
Lahontan Regional Water Quality Control Board

June 01, 2017

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Water Code Section 13383 Order to Submit Method to Comply with Statewide Trash Provisions; Requirements for Municipal Separate Storm Sewer System (MS4) Permittees

On April 7, 2015, the State Water Resources Control Board (State Water Board) adopted statewide Trash Provisions¹ to address the pervasive impacts trash has on the beneficial uses of many surface waters in the state. Throughout the state trash is a water quality problem, often transported to surface water through MS4 discharges. Discharges from MS4s on the California side of the Lake Tahoe basin are regulated by Lahontan Regional Water Quality Control Board (Lahontan Water Board) Order R6T-2017-0010 (Lake Tahoe MS4 Permit) pursuant to section 402(p) of the Federal Clean Water Act.

¹ Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash (Ocean Plan) and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, And Estuaries Of California (ISWEBE Plan) to be adopted by the State Water Board. Documents may be downloaded from our website at http://www.waterboards.ca.gov/water_issues/programs/trash_control/documentation.shtml.

The Trash Provisions establish a statewide water quality objective for trash and a prohibition of trash discharge, or deposition where it may be discharged, to surface waters of the State. For MS4 permittees that have regulatory authority over Priority Land Uses,² the Trash Provisions require implementation of the prohibition through requirements incorporated into relevant MS4 Permits and/or through monitoring and reporting orders, by **June 2, 2017**. The initial steps in planning for the implementation of the Trash Provisions are required through this Order in accordance with Water Code section 13383, as specified in the Trash Provisions,³ and as further authorized by Clean Water Act section 308(a) and 40 Code of Federal Regulations part 122.41(h). The information submitted in response to this Order is subject to approval by the Lahontan Water Board.

This Order is issued to implement federal law. The water quality objective established by the Trash Provisions serves as a water quality standard federally mandated under Clean Water Act section 303(c) and the federal regulations. (33 U.S.C. § 1312, 40 C.F.R. § 131.) This water quality standard was specifically approved by U.S. EPA following adoption by the State Water Board and approval by the Office of Administrative Law. This Order requests information necessary for municipal permittees to plan for implementation of actions to achieve the water quality standard for trash. Further, the water quality standard expected to be achieved pursuant to the Trash Provisions may allow each water body impaired by trash and already on the Clean Water Act section 303(d) list to be removed from the list, or each water body subsequently determined to be impaired by trash to not be placed on the list, obviating the need for the development of a total maximum daily load (TMDL) for trash for each of those water bodies. (33 U.S.C. § 1313(d); 40 C.F.R. § 130.7.) In those cases, the specific actions that will be proposed by the municipal permittees in response to this Order substitute for some or all of the actions that would otherwise be required consistent with waste load allocations in a trash TMDL. (40 C.F.R. § 122.44, subd. (d)(1)(vii)(B).) This Order nevertheless allows municipal permittees to select specific proposed actions to meet the federal requirements.

The Trash Provision requires MS4 permittees with regulatory authority over Priority Land Uses to select a method of compliance with the trash prohibition. Through this Order, the Lahontan Water Board requires Lake Tahoe MS4 permittees to determine and report their selection of either the following Track 1 or Track 2 compliance methods, described below:⁴

1. **Track 1:** Install, operate, and maintain Full Capture Systems* for all storm drains that capture runoff from the Priority Land Uses* in their jurisdiction.

² All terms marked with an asterisk ** are defined in Enclosure, *Trash Provisions Glossary*.

³ Chapter IV.A.5.a.(1)B of the ISWEBE Plan and Chapter III.L.4.a.(1)B of the Ocean Plan.

⁴ Chapter IV.A.3.a. of the ISWEBE Plan and Chapter III.L.2.a. of the Ocean Plan.

MS4 permittees that select the Track 1 compliance method may discover that there are locations within their MS4 system where full capture systems cannot be implemented, or are better implemented within another land use area. The Trash Provisions allow an MS4 permittee with regulatory authority over Priority Land Uses to request, from the appropriate Regional Water Board Executive Officer, to substitute one or more Priority Land Uses with equivalent alternate land uses⁵ within the MS4 permittee's jurisdiction.

