

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906**

CEASE AND DESIST ORDER NO. R3-2005- 0022

Requiring the

CITY OF CARMEL BY THE SEA, MONTEREY COUNTY,

**To Cease and Desist from
Discharging Waste to Areas of Special Biological Significance (ASBS) in Violation of
Prohibitions Prescribed by the
State Water Resources Control Board**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), finds:

1. The Regional Board is authorized under Section 13301 of the Porter-Cologne Water Quality Control Act to order dischargers to cease and desist discharging waste in violation of discharge prohibition(s) prescribed by the Regional Board or the State Water Resources Control Board (State Board). Section 13301 also authorizes the Regional Board to require dischargers to comply with a time schedule set by the Regional Board.
2. Water Code Section 13301 states:

When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.

3. The City of Carmel by the Sea (hereafter Discharger or municipality) operates a municipal separate storm sewer system (MS4) which collects storm water runoff. In 1987 the U.S. Clean Water Act was amended to include defined storm water conveyance systems that were considered point source discharges. Under the 1987 amendments, a municipal separate storm water system discharge is defined as a point source discharge, and is therefore subject to NPDES permit requirements and prohibitions. MS4 storm water discharges are regulated pursuant to State Board Water Quality Order No. 2003 - 0005 - DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, Waste Discharge Requirements For Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (Phase II Storm Water Permit). The Phase II Storm Water Permit required all automatically designated MS4s to submit a Notice of Intent no later than August 8, 2003. Permit coverage for a particular discharger takes effect when the Regional Board approves the discharger's storm water management plan (SWMP).

4. In 1975 Carmel Bay was designated as an Area of Special Biological Significance (ASBS) by Resolution No. 75-61¹. Among the actions required by the resolution, was a directive that the local government "adequately considers the problem of urban runoff" and other non-point source wastes, "with the objective that the Carmel Bay (ASBS) will not be impaired by waste substances." Although storm water had not yet been defined as a point source, this 1975 Resolution recognized that storm water runoff was a threat to the ASBS receiving water. It did not, however, require a ban on storm water runoff to the ASBS.
5. Assembly Bill 2800, the Marine Managed Areas Improvement Act was signed on September 8, 2000, and added sections to the Public Resources Code (PRC) that are relevant to ASBS. Section 36710 (f) of PRC states: "In a state water quality protection area, point source waste and thermal discharges shall be prohibited or limited by special conditions. Non-point source pollution shall be controlled to the extent practicable." State water quality protection areas include all ASBS. (PRC § 36700(f).)
6. Senate Bill 512 takes effect on January 1, 2005. S.B. 512 added the following language to PRC Sections 36700(f): "'Areas of special biological significance'" are a subset of state water quality protection areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan ... and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the State Board." S.B. 512 amended PRC Section 36700(f) to read: "In a state water quality protection area, waste discharges shall be prohibited or limited by the imposition of special conditions in accordance with the Porter-Cologne Water Quality Control Act ...and implementing regulations, including, but not limited to, the California Ocean Plan ... and the ... California Thermal Plan ... adopted by the State Board. No other use is restricted."
7. The 2001 California Ocean Plan, published by the State Board, includes section III.E, "Implementation Provisions For Areas of Special Biological Significance". Item III.E.1 states, "Waste shall not be discharged to areas designated as being of special biological significance. Dischargers shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas."
8. In Order No. WQ 2001-08, the State Board ruled that stormwater discharges are subject to the ASBS discharge prohibition in the California Ocean Plan.
9. In December 2003, the State Board published an Informational Document² on proposed Ocean Plan amendments. The Informational Document explained that:

In 1974, urban storm water runoff was considered a form of non-point source pollution to be controlled to the extent practicable. The 1978 and 1983 California Ocean Plan amendments, in effect, prohibited all discharges, both point and non-point source, to ASBS.

