## State of California California Regional Water Quality Control Board, Los Angeles Region

## RESOLUTION NO. R10-010 November 4, 2010

Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Debris for Nearshore and Offshore Santa Monica Bay

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

- 1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) to establish water quality standards for each waterbody within its region. Water quality standards include beneficial uses, water quality objectives that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading high quality waters. Waterbodies that do not meet water quality standards are considered impaired.
- 2. CWA section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Those waters are placed on the state's "303(d) List" or "Impaired Waters List". For each listed water, the state is required to establish the Total Maximum Daily Load (TMDL) of each pollutant impairing the water quality standards in that waterbody. Both the identification of impaired waters and TMDLs established for those waters must be submitted to the United States Environmental Protection Agency (U.S. EPA) for approval pursuant to CWA section 303(d)(2).
- 3. The Clean Water Act also requires protection of downstream beneficial uses, and section 303(d)(3) gives the Regional Board authority to establish a TMDL for unassessed and/or unimpaired upstream waterbodies to assure protection of beneficial uses of those waters as well as downstream waters.
- 4. A consent decree between U.S. EPA, Heal the Bay, Inc. and Santa Monica BayKeeper, Inc. was approved on March 22, 1999, which resolved litigation between those parties relating to the pace of TMDL development in the Los Angeles Region. The court order directs the U.S. EPA to ensure that TMDLs for all 1998-listed impaired waters in the Los Angeles Region be established within 13 years of the consent decree. The consent decree combined waterbody pollutant combinations in the Los Angeles Region into 92 TMDL analytical units. In accordance with the consent decree, the Santa Monica Bay Nearshore and Offshore Debris TMDL addresses the listings for analytical unit 66. Based on the consent decree schedule, TMDLs must be approved or established by U.S. EPA by March 2012.

- 5. Pursuant to Water Code Section 13367, the Regional Board must implement a program to control point and nonpoint discharges of preproduction plastic. The program shall, at a minimum, require plastic manufacturing, handling, and transportation facilities to implement best management practices to control discharges of preproduction plastics, including: appropriate containment systems; sealed containers durable enough so as not to rupture during transfer and storage; use of capture devices during loading, unloading, and transferring; the availability of a vacuum or vacuum like system to clean up loose pellets. However, nothing in California Water Code Section 13367 limits the authority of the Regional Board to establish requirements in addition to the BMPs for the elimination of discharges of preproduction plastic. Based on Section 13367, this program was to be implemented on January 1, 2009.
- The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d)(1)(C) and (D) of the CWA, as well as in U.S. EPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources, load allocations for nonpoint sources and natural background (40 CFR 130.2). TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)). 40 CFR 130.7 also dictates that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. TMDLs typically include one or more numeric "targets", i.e., numerical translations of the existing water quality standards, which represent attainment of those standards, contemplating the TMDL elements described above. Since a TMDL must represent the "total" load, TMDLs must account for all sources of the relevant pollutants, irrespective of whether the pollutant is discharged to impaired or unimpaired upstream reaches.
- 7. Neither TMDLs nor their targets or other components are water quality objectives, and thus their establishment does not implicate California Water Code section 13241. Rather, under California Law, TMDLs are programs to implement existing standards (including objectives), and are thus established pursuant to Cal. Water Code section 13242. Moreover, they do not create new bases for direct enforcement against dischargers apart from the existing water quality standards they translate. Like most other parts of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), TMDLs are not generally self-implementing. The targets merely establish the bases through which load allocations (LAs) and waste load allocations (WLAs) are calculated. The LAs and WLAs may be implemented in any manner consistent with the Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options, adopted by the State Water Resources Control Board (State Board) on June 16, 2005 (Resolution 2005-0050). Federal regulations

