

From: [Dave Doeblar](#)
To: [Stormwater2020](#)
Subject: Stormwater TAC - Examples of other state MS4 permit language regarding TRASH / PLASTICS
Date: Friday, May 28, 2021 10:11:57 AM
Attachments: [Stormwater Rulemaking Comment - BBMHC 2-24-21.pdf](#)
[EPA ms4 trash compendium april 2021.pdf](#)

Hi Stormwater TAC team – On the April 28th stormwater TAC meeting, I posed a public question whether this body will be discussing any additional focus or requirements to address plastic trash through MS4 stormwater systems (both design and maintenance). I received an answer and a task which I am responding to below.

1. TAC STATED “As of April, there is no planned discussion on this topic”. I request that you poll the TAC and ask to make trash and marine debris a topic before the TAC ends. If you need an excellent speaker, I recommend Romell Nandi – the EPA’s “Trash Free Waters National Program Lead” (Office of Wetlands, Oceans, and Watersheds - Partnership Programs Branch) nandi.romell@epa.gov. Romell has been giving a series of webinars specifically on this topic. This TAC has an opportunity to address a significant worldwide marine debris problem in which stormwater is a significant conveyor (the California Water Board showed that **40% of plastic debris enters their water bodies through Stormwater systems**). As an additional benefit, many of the solutions that will address plastic trash will also address nutrient loads caused by natural debris as it decays inside the stormwater systems.
2. TAC ASKED ME “to provide specific examples of changes that the DEP Stormwater TAC could implement”, so I have compiled and condensed the specific items from the 2 attached/linked files with specific data points of relevance.
 1. **STORMWATER RULEMAKING COMMENT – BBMHC 2-24-21.pdf** : Our original recommendations based on lessons learned here in Miami-Dade County fell into 3 categories: (ATTACHED and can be downloaded from <http://publicfiles.dep.state.fl.us/dworm/draftrulesdocs/stormwater/comments/Comments%20By%20BBMHC%202-24-21.pdf>):
 1. **Stormwater Treatment Performance Standards / Design** : MS4 permittees must design a Stormwater strategy to prevent or capture plastics larger than 5mm (the size of a cigarette butt) and can include education, policy, street sweeping, retention or beginning, middle, and end of pipe pollution controls.
 2. **Maintenance and Schedules** : a) Current MS4 permit guidance requires the inspection and maintenance of structural controls and roadways for trash and debris ‘to prevent clogging or impeding flow’, but doesn’t treat plastics and garbage as the nuisance and pollutants that they are. b) All MS4 permittees must create a baseline assessment of 100% of their stormwater infrastructure and pollution controls to determine minimum and appropriate maintenance schedules to keep the pollution controls below the manufacturers recommended effectiveness capacity
 3. **TMDL’s (Voluntary or Mandatory) for impaired waterways** : Waterways which are determined to be impaired by plastic and garbage should be required to

progressively monitor and achieve annual reductions of trash and plastic discharges through a TMDL (Voluntary or Mandatory) from an established baseline until a final numeric target of zero trash and plastic discharge is attained. This action is required pursuant to Florida's Minimum Water Quality Standards.

2. **EPA MS4_TRASH_COMPENDIUM_APRIL_2021.pdf** : 'Trash Stormwater Permit Compendium' from the EPA includes specific language from other state MS4 permits that can be dropped into Florida DEP's MS4 permits, as this document was developed SPECIFICALLY for MS4 permit writers in review process' just like this. In my cursory review of the current rules, the below items would be additions. (*ATTACHED and can be downloaded from https://www.epa.gov/sites/production/files/2021-05/documents/ms4_trash_compendium_april_2021.pdf*). Items from the EPA's Trash Stormwater Permit Compendium that could be easily introduced:

Floatables Management Program - Design an Overall Plan

- The Permittee shall develop a floatable and settleable trash and debris management program as part of the Stormwater Management Program Plan. The objectives of the floatable and settleable trash and debris management program shall be to develop a methodology to determine the loading rate of floatable and settleable trash and debris, including land-based sources, from the MS4 to waterbodies listed as impaired for floatables in the MS4 areas, and to assess and implement strategies to reduce floatable and settleable trash and debris to waterbodies. The program included in the SWMP in the first permit cycle shall be designed to accomplish the following: 1. Evaluate the Permittee's existing programs including best management practices and structural and non-structural control measures for floatable and settleable trash and debris, and their efficacy, based on existing information, and compare them with the best available technologies identified for control of floatable and settleable trash and debris to waterbodies listed as impaired for floatables in the MS4 areas; 2. Identify technological advancements and best available technologies for floatable and settleable trash and debris capture employed in other municipalities and assess their applicability to New York City; and 3. Propose a methodology for selecting, sizing and siting the best management practices and controls that will be implemented to reduce floatable and settleable trash and debris for Department review and approval. (full guidelines provided in the document on page 29-31).
- Permittees shall implement trash load reduction control actions in accordance with the following schedule and trash generation area management requirements, including mandatory minimum full trash capture systems, to meet the goal of 100 percent trash load reduction or no adverse impact to receiving waters from trash by July 1, 2022. i. Schedule – Permittees shall reduce trash discharges from 2009 levels, described below, to receiving waters in accordance with the following schedule: a. 70 percent by July 1, 2017; and b. 80 percent by July 1, 2019. In addition, Permittees should achieve 60 percent reduction by July 1, 2016. This is not a mandatory deadline; rather, it shall be used as a performance guideline to meet the mandatory July 1, 2017 deadline. Permittees that do not attain the 60 percent performance guideline shall submit documentation of a plan and schedule of implementation of additional trash

load reduction control actions that will attain the July 1, 2017 deadline... Permittees shall install and maintain a mandatory minimum number of full trash capture devices, to treat runoff from an area equivalent to 30 percent of retail/wholesale land area which drains to the storm drain system within their jurisdictions... The device(s) must also have a trash reservoir large enough to contain a reasonable amount of trash safely without overflowing trash into the overflow outlet between maintenance events. (Page 34)

Pollution Prevention and Good Housekeeping - Street Sweeping

- Procedures for the development and implementation of a regular street and road sweeping program that includes sweeping of all streets and roads within the regulated area semi-annually, to be fully implemented by the third year of the program. The operator is required to sweep all streets and roads within the regulated area annually unless a lesser frequency can be justified based on at least two consecutive years of data indicating the street or road does not require annual sweeping... (Page 18)
- Report annually on types of sweepers used, swept curb and/or lane miles, dates of sweeping by general location and frequency category, volume or weight of materials removed and a representative sample of the particle size distribution of swept material; (Page 26)

Pollution Prevention and Good Housekeeping - Stormwater Catch Basin Maintenance

- Establish, for other catch basins, a schedule for the frequency of routine cleaning that will ensure that no catch basin at any time will be more than 50 percent full. A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin... (Page 19)
- Catch Basin Cleaning: (a) In areas that are not subject to a trash TMDL, the LACFCD shall determine priority areas and shall update its map or list of catch basins with their GPS coordinates and priority: Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris. Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris. Priority C: Catch basins that are designated as generating low volumes of trash and/or debris. The map or list shall contain the rationale or data to support priority designations. (b) In areas not subject to a trash TMDL, the LACFCD shall inspect its catch basins according to the following schedule: Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year. Priority B: A minimum of once during the wet season and once during the dry season every year. Priority C: A minimum of once per year. Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, LACFCD shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. LACFCD shall maintain inspection and cleaning records for Regional Water Board review... (Page 20)

Pollution Prevention and Good Housekeeping - Trash Management in Public Spaces

- Permittee shall establish procedures for trash management in parks. Permittee-owned or -operated properties, parks, and other facilities that are owned, operated, or otherwise the legal responsibility of the permittee shall be maintained so as to

minimize the discharge of pollutants to its MS4,...[including establishing] procedures for management of trash containers at parks (scheduled cleanings; sufficient number). (Page 21)

- Within one year of permit issuance, the City shall inventory and evaluate all current trash and recyclable pick-up operations, litter control programs, and public outreach efforts. (Page 29)

Public Participation, involvement and Education

- Develop and implement a public involvement/participation program that: Describes the public involvement/participation activities...Such activities may include, but are not limited to, a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like beach cleanups, wetland restorations and volunteer water quality monitoring. (Page 14)
- Catch Basin Labels and Open Channel Signage (a) LACFCD shall label all catch basin inlets that they own with a legible “no dumping” message. (b) The LACFCD shall inspect the legibility of the catch basin stencil or label nearest the inlet prior to the wet season every year. (c) The LACFCD shall record all catch basins with illegible stencils and re-stencil or relabel within 180 days of inspection. (d) The LACFCD shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant waterbodies. (Page 21)

Reporting

- Trash Reduction Plan. The Trash Reduction Plan shall be included within the SWMP and any revisions reported in the Annual Report. Trash means all improperly discarded waste material, excluding vegetation, except for yard/landscaping waste that is illegally disposed of in the storm drain system. Plan to determine a quantitative estimate of the debris currently being discharged (baseline load) from the MS4, including methodology used to determine the load. • Description of control measures currently being implemented as well as those needed to reduce debris discharges from the MS4 consistent with short-term and long-term reduction targets. • A short-term plan and proposed compliance deadline for reducing debris discharges from the MS4 by 50% from the baseline load. • A long-term plan and proposed compliance deadline for reducing debris discharges from the MS4 to zero. • Geographical targets for trash reduction activities with priority on waterbodies. (Page 38)
- Submit annually, a report which details progress toward implementing the trash reduction strategies. The report shall describe the status of trash elimination efforts including resources (e.g., personnel and financial) expended and the effectiveness of all program components. (Page 29)
- In each Annual Report, each Permittee shall list the events (name of event, event location, and event date) participated in; identify whether the event is public outreach or citizen involvement; and assess the effectiveness of efforts with appropriate measures. (e.g., success at reaching a broad spectrum of the community, number of participants compared to previous years, post-event effectiveness assessment/evaluation results, quantity/volume of materials cleaned up and comparisons to previous efforts). (Page 13)

Construction Site Runoff Control

Permittee shall include litter control in construction site runoff control program and report tracking information in annual report. Requirements for construction site operators within the MS4 jurisdiction to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes. These wastes may not be discharged to the MS4.... The procedures for site inspections conducted by the permittee shall include the requirement that inspections occur during construction of BMPs as well as after construction of BMPs to ensure they are working as described in the approved plans...This tracking information shall be included as part of each annual report. (Page 17)

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