¹ Designating a Portion of Carmel Bay in Monterey County as an Area of Special Biological Significance and Requesting the Development of Plans for Management of Wastewater Entering Carmel Bay, Resolution No. 75-61

² State Water Resources Control Board Division of Water Quality "Informational Document, Public Scoping Meeting for the Proposed Amendment of the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan, December 2003"

10. On October 18, 2004, the State Board issued "Prohibition of Waste Discharges into the Carmel Bay Area of Special Biological Significance" letters (Prohibition letter), to the City of Carmel by the Sea. The Prohibition letter explained that the storm water discharge from the Municipality violates the ASBS discharge prohibition in Section III.E.1 of the Ocean Plan.
11. The 2001 Ocean Plan contains water quality objectives, set forth in Table B of the document. This Cease and Desist Order ("CDO" or "Order") includes requirements to monitor for those constituents in Table B which are likely to be found in urban storm water runoff. The 2001 Ocean Plan, section III.G states,

G.1 The Regional Boards shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste discharge requirements, and may require dischargers to contract with agencies or persons acceptable to the Regional Board to provide monitoring reports...G.2 Where the Regional Board is satisfied that any substance(s) of Table B will not significantly occur in a discharger's effluent, the Regional Board may elect not to require monitoring for such substance(s), provided the discharger submits periodic certification that such substance(s) is not added to the waste stream, and that no change has occurred in activities that could cause such substance(s) to be present in the waste stream. Such election does not relieve the discharger from the requirement to meet the objectives of Table B.

12. The Phase II Storm Water Permit states: "Urban runoff is a leading cause of pollution throughout California. Pollutants of concern found in urban runoff include sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides and herbicides."

Urbanized areas have a higher percentage of impervious area compared to non-urban areas.

Higher impervious areas correlates to a greater pollutant loading, resulting in turbid water, nutrient enrichment, bacterial contamination, organic matter loads, toxic compounds, temperature increases, and increases of trash or debris. Pollutants present in storm water can have damaging effects on both human health and aquatic ecosystems. In addition, the increased flows and volumes of storm water discharged from impervious surfaces resulting from development can significantly impact beneficial uses of aquatic ecosystems due to physical modifications of watercourses, such as bank erosion and widening of channels.³

13. The 2001 California Ocean Plan includes Table C, "Background Seawater Concentrations" which provides a good basis for expected natural water quality in the receiving ocean water. Table C concentrations should be used as benchmarks to compare with the effluent water quality samples required in this CDO (see CDO requirement number 11, below). If the Municipality has well documented data, acceptable to the Executive Officer, on local background seawater chemical concentrations, the Discharger may use that data instead of Table C values.

³ State Water Resources Control Board Water Quality Order NO. 2003 - 0005 - DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000004, Waste Discharge Requirements for Storm Water Discharges From Small Separate Storm Sewer Systems (MS4s) (GENERAL PERMIT), "Findings" section.

14. Storm water discharge occurs whenever there is enough rain for the municipal streets to have runoff that flows to the ocean. To be in compliance with the Ocean Plan, the Municipality must either: 1) redesign or redirect the storm drain system so that no runoff enters in or near the Carmel Bay ASBS; or 2) apply for an exception to the ASBS discharge prohibition. The State Board October 18, 2004 letter to the Municipality required that the Municipality notify the State Board as to which option they intend to pursue by January 1, 2005.
15. Runoff from City of Carmel by the Sea discharges to the Carmel ASBS via surface runoff collected and carried in gutters to storm drains. It is likely that storm water also discharges via sheet flow or similar non-engineered flow paths. The California Ocean Plan prohibits both point source and non-point source discharges to an ASBS. Therefore any runoff from the municipality which discharges to the ASBS, whether the runoff is within the storm drain system (gutters, pipes, etc.) or not, violates the ASBS-discharge prohibition.
16. The City of Carmel by the Sea may apply to the State Board for an exception to the ASBS-discharge prohibition (exception). The Scripps Institution of Oceanography (Scripps) received the most recent ASBS-discharge exception granted by the State Board. The Scripps discharge consists of both wastewater point source, and storm water runoff discharges. The Scripps exception contains a number of requirements, some aimed at mitigating or eliminating the wastewater point source, and others aimed at the storm water discharge. The Discharge exception will be aimed solely at storm water discharges. Nonetheless, the Scripps storm water exception-requirements may be considered to be a model of the requirements expected from the ASBS-discharge MS4s.
17. The Discharger has submitted a Storm Water Management Plan in conjunction with other MS4s in the Monterey area (Monterey Regional group). The document, titled Monterey Regional Storm Water Management Program (MRSWMP) is prerequisite to applying for the MS4 Phase II General Permit. The Monterey Regional group chose to work together to write the MRSWMP, and to combine resources and efforts in implementing Best Management Practices (BMPs) in order to achieve a stronger, more unified approach to protecting storm water runoff. Of the nine (9) Monterey Regional group MS4s, the City of Carmel by the Sea, City of Pacific Grove, and the Pebble Beach Company are the three (3) MS4s that the State Board has identified as discharging to an ASBS. The Regional Board has identified the City of Monterey as an additional discharger, due to fact that a portion of that City's storm water discharges to the City of Pacific Grove's MS4, which then discharges to the ASBS. The City of Pacific Grove, City of Monterey, City of Carmel by the Sea, and the Pebble Beach Company have requested to be enrolled in the General Permit.
18. Implementation of the requirements will necessitate the Municipality to expend financial and human resources.. This resource expenditure is coming at the same time that the Cities are also spending similar resources to implement the MRSWMP Best Management Practices. These multiple resource demands are not funded, and will impact the City's budget. The time line and requirements in this CDO provide a balance between the need to protect water quality, the need to meet the ASBS-discharge prohibition, and the public interest. The Discharger is strongly encouraged to work collaboratively with other Monterey Bay Area ASBS dischargers⁴ to prepare and implement a