- also require that National Pollutant Discharge Elimination System (NPDES) permits be consistent with the assumptions and requirements of available WLAs (40 C.F.R. 122.44(d)(vii)(B)).
- 8. As envisioned by California Water Code section 13242, the TMDL contains a "description of surveillance to be undertaken to determine compliance with objectives." The Compliance Monitoring element of the TMDL recognizes that monitoring will be necessary to assess the progress of pollutant load reductions and improvements in water quality in Santa Monica Bay. The TMDL establishes the types of information that will be necessary to secure. The Regional Board's Executive Officer will ensure that appropriate entities develop and submit monitoring programs and technical reports necessary to achieve the purposes of the TMDL. The Executive Officer will determine the scope of these programs and reports, taking into account any legal requirements, including this TMDL, and if necessary issue appropriate orders to appropriate entities.
- 9. Upon establishment of TMDLs by the State or U.S. EPA, the State is required to incorporate, or reference, TMDLs in the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Los Angeles Regional Board. Attachment A to this resolution contains the language to be incorporated into the Basin Plan for this TMDL.
- 10. The Santa Monica Bay is an integral part of the larger geographic region commonly known as the Southern California Bight. It is bordered offshore by the Santa Monica Basin, to the north by the rocky headlands of Point Dume and to the south by the Palos Verdes Peninsula, and onshore by the Los Angeles Coastal Plain and the Santa Monica Mountains. The 414 square mile area of land that drains naturally to the Bay, known as the Santa Monica Bay watershed, is bordered on the north by the Santa Monica Mountains from the Ventura-Los Angeles County line to Griffith Park, extending south and west across the Los Angeles coastal plain to include the area east of Ballona Creek and north of Baldwin Hills. South of Ballona Creek, a narrow coastal strip between Playa del Rey and the Palos Verdes Peninsula forms the southern boundary of the watershed. The Santa Monica Bay itself is the submerged portion of the Los Angeles Coastal Plain. The continental shelf extends seaward to the shelf break about 265 feet underwater, then drops steeply to the Santa Monica Basin at about 2,630 feet. Nearshore Santa Monica Bay is defined by the Ocean Plan as, within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot contour, whichever is further from the shoreline. Offshore is defined as the waters between the nearshore zone and the limit of state waters. Lastly, state waters, according to section 13200 of the California Water Code, extend three nautical miles into the Pacific Ocean from the line of mean lower low water marking the seaward limits of inland waters and three nautical miles from the line of mean lower low water on the mainland

and each offshore island. The primary land use in the Santa Monica Bay Watershed is open space (55%), while high-density residential areas represent the largest developed area (25% of the total watershed). Low-density residential constitutes 5% of the land area. Commercial, industrial and mixed urban areas cover 10%. The remaining 5% of land area is covered by transportation (1.7%), educational institutions (1.6%), agriculture (0.8%), recreational uses (0.8%), public facilities and military installations (0.2%), and water (0.4%). Santa Monica Bay receives urban and stormwater runoff from a network of storm drains throughout the watershed.

- 11. Numeric targets for the TMDL are based on narrative water quality objectives (WQOs) for Floating Material and Solid, Suspended, or Settleable Materials contained in the Basin Plan, and the narrative water quality objective for Floating Particulates contained in the California Ocean Plan (2005).
- 12. The Regional Board's goal in establishing the TMDL for debris in nearshore/offshore Santa Monica Bay is to protect the beneficial uses of: industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), estuarine habitat (EST), marine habitat (MAR), preservation of biological habitats (BIOL), migration of aquatic organisms (MIGR), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), spawning, reproduction, and or early development (SPWN), shellfish harvesting (SHELL), and wetland habitat (WET) in Santa Monica Bay by achieving the numeric and narrative water quality objectives set to protect those uses.
- 13. Marine debris has impacted at least 267 species world-wide, primarily through ingestion and entanglement (Heal the Bay, 2007). Entanglement of marine life can cause strangulation or suffocation, and wounds that can lead to infections or loss of limbs. Marine debris and beach litter injures and kills marine wildlife, damages the Bay's aesthetic qualities, and is expensive for coastal communities to clean up.
- 14. Debris can threaten the health of people who wade or swim in the Santa Monica Bay. Of particular concern are the bacteria and viruses associated with diapers, medical waste (e.g., used hypodermic needles and pipettes), and human or pet waste. Additionally, sharp objects left on the beach can cause cuts and injuries. Such injuries can then expose a person's bloodstream to microbes in the water that may cause illness.
- 15. Buoyant (floatable) elements are easily transported through water ways and into the marine environment. Birds, fish and mammals often mistake plastic for food. Plastic resin pellets (a by-product of plastic manufacturing) are harmful to aquatic life, since they can be ingested by a large number of small organisms which can then suffer malnutrition or internal injuries. In addition, plastic pellets may contain chemicals that are toxic (e.g. persistent organic pollutants).

These substances may be additives that were intentionally mixed into the resin to achieve specific properties, or contaminants that were adsorbed by the pellets from the environment (U.S. EPA, 1992).

