Statewide Water Quality Control Plans for Trash

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Overview and Status

- Statewide Water Quality Control Plans
 - California Ocean Plan
 - Inland Surface Waters, Enclosed Bays, and Estuaries (ISWEBE)Plan
- The Trash Amendments were:
 - Approved by OAL on December 2, 2015
 - Approved by U.S. EPA on January 12, 2016
- Trash Implementation Phase



Framework

- 1. Narrative Water Quality Objective
- 2. Applicability
- 3. Prohibition of Discharge
- 4. Implementation Provisions
- 5. Time Schedule
- 6. Monitoring and Reporting



California Coastal Commission 2013 Coastal Art & Poetry Contest Leo Yang 9th Grade



1. Narrative Water Quality Objective

- California Ocean Plan: "Trash shall not be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance."
- **ISWEBE Plan**: "Trash shall not be present in inland surface waters, enclosed bays, estuaries, and along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance."

2. Applicability

- Applicable to all surface waters of the State, with an exception for those waters within the jurisdiction of the Los Angeles Water Board with trash or debris TMDLs.
- Implemented through NPDES permits, waste discharge requirements (WDRs), and waivers of WDRs.



3. Prohibition of Discharge

- Prohibition of discharge of trash to surface waters of the State.
 - Compliance achieved through implementation provisions present in NDPES permits, WDRs, and waivers of WDRs.
 - Prohibition of discharge of preproduction plastics, unless existing IGP provisions already exist.



4. Implementation Provisions

Track 1: Install, operate and maintain full capture systems in storm drains that capture runoff from the priority land uses. Or

Track 2: Implement a plan with any combination of treatment controls, institutional controls, and/or multibenefit projects within the jurisdiction of the MS4 permittee. Demonstrate full capture system equivalency. Expectation is to install full capture systems to the extent not cost-prohibitive.



4. Implementation Provisions

- Full Capture System:
 - Designed to trap all particles that are 5 mm or greater and design treatment capacity of the corresponding storm drain.
 - Design must be certified by the Executive Director.
 - Includes those certified by the Los Angeles Water Board or listed in the Bay Area-wide Trash Capture Demonstration Project.



Vortex Separation System



Connector Pipe Screen



Catch Basin Brushes

4. Implementation Provisions

- Full Capture System Equivalency:
 - Trash load reduction target if full capture systems were implemented for all storm drains in the relevant areas of land.
 - Permittee derived approach.
- Two approach examples:
 - Trash Capture Rate Approach Direct measurement of representative locations and application to all similar land uses.
 - Reference Approach Compare against amount of trash in a reference receiving watershed with full capture systems installed.



5. Time Schedule



6. Monitoring and Reporting

- **MS4 Track 1:** Reporting to demonstrate installation, operation, and maintenance of full capture systems.
- MS4 Track 2 and Caltrans: Demonstrate effectiveness of controls and full capture system equivalency.
- Industrial General Permit and Construction General Permit: Report control measures.



Common Goals

- Prevent adverse impacts of marine debris
- Reduce trash in the ocean
- Remove trash from beaches, recreation areas, marinas, and non –MS4 urban areas
- Understand
 - Trends of marine debris, such as transport and deposition



Potential Research Needs

- Trash full capture device testing protocols

 Efficiency on full capture devices
- Trash assessment in receiving waters
 - micro-plastics in the water column
 - Mechanisms of marine micro-plastic debris, such as leaching contaminants
- Trash assessment on land
 - Evaluate strategies to address trash in high generating areas
 - Evaluate the Best Management Practices to prevent the discharge of trash from industries



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