⁴ In October, 2004, the State Water Resources Control Board notified the following Monterey Bay-area entities that they must cease ASBS discharge, or apply for an exception: the Cities of Pacific Grove, Monterey, Carmel by the Sea, the Pebble Beach Company, Hopkins Marine Station, Monterey Bay Aquarium, the California Department of Transportation, and the California Department of Parks and Recreation.

monitoring and reporting plan with all components required in this CDO. A combined effort should result in less cost to each group member, while still yielding acceptable scientific data.

The purpose of the monitoring and reporting plan requirements (item 6, below) is to gather background information on the effluent water quality and its possible effects on benthic marine life. If background data exists, the Discharger may propose to utilize this data in full or as a portion of the monitoring and reporting requirements. The Discharger may work with other groups to fulfill the monitoring requirements. The monitoring and reporting plan must be approved by the Executive Officer.

19. While this CDO is in effect, and during the application for an exception, the municipality will continue to discharge storm water, and for a limited time, non-storm water, to the ASBS. However, through application of the requirements of this CDO, the quality of the discharges will be controlled and potential impacts will be minimized.
20. This enforcement action enforces the terms of the Phase II Storm Water Permit, the California Ocean Plan and the Basin Plan and thus is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 15321, Title 14, California Code of Regulations.
21. The technical and monitoring reports required in this Order are required of the Discharger under Sections 13267 and 13383 of the Porter-Cologne Water Quality Control Act because the Discharger is legally responsible for operation of the MS4. These technical and monitoring reports are necessary to assure the Discharger is taking actions to eliminate ASBS discharges that violate the Phase II Storm Water Permit and the prohibitions in the Basin Plan and Ocean Plan or to obtain a State Board exception authorizing such discharges; to assure that ASBS discharges in the interim do not unreasonably degrade water quality; and to determine whether the Discharger should take any additional measures to abate the discharges and/or the effects of the discharges. Additional information in support of the requirement to provide technical and monitoring reports can be found in the official Regional Board files.

IT IS HEREBY ORDERED, pursuant to Sections 13301, 13267 and 13383 of the Porter-Cologne Water Quality Control Act, that:

The Municipality must EITHER: a) file for an exception to the ASBS-discharge prohibition by **March 1, 2005**, and comply with the milestones below; OR b) cease all dry weather waste discharges to the ASBS no later than **January 1, 2007**, and cease all wet weather discharges no later than **January 1, 2008**. If the Discharger seeks an exception by **March 1, 2005** and the State Board denies the exception or does not grant the exception by **January 1, 2008**, the Discharger shall cease all discharges to the ASBS no later than **January 1, 2010**.

Should the Discharger request an exception, then Discharger shall meet all of the following conditions. Should the Discharger elect to cease all ASBS discharges, the Discharger shall meet conditions 1, 4, 5, 6 (until all ASBS discharges cease), 7, 8 and 14.

1. **Within 30 days after the date of this CDO** – The Discharger shall advise the Regional Board in writing whether it intends to seek an exception or cease all storm water discharges to the ASBS.

2. **Within one year after the date of this CDO, or such other date as directed by the State Board** – The Discharger shall prepare a draft CEQA document supporting the exception request and submit it to the State Board. The Discharger shall comply with all other deadlines the State Board imposes during the exception process, and such deadlines shall become enforceable requirements of this Order.
3. **Within three years of the date of this CDO** - The City of Carmel by the Sea must cease all non-storm water discharges to the ASBS, except (i) fire fighting water, and (ii) those non-storm water discharges described in the Phase II General Permit, Section D.2.c.6 that meet the requirements in item 4, below.
4. The Municipality shall include a demonstration in its CDO-Annual Report (see below) that discharges of the following types are not significant contributors of pollutants to ASBS (see Phase II General Permit, Section D.2.c.6):
 - water line flushing;
 - landscape irrigation;
 - diverted stream flows;
 - rising ground waters;
 - untaminated ground water infiltration (as defined at 40 CFR section 35.2005(20)) to
 - separate storm sewers;
 - untaminated pumped ground water;
 - discharges from potable water sources;
 - foundation drains;
 - air conditioning condensation;
 - irrigation water; springs;
 - water from crawl space pumps;
 - footing drains;
 - lawn watering;
 - individual residential car washing;
 - flows from riparian habitats and wetlands; and
 - dechlorinated or debrominated swimming pool discharges.
5. **Within three months of the date of this CDO** - If they have not already done so, the Discharger shall submit a map of the storm drain system to the Regional Board. The map must be detailed enough to determine watersheds contributing to each of the ASBS-discharge points.
6. **Within six months of the date of this CDO** – The Discharger shall submit a monitoring and reporting plan to the Regional Board's Executive Officer for approval. The monitoring and reporting plan shall:
 - a) Include a map and description of storm water ASBS-discharge outfall locations to be sampled;
 - b) Include plans to sample storm water runoff (effluent) as shown on Table 1, attached, , **beginning within two years of the date of this CDO** or as otherwise directed by the Regional Board's Executive Officer if revisions to the monitoring and reporting plan are necessary;

- c) Include a toxicity testing component. The final approved toxicity component of the monitoring program must be implemented **within two years of the date of this CDO**, or as otherwise directed by the Regional Board's Executive Officer if revisions to the toxicity monitoring are necessary.
 - d) **Within three years of the date of this CDO** - A quantitative survey of benthic marine life must be performed.
 - e) **Within three years of the date of this CDO** - Conduct a bioaccumulation study using sand crabs (*Emerita analoga*) and mussels (*Mytilus californianus*) near field and far field (up and down coast, and offshore) in the ASBS to determine the concentrations of the metals listed on Table 1.
7. **Within six months of the date of this CDO** - The Discharger shall revise its Storm Water Management Plan (SWMP) to describe the measures by which the Discharger will eliminate non-storm water discharges within three years (per item No. 3, above), and interim measures that the Discharger will employ to reduce non-storm water flows until non-stormwater ASBS discharges cease. The revised SWMP must be approved by the Regional Board's Executive Officer. The revised SWMP shall address storm water discharges and how pollutants will be reduced in storm water runoff into the ASBS through the implementation of BMPs. The SWMP must be designed to ensure an improvement in receiving water quality each year, due to either a reduction in storm water discharges, or reduction in pollutants (due to on-site treatment or other BMPs). The revised SWMP implementation must be developed to ensure non-structural BMPs are implemented **within one year** of this CDO issuance. Structural BMPs must be implemented as soon as practicable, but no later than the required implementation dates given in the Design Standards Plan (see item 13, below).
 8. **Within six months of the date of this CDO** - the Discharger shall submit an updated financial analysis for development and implementation of time-scheduled items in this Order. At a minimum, the financial analysis must include a cost estimate for implementing the items in this Order, broken down by line item or categories of costs, and an analysis of sources of funding in amounts sufficient to cover the estimated cost. If the financial analysis discloses available funds are not sufficient to cover estimated costs of developing and implementing the Long-term Wastewater Management Program, measures shall be identified to secure additional funding.
 9. Storm water effluent water quality monitoring sample results shall be compared to Table A, Effluent Limitations, and Table C, Background Seawater Concentration, both from the Ocean Plan. If the results of water quality monitoring indicate discharges exceed Table A or Table C water quality objectives, then:

The Discharger shall identify all reasonable steps to identify the source(s) of the pollutant(s) and determine appropriate BMPs to eliminate the causes of the pollutant(s). Once the Discharger has identified the source(s) of pollutant(s) and appropriate BMPs, the Discharger shall submit a Report of Exceedance to the Executive Officer for approval. The Report of Exceedance shall be submitted **within 120 days** of the discharger receiving effluent sampling results. At a minimum, the Report of Exceedance shall include a discussion of the following items:

1. Geographical description of the problem area;
2. The potential sources of pollutant(s);
3. Permittee's jurisdiction over the pollutant sources;
4. Recommended BMPs to reduce the pollutant(s);
5. Proposed changes to the SWMP to reduce the pollutant(s); and
6. Suggested follow-up monitoring to demonstrate that the pollutant source(s) have been removed.

The Discharger shall revise the above items as directed by the Executive Officer. After the above items are approved by the Executive Officer, the Discharger shall amend the SWMP to include the proposed changes, and the SWMP revisions will go into effect immediately unless otherwise directed by the Executive Officer. If the Discharger has complied with the procedures set forth above, and is implementing the SWMP as revised pursuant to this paragraph, then the Discharger need not repeat the same procedure for continuing or recurring exceedances of the same receiving water quality objective, unless directed by the Regional Board Executive Officer.

10. **Within one year of the date of this CDO** – The Discharger shall develop and submit for public review and comment, and Executive Officer approval, a Design Standards Plan (DSP) that describes measures to reduce pollutant discharges to the Maximum Extent Practicable from all new development and significant redevelopment projects, and individual priority project categories as defined in Attachment 4 of the Phase II Storm Water Permit. The DSP must be consistent with the applicable portions of State Board Order WQ 2000-11 and Attachment 4 of the Phase II Storm Water Permit. The DSP shall be applicable to lands within the MS4 that discharge to the ASBS. The DSP shall provide the following information:
 - a. A description of existing Design Standards, if any, including project categories, BMP requirements and numeric sizing criteria;
 - b. A comparison of existing design standards to the requirements established under State Board Order WQ 2000-11, Attachment 4 of the Phase II Storm Water Permit, and/or other applicable directives; and
 - c. A description of the proposed modifications to the Design Standards to ensure that, at a minimum, they are consistent with the requirements of State Board Order WQ 2000-11, Attachment 4 of the Phase II Storm Water Permit, and this Order.
11. **Within one year of approval of the DSP** - the Discharger shall amend, or adopt if needed, its own local Design Standards, including amendment of ordinances as needed. Design Standards must apply to lands discharging to the ASBS.
12. **By February 11, 2008** - The Discharger shall fully implement all aspects of this Cease and Desist Order, other than the requirement to cease all ASBS discharges by January 1, 2010 if (i) the Discharger timely requests an exception to the prohibition and (ii) the State Board denies the exception or fails to grant an exception by January 1, 2008. Full implementation includes all necessary permitting actions, environmental review, design, construction, and funding.
13. **Within one year of the date of this CDO, and each anniversary thereafter** – The Discharger shall submit a CDO-Annual Report on the results and progress gained on all applicable requirements of this CDO. The Discharger shall submit a CDO-Annual Report on each

anniversary of the CDO date, until all CDO requirements items have been completed, or until this CDO is determined by the Regional Board to be null and void for any reason.

- 14. If the State Board issues an exception to the ASBS discharge prohibition, the State Board order will control if there are any conflicts between the exception and this Order. This Order will become null and void on the date that the State Board exception and any supporting CEQA documents become final and non-appealable.
- 15. If the State Board grants an exception prior to the due date any of the sampling and monitoring tasks listed in item No.6 this CDO, the non-completion of this task shall not be a violation of the CDO. However, the exception or amended SWMP may require this task within the same timeframe.
- 16. The Regional Board reserves jurisdiction to extend due dates set forth in this Order if the extension is necessary due to circumstances beyond the Discharger's reasonable control. Lack of financial resources does not constitute a circumstance beyond the Discharger's reasonable control. The Executive Officer may extend due dates under this paragraph for a period not to exceed sixty days.
- 17. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, then the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, **Roger W. Briggs, Executive Officer** of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Control Board, Central Coast Region, on February 11, 2005.

Executive Officer

Date

TABLE 1
Wet Weather Effluent Monitoring

<u>Type of Monitoring</u>	<u>Parameters Analyzed or Measurements Taken</u>	<u>Sampling Locations</u>	<u>Frequency of Sampling</u>
In-situ water quality measurements	<ul style="list-style-type: none"> • pH • conductivity • turbidity • temperature • Flow • Cross sectional area 	Urban Discharge sites identified in the monitoring plan	Twice per year: 1. First storm water discharge event; and 2. One other time during wet season
Wet Weather – lab samples	<ul style="list-style-type: none"> • Arsenic • Copper • Mercury • Silver • Zinc • E. coli bacteria • Total coliform • Fecal coliform • NH3 total • Nitrate as N • Orthophosphate as P • Polycyclic aromatic hydrocarbons (PAHs), • TDS • Oil&Grease • Suspended Solids • Settleable Solids • Turbidity 	Urban Discharge sites identified in the monitoring plan	Twice per year 1. First storm water discharge event; and 2. One other time during wet season