- 16. Regional Board staff has prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this TMDL. The technical document entitled "Santa Monica Bay Nearshore and Offshore Debris TMDL" is an integral part of this Regional Board action and was reviewed, considered, and accepted by the Regional Board before acting. Further, the technical document provides the detailed factual basis and analysis supporting the problem statement, numeric targets (interpretation of the narrative water quality objectives, used to calculate the waste load and load allocations), source analysis, linkage analysis, waste load allocations (for point sources), load allocations (for non-point sources), margin of safety, and seasonal variations and critical conditions of this TMDL.
- 17. On November 4, 2010, prior to the Board's action on this resolution, a public hearing was conducted on the Santa Monica Bay Debris TMDL. Notice of the hearing was published in accordance with the requirements of California Water Code Section 13244. This notice was published in the Los Angeles Times and the Ventura County Star on July 30, 2010.
- 18. The public has had a reasonable opportunity to participate in the review of the amendment to the Basin Plan. Stakeholder meetings were held on November 10, 2009, February 18, 2010, March 23, 2010, April 29, 2010, June 7, 2010, June 8, 2010, June 17, 2010, June 23, 2010; August 10, 2010, August 17, 2010, August 26, 2010, and September 2, 2010. A draft of the TMDL was released for public comment on July 30, 2010. A Notice of Hearing and Notice of Filing were published and circulated more than 45 days preceding Board action. An additional notice of hearing was published on September 7, 2010, and a notice of postponement was published on September 9, 2010, in order to give industrial facilities that manufacture, handle or transport plastic pellets time to review and comment on the Basin Plan Amendment. Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on November 4, 2010 to consider adoption of the TMDL.
- 19. In amending the Basin Plan to establish this TMDL, the Regional Board considered the requirements set forth in Sections 13240 and 13242 of the California Water Code.
- 20. Because the TMDL implements existing narrative and numeric water quality objectives (i.e., water quality objectives in the Basin Plan and California Ocean Plan), the Regional Board (along with the State Board) has determined that adopting a TMDL does not require the Regional Board to consider the factors of California Water Code section 13241. The consideration of the California

Water Code section 13241 factors, by section 13241's express terms, only applies "in establishing water quality objectives." Here the Regional Board is not establishing water quality objectives, but as required by section 303(d)(1)(C) of the Clean Water Act is adopting a TMDL that will implement the previously established objectives that have not been achieved. In making this determination, the Regional Board has considered and relied upon a legal memorandum from the Office of Chief Counsel to the State Board's basin planning staff detailing why TMDLs cannot be considered water quality objectives. (See Memorandum from Staff Counsel Michael J. Levy, Office of Chief Counsel, to Ken Harris and Paul Lillebo, Division of Water Quality: The Distinction Between a TMDL's Numeric Targets and Water Quality Standards, dated June 12, 2002.)

21. While the Regional Board is not required to consider the factors of California Water Code section 13241, it nonetheless has developed and received significant information pertaining to the California Water Code section 13241 factors and has considered that information in developing and adopting this TMDL. Section 13241 at a minimum requires that water quality objectives ensure reasonable protection of beneficial uses. The designated beneficial uses for Santa Monica Bay and its coastal features include industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), estuarine habitat (EST), marine habitat (MAR), preservation of biological habitats (BIOL). migration of aquatic organisms (MIGR), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), spawning, reproduction, and or early development (SPWN), shellfish harvesting (SHELL), and wetland habitat (WET). The past, present and probable future beneficial uses of water have been considered in that Santa Monica Bay is designated for a number of beneficial uses in the Basin Plan. The environmental characteristics of Santa Monica Bay are spelled out at length in the Basin Plan and in the technical documents supporting this Basin Plan amendment, and have been considered in developing this TMDL. Water quality conditions that reasonably could be achieved through the coordinated control of all factors which affect water quality in the area have been considered. This TMDL provides several compliance options, including structural and/or non-structural best management practices (BMPs) such as full capture devices for point sources and a program of minimum frequency of assessment and collection in conjunction with BMPs (MFAC/BMP program) for nonpoint sources that could be implemented directly in the watershed to reduce trash loading to Santa Monica Bay. These options provide flexibility for responsible jurisdictions to reduce trash loading to the waterbodies in the Santa Monica Bay Watershed. Establishing a plan that will ensure the waterbodies in the Santa Monica Bay Watershed attain and continue to attain water quality standards is a reasonable water quality condition. However, to the extent that there would be any conflict between the consideration of the factor in Water Code section 13241, subdivision (c), if the consideration were required, and the Clean Water Act, the Clean Water Act requirements would prevail. Economic considerations were considered throughout the development of the TMDL. Some of these economic considerations arise in the context of Public Resources Code section 21159 and are equally applicable here. The implementation program for this TMDL recognizes the economic limitations on achieving immediate compliance and allows a flexible implementation schedule of 8 years for point sources, and 5 years for nonpoint sources.

- 22. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), and the federal Antidegradation Policy (40 CFR 131.12), in that it does not allow degradation of water quality, but requires restoration of water quality and attainment of water quality standards.
- 23. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). The Regional Board staff has prepared "substitute environmental documents" for this project that contain the required environmental documentation under the State Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The substitute environmental documents include the TMDL staff report entitled "Santa Monica Bay Debris TMDL", the environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution. The project itself is the establishment of a TMDL for debris in Santa Monica Bay. While the Regional Board has no discretion to not establish a TMDL (the TMDL is required by federal law), the Board does exercise discretion in assigning waste load allocations and load allocations, determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the substitute environmental documents contain significant analysis and numerous findings related to impacts and mitigation measures.
- 24. A CEQA Scoping meeting was conducted on March 23, 2010 at the Hyperion Treatment Plant, 12000 Vista del Mar, Playa del Rey, California 90293. A notice of the CEQA Scoping meeting was sent to interested persons within the subwatershed.
- 25. In preparing the substitute environmental documents, the Regional Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends those documents to serve as a tier 1 environmental review. This analysis is not intended to be an exhaustive analysis of every conceivable impact, but an analysis of the reasonably foreseeable consequences of the adoption of this regulation, from a programmatic perspective. The "Lead" agencies for tier 2 projects will assure compliance with project-level CEQA analysis of this

- programmatic project. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2.
- 26. The foreseeable methods of compliance with trash control elements of this TMDL entail construction and operation of structural best management practices such as full capture devices including catch basin inserts and vortex separation systems for point sources or combinations of partial capture and/or institutional controls. Foreseeable methods of compliance also include nonstructural best management practices such as Minimum Frequency of Assessment and Collection Programs for nonpoint sources.
- 27. The foreseeable methods of compliance with the plastic pellet Waste Load Allocation assigned to industrial permittees, include the implementation of best management practices such as appropriate containment systems, sealed containers, vacuum devices for cleaning, and frequent inspection and cleaning at operational areas and outlets of water discharge, to effectively control and prevent discharges of pre-production plastics pellets. In addition, necessary best management practices shall be exercised to eliminate spillage of plastic pellets during transportation that could be later mobilized and transported to waters of the State.
- 28. Consistent with the Regional Board's substantive obligations under CEQA, the substitute environmental documents do not engage in speculation or conjecture, and only consider the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.
- 29. The proposed amendment could have a potentially significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation measures, or both, that if employed, would substantially lessen the potentially significant adverse impacts identified in the substitute environmental documents; however such alternatives or mitigation measures are within the responsibility and jurisdiction of other public agencies, and not the Regional Board. California Water Code section 13360 precludes the Regional Board from dictating the manner in which responsible parties comply with any of the Regional Board's regulations or orders. When the parties responsible for implementing this TMDL determine how they will proceed, the parties responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. These feasible alternatives and mitigation measures are described in more detail elsewhere in the substitute environmental documents. (14 Cal. Code Regs. § 15091(a)(2).)

- 30. The substitute documents for this TMDL, and in particular the Environmental Checklist and staff's responses to comments, identify broad mitigation approaches that should be considered at the project level.
- 31. To the extent significant adverse environmental effects could occur, the Regional Board has balanced the economic, legal, social, technological, and other benefits of the TMDL against the unavoidable environmental risks and finds that specific economic, legal, social, technological, and other benefits of the TMDL outweigh the unavoidable adverse environmental effects, such that those effects are considered acceptable. The basis for this finding is set forth in the substitute environmental documents. (14 Cal. Code Regs. § 15093.)
- 32. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b). As specified above, federal law and regulations require that TMDLs be incorporated or referenced in the state's water quality management plan. The Regional Board's Basin Plan is the Regional Board's component of the water quality management plan, and the Basin Plan is how the Regional Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the debris impairment in Santa Monica Bay.
- 33. The Basin Plan amendment incorporating a TMDL for Debris in nearshore/offshore Santa Monica Bay must be submitted for review and approval by the State Board, the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. A Notice of Decision will be filed with the Resources Agency.
- 34. If during the State Board's approval process Regional Board staff, the State Board or State Board staff, or OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer should make such changes consistent with the Regional Board's intent in adopting this TMDL, and should inform the Board of any such changes.
- 35. Considering the record as a whole, this Basin Plan amendment is expected to result in an effect, either individually or cumulatively, on wildlife resources.

THEREFORE, be it resolved that pursuant to sections 13240 and 13242 of the Cal. Water Code, the Regional Board hereby amends the Basin Plan as follows:

- 1. The Regional Board hereby approves and adopts the CEQA substitute environmental documentation, which was prepared in accordance with Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and directs the Executive Officer to sign the environmental checklist.
- 2. Pursuant to Sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements and implementation schedule of the Santa Monica Bay Debris TMDL.
- 3. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
- 4. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the U.S. EPA.
- 5. If during the State Board's approval process, Regional Board staff, the State Board or State Board staff, or OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
- 6. The Executive Officer is authorized to request a "No Effect Determination" from the Department of Fish and Game, or transmit payment of the applicable fee as may be required to the Department of Fish and Game.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 4, 2010.

Samuel Unger

**Executive Officer** 

Nov. 4, 2010

Date