2. **Track 2:** Install, operate, and maintain any combination of Full Capture Systems,^{*} Multi-Benefit Projects,^{*} other Treatment Controls,^{*} and/or Institutional Controls^{*} within either the jurisdiction of the MS4 permittee or the jurisdiction of the MS4 permittee and contiguous MS4 permittees. The MS4 permittee may determine the locations or land uses within its jurisdiction to implement any combination of controls. Permittees choosing Track 2 must demonstrate that the approach⁶ will achieve Full Capture System Equivalency.^{*}

Pursuant to Water Code section 13383, **IT IS HEREBY ORDERED THAT**, as a Lake Tahoe MS4 permittee, you shall:

1. By **September 1, 2017**:
 - a. Submit a letter to Lahontan Water Board identifying the permittee's selected compliance option, (Track 1 or Track 2) as defined in this Order;
2. Permittees Selecting Track 1: By **December 1, 2018**, submit an updated jurisdictional map(s) identifying the following:
 - i. All Priority Land Use areas discharging to the MS4 system(s);
 - ii. The corresponding MS4 network;
 - iii. Proposed locations of all certified Full Capture Systems⁷.
3. Permittees Selecting Track 2: By **December 1, 2018**, submit an Implementation Plan that includes:
 - a) Proposed locations where any combination of controls will be implemented that will achieve Full Capture System Equivalency;
 - b) The rationale for how the selected combination of controls will achieve Full Capture System Equivalency; and

⁵ See definition of Priority Land Uses in enclosed *Trash Provisions Glossary*.

⁶ The MS4 permittee may determine which controls to implement to achieve compliance with the Full Capture System Equivalency. It is, however, the State Water Board's expectation that the MS4 permittee will elect to install Full Capture Systems where such installation is not cost-prohibitive. (Chapter IV.A.3.a.(2) of the ISWEBE Plan and Chapter III.L.2.a.(2) of the Ocean Plan).

⁷ A list of Certified Full Capture Systems is located at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml

- c) A description and rationale for how Full Capture System Equivalency will be demonstrated.

The Legally Responsible Person must sign and certify all submittals required by this Order, with the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Failure to comply with this Order, or falsifying any information provided therein, may result in enforcement action including civil liabilities for late or inadequate reports consistent with Water Code section 13385.

Please contact me at (530) 542-5412 (patty.kouyoumdjian@waterboards.ca.gov), Or Robert Larsen, Senior Environmental Scientist at (530) 542-5439 (robert.larsen@waterboards.ca.gov), if you have any questions regarding this order.



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Enclosures: Trash Policy Implementation Procedure Flowchart
Trash Provisions Glossary

cc: Bob Larson, Lahontan Regional Water Quality Control Board

BL/gg/T: 13383 Trash Letter
File Under: ECM

Trash Policy Implementation Procedure For Phase II MS4 Permit



Within First 3 Months
June 2017-Sept 2017

Within Next 15 Months
September 2017- December 2018

Prepare Preliminary Jurisdictional Map(s) showing the following:

- Priority Land Uses¹
- Corresponding Storm Drain Network

Submit Via SMARTS

- Selected compliance method
- Preliminary Jurisdictional Map(s)

Update Jurisdictional Map(s) showing the following:

- Priority Land Uses¹
- Corresponding Storm Drain Network
- Proposed Full Capture Systems installations and associated drainage areas



Track 1
Submit Via SMARTS⁵

- Updated Jurisdictional Map

Track 2
Update Jurisdictional Map(s) showing the following:

- Priority Land Uses,^{1,2} and selected Locations, and other Land Uses,³
- Proposed Combination of Controls,³ locations, and associated drainage area that achieve Full Capture Equivalency,⁴
- Corresponding Storm Drain Network,

Conduct Trash Assessment of the following:

- Priority Land Uses,^{1,2} and
- Selected Locations and Other Land Uses

Add to Jurisdictional Map(s)

- Trash Generation Rates based on trash assessment

Prepare Rationale for the Selection of:

- Locations and Other Land Uses² where a Combination of Controls³ will be implemented
- Combination of Controls designed to achieve Full Capture System Equivalency⁴

Prepare Rationale for:

- How Trash Generation Rates and Full Capture System Equivalency will be demonstrated (only required if recommended on-land visual trash assessment not used)

Track 2
Submit Implementation Plan* Via SMARTS which contains the following:

- All Map(s) and
- All Rationale for Selections

***Subject to RB Approval**

¹ "Priority Land Uses" are generally defined as high density residential (10 developed dwelling units/acre), industrial, commercial, mixed urban, and public transportation stations. See Glossary of the Trash Amendments for a complete definition.

² As Permitting Authority, State Board exercises its authority (Trash Amendments) to require that permittees choosing Track 2 at a minimum assess the Priority Land Uses areas, even if they subsequently select other Locations or Land Uses within their jurisdiction to implement any Combination of Controls that meet Full Capture Equivalency (Trash Amendments).

³ A "Combination of Controls" is any combination of Full Capture Systems, Multi-Benefit Projects, other treatment controls, and/or institutional controls that achieve Full Capture System Equivalency at applicable storm drains.

⁴ "Full Capture System Equivalency" is the Trash Load that would be reduced if Full Capture Systems were installed, operated, and maintained for all inlets that capture runoff from the relevant areas.

⁵ Permittees requesting to substitute "Equivalent Alternate Land Uses" for Priority Land Uses must obtain Regional Board approval prior to SMARTS submittal. The total trash generated from the Equivalent Alternate Land Uses must be equivalent to or greater than the Priority Land Uses for which substitution is requested.



Trash Provisions Glossary

This glossary is an excerpt of the Trash Provisions of the [Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California](#), and the [California Ocean Plan](#).

Full Capture System: A treatment control*, or series of treatment controls, including but not limited to, a multi-benefit project* or a low-impact development control* that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either:

- a) of not less than the peak flow rate, Q , resulting from a one-year, one-hour, storm in the subdrainage area, or
- b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain.

[Rational equation is used to compute the peak flow rate: $Q = C \times I \times A$, where Q = design flow rate (cubic feet per second, cfs); C = runoff coefficient (dimensionless); I = design rainfall intensity (inches per hour, as determined per the rainfall isohyetal map specific to each region, and A = subdrainage area (acres).]

Prior to installation, full capture systems* must be certified by the Executive Director, or designee, of the State Water Board. Uncertified full capture systems will not satisfy the requirements of these Trash Provisions*. To request certification, a permittee shall submit a certification request letter that includes all relevant supporting documentation to the State Water Board's Executive Director. The Executive Director, or designee, shall issue a written determination approving or denying the certification of the proposed full capture system or conditions of approval, including a schedule to review and reconsider the certification. Full capture systems certified by the Los Angeles Regional Water Board prior to the effective date of these Trash Provisions and full capture systems listed in Appendix I of the Bay Area-wide Trash Capture Demonstration Project, Final Project Report (May 8, 2014) will satisfy the requirements of these Trash Provisions, unless the Executive Director, or designee, of the State Water Board determines otherwise.

Full Capture System Equivalency: The trash* load that would be reduced if full capture systems were installed, operated, and maintained for all storm drains that capture runoff from the relevant areas of land (priority land uses*, significant trash generating areas*, facilities or sites regulated by NPDES permits for discharges of storm water* associated with industrial activity, or specific land uses or areas that generate substantial amounts of trash, as applicable). The full capture system equivalency* is a trash load reduction target that the permittee quantifies by using an approach, and technically acceptable and defensible assumptions and methods for applying the approach, subject to the approval of permitting authority*. Examples of such approaches include, but are not limited to, the following:

- (1) Trash Capture Rate Approach. Directly measure or otherwise determine the amount of trash captured by full capture systems for representative samples of all similar types of

land uses, facilities, or areas within the relevant areas of land over time to identify specific trash capture rates. Apply each specific trash capture rate across all similar types of land uses, facilities, or areas to determine full capture system equivalency. Trash capture rates may be determined either through a pilot study or literature review. Full capture systems selected to evaluate trash capture rates may cover entire types of land uses, facilities, or areas, or a representative subset of types of land uses, facilities, or areas.

With this approach, full capture system equivalency is the sum of the products of each type of land use, facility, or area multiplied by trash capture rates for that type of land use, facility, or area.

- (2) Reference Approach. Determine the amount of trash in a reference receiving water in a reference watershed where full capture systems have been installed for all storm drains that capture runoff from all relevant areas of land. The reference watershed must be comprised of similar types and extent of sources of trash and land uses (including priority land uses and all other land uses), facilities, or areas as the permittee's watershed. With this approach, full capture system equivalency would be demonstrated when the amount of trash in the receiving water is equivalent to the amount of trash in the reference receiving water.

Institutional Controls: Non-structural best management practices (i.e., no structures are involved) that may include, but not be limited to, street sweeping, sidewalk trash* bins, collection of the trash, anti-litter educational and outreach programs, producer take-back for packaging, and ordinances.

Low-Impact Development Controls: Treatment controls that employ natural and constructed features that reduce the rate of storm water runoff, filter out pollutants, facilitate storm water storage onsite, infiltrate storm water into the ground to replenish groundwater supplies, or improve the quality of receiving groundwater and surface water. (See Water Code § 10564.)

Multi-Benefit Project: a treatment control* project designed to achieve any of the benefits set forth in section 10562, subdivision (d) of the Water Code. Examples include projects designed to: infiltrate, recharge, or store storm water for beneficial reuse; develop or enhance habitat and open space through storm water and non-storm water management; and/or reduce storm water and non-storm water runoff volume.

Municipal Separate Storm Sewer System (MS4): Same meaning set forth in 40 Code of Federal Regulations section 122.26(b)(8).

Preproduction Plastic: Same meaning set forth in section 13367(a) of the Water Code.

Priority Land Uses: Those developed sites, facilities, or land uses (i.e., not simply

zoned land uses) within the MS4 permittee's jurisdiction from which discharges of trash* are regulated by these Trash Provisions* as follows:

- (1) High-density residential: all land uses with at least ten (10) developed dwelling units/acre.
- (2) Industrial: land uses where the primary activities on the developed parcels involve product manufacture, storage, or distribution (e.g., manufacturing businesses, warehouses, equipment storage lots, junkyards, wholesale businesses, distribution centers, or building material sales yards).
- (3) Commercial: land uses where the primary activities on the developed parcels involve the sale or transfer of goods or services to consumers (e.g., business or professional buildings, shops, restaurants, theaters, vehicle repair shops, etc.)
- (4) Mixed urban: land uses where high-density residential, industrial, and/or commercial land uses predominate collectively (i.e., are intermixed).
- (5) Public transportation stations: facilities or sites where public transit agencies' vehicles load or unload passengers or goods (e.g., bus stations and stops).

Equivalent alternate land uses: An MS4 permittee with regulatory authority over priority land uses may issue a request to the applicable permitting authority* that the MS4 permittee be allowed to substitute one or more land uses identified above with alternate land uses within the MS4 permittee's jurisdiction that generates rates of trash that is equivalent to or greater than the priority land use(s) being substituted. The land use area requested to substitute for a priority land use need not be an acre-for-acre substitution but may involve one or more priority land uses, or a fraction of a priority land use, or both, provided the total trash generated in the equivalent alternative land use is equivalent to or greater than the total trash generated from the priority land use(s) for which substitution is requested. Comparative trash generation rates shall be established through the reporting of quantification measures such as street sweeping and catch basin cleanup records; mapping; visual trash presence surveys, such as the "Keep America Beautiful Visible Litter Survey"; or other information as required by the permitting authority.

Permitting Authority: The State Water Board or Regional Water Board, whichever issues the permit.

Significant Trash Generating Areas: All locations or facilities within the Department's jurisdiction where trash* accumulates in substantial amounts, such as:

- (1) Highway on- and off-ramps in high density residential, commercial, and industrial land uses (as such land uses are defined under priority land uses* herein).
- (2) Rest areas and park-and-rides.
- (3) State highways in commercial and industrial land uses (as such land uses are defined under priority land uses herein).
- (4) Mainline highway segments to be identified by the Department through pilot studies and/or surveys.

Storm Water: Same meaning set forth in 40 Code of Federal Regulations section 122.26(b)(13) (Nov. 16, 1990).

Treatment Controls: Structural best management practices to either (a) remove pollutants and/or solids from storm water* runoff, wastewater, or effluent, or (b) capture, infiltrate or reuse storm water runoff, wastewater, or effluent treatment controls* include full capture systems* and low impact development controls*.

Trash: All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

Trash Provisions: The water quality objective for trash*, as well as the prohibition of discharge and implementation requirements set forth in Implementation of Water Quality Objectives of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan.