

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 11, 2005**

Prepared on January 10, 2005

**ITEM NUMBER: 27**

**SUBJECT: ISSUANCE OF NPDES MUNICIPAL STORM WATER PERMIT WASTE DISCHARGE REQUIREMENTS FOR STORM WATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (PHASE II STORM WATER PERMIT), MONTEREY REGIONAL GROUP, MONTEREY COUNTY**

**KEY INFORMATION**

Location: Cities of Monterey, Del Rey Oaks, Sand City , Seaside, Pacific Grove, Carmel Marina, and the Pebble Beach Company and the County of Monterey, all within Monterey County

Discharge Type: Municipal Storm Water

Existing Orders: none

**I. BACKGROUND SUMMARY**

The Cities of Monterey, Del Rey Oaks, Sand City, Seaside, Pacific Grove, Carmel, Marina, and the Pebble Beach Company and the County of Monterey (hereinafter referred to as the Monterey Regional Group) are required by the Clean Water Act §402(p) to obtain permit coverage pursuant to the NPDES Municipal Storm Water Permit for Small Municipal Separate Storm Sewer Systems (General Permit, or Phase II Storm Water Permit).

The process of gaining Phase II Storm Water Permit coverage begins with the applicant submitting a Notice of Intent, and a Storm Water Management Program (SWMP) that meets all the requirements of Section D of the General Permit. Regional Board staff review the SWMP, and, if it is deemed complete, post the SWMP to the State Board website for a 60-day public comment period and notify interested parties via email of the posting. If no comments are received, or if a commenter's concerns are satisfactorily resolved, then the enrollee gains Phase II General Permit

coverage. However, if a commenter's concerns are not resolved to the satisfaction of all parties involved, then the third party must request a hearing from the Regional Board in a letter that includes the reason(s) the hearing is being requested (e.g., why the SWMP is inadequate).

The Monterey Regional Group developed their SWMP over the course of about three years, with input from Jennifer Bitting, Storm Water Program coordinator, Donette Dunaway, storm water staff, and members of the local communities. The Monterey Regional Group submitted their initial SWMP and Notice of Intent by the August 8, 2003 due date as required. Regional Board staff deemed the SWMP incomplete, made comments, and returned the SWMP to the Monterey Regional Group for revisions. This review-revision process was repeated several times until we arrived at a "final" version, dated February 17, 2004. Regional Board staff accepted the MRSWMP, and posted it on the State Board website for a 75 day public comment period which ended April 30, 2004.

The 75 day posting was extended past the standard 60-day period as a result of one comment letter, in which the issues were resolved to the satisfaction of the author.

During the February – April, 2004 posting, Regional Board staff received seven (7) comment letters, two of which requested a Regional Board hearing on the MRSWMP. The issue from one commenter was resolved, and the commenter withdrew his request for a hearing. Several of the other commenters also requested a hearing, and have not rescinded their requests.

In response to the third-party concerns, Regional Board staff emailed and/or phoned each of the commenters to discuss the main points of their letters, and to set up a meeting between the commenters, the Monterey Regional Group participants, and Regional Board staff. Additionally, representatives in surrounding Monterey-area cities were asked to attend the meeting as observers. We held the meeting June 8, 2004, in the Monterey area. The agenda and summary points are included as Attachment 1 of this staff report.

The purpose of the June 8, 2004 meeting was to give the Monterey Group and the Regional Board staff a venue to ask questions and clarify comment points with the authors, and to attempt to reach consensus and revise the SWMP to satisfy all valid concerns. At the closing of the June 8 meeting, the Monterey Regional Group agreed to withdraw their SWMP, and make revisions to reflect the main concerns raised at the meeting. The Monterey Regional Group submitted a draft SWMP, dated December 8, 2004, which was deemed complete by Regional Board staff, and was posted to the State Board website and emailed to all interested parties on December 10, 2004, for a 30-day public comment period.

## **II. STORM WATER MANAGEMENT PROGRAM SUMMARY**

The SWMP describes the organizational framework under which the participating entities will work together to accomplish the objectives of the Program. It contains a description, and map, of the areas to be

covered by the NPDES permit for which the Program was prepared. It also describes Best Management Practices (BMPs) with justification for BMP choices, Measurable Goals, implementation timeframes, and implementing party(ies).

The purpose of the Monterey Regional Group's SWMP is to implement and enforce a series of BMPs. These BMPs are designed to reduce the discharge of pollutants from the municipal separate storm sewer systems to the "maximum extent practicable," to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The achievement of these objectives will be gauged using a series of Measurable Goals, which also are contained in the SWMP.

The BMPs are grouped under the following six "Minimum Control Measures" (MCMs), which are required under the Phase II regulations:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

The SWMP lists BMPs and Measurable Goals, which are included with this Staff Report as Attachment 2. This list was developed by the participating entities, using the comprehensive list of potential BMPs and Measurable Goals promulgated by EPA. The SWMP list contains those BMPs and Measurable Goals that the participants believe will be most useful and effective in reducing the discharge of pollutants from storm sewer systems within the particular geographic area and land uses covered by this permit.

## **III. DISCUSSION**

Regional Board staff believe the SWMP meets and/or exceeds the Phase II General Permit

requirements for all six Minimum Control Measures (listed above in Section II). This Discussion highlights examples from the SWMP that demonstrate the thoroughness of effort put forth by the Monterey Regional Group. These examples provide a glimpse of the information contained in the entire document.

A. Minimum Control Measures (MCM)  
1 and 2 – “Public Education and Outreach”, and “Public Participation and Involvement”

Appendix E and F of the SWMP provide 22 pages of detailed descriptions, examples, financial analysis, and programming of current and future public education, outreach and participation efforts (these appendices are at the end of this document and on our web site: <http://www.waterboards.ca.gov/centralcoast/Permits/documents/MRSWMP120804withAppendixDEF.pdf> ). The appendices provide a wealth of information to any reader, including other communities that may be looking for examples and resources. The Monterey Regional Group is already implementing portions of these programs. Regional Board staff believe the combined efforts of this group in the Public Education/Participation/Outreach area exemplify the intent and benefit that was originally foreseen by the State Board in allowing MS4 permittees to work together to meet MCM requirements.

The Monterey Regional Group SWