city ordinances that address these concerns. This section presents an overview of the City's existing pollution prevention methods."*
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> *"The effectiveness of these programs* [City's existing NMC #7 efforts] *is demonstrated by the lack of any reported receiving water impacts related to CSO discharges. However, modifications to these programs may be considered if the DRBC or PWD's proposed Floatables Control Monitoring Program identifies any receiving water impacts in the future."* Philadelphia 1995 CSO Implementation: page 7-1.

In 1995, Philadelphia was apparently not aware of any negative receiving water impacts from City CSO outfall discharges. In 2003, the City's Visual Stream Assessment of the Tacony Creek documented extensive trash in and along the Creek. While the City clearly knew about trash in the Tacony ï Frankford Creek in 2003, the City did not make the connection between CSO floatables discharges and creek trash conditions.

The Cityôs 1995 ***no CSO floatables discharge problem*** assessment is repeated in the Cityôs Oct. 2010 Memorandum concerning the T-04 Netting Facility. In the Oct., 2010 Memorandum, the City states:

> *ñAlthough no formal analysis has been conducted on the ratio of organic matter to floatables collected, visual inspection and historic field notes show that the nets mostly collect leaves and very little floatables like cans or bottles. This is mainly because most of the floatables that get in the wastewater system are removed by existing catch basins before they get to the outfalls, so the majority of what the nets collect is organic matter.ò*
> Oct. 2010 Memorandum, Page 6 of 10.

In fact Philadelphia still did not make the CSO floatables connection in the Cityôs 2013 Updated Nine Minimum Controls report.

The Cityôs CSO floatables discharge judgment seems to be that Philadelphiaôs trapped inlets prevent floatables from getting to the CSO outfalls so Philadelphia does not have a floatables discharge problem. The City has used the lack of reported receiving water impacts to confirm the Cityôs *no CSO floatables discharge problem* judgment.

In the past year, Philadelphia-EPA III-PaDEP have been notified of potential Philadelphia CSO floatables discharges and negative receiving stream impacts to the Tookany-Tacony-Frankford Creek.

I first advised the City about my finding evidence of floatables below City CSO outfalls in a 3/18/13 email and later in presentations to the Cityôs Trash Task Force at their May, June and July, 2013 meetings. I notified EPA III about my Philadelphia CSO floatables discharge concerns on 10/3013 and EPA Washington, DC on 1/20/14. I have subsequently updated EPA III, PaDEP and the City about my TTF creek trash findings.

EPA III ï PaDEP - Philadelphia need to re-examine the Cityôs CSO floatables control approach under NMC #7 in light of the observed trash immediately downstream of 10 City MS4 and CSO outfalls in the TTF watershed. Nonstructural approaches like focused frequent street cleaning, additional trash cans, and frequent trash pick-ups in problem areas in high litter problem areas as well as City-wide product bans and/or fees on plastic bags ï plastic bottles ï Styrofoam cups are all options outlined in EPAôs NMC #7 guidance. The City needs to assess the cost versus potential CSO floatables discharge reduction benefits of these nonstructural approaches.

In light of the Tookany-Tacony-Frankford creek trash downstream of City CSO findings, I request that EPA III ï PaDEP ï Philadelphia conduct a ñdue diligenceò re-assessment of Philadelphiaôs NMC #7 programs and develop an appropriate nonstructural litter - floatables reduction plan which would include routine CSO outfall and in-creek floatables monitoring. A timeline for the implementation of the Cityôs NMC #7 re-assessment, reduction plan and floatables monitoring should be included in the Cityôs upcoming CSO permit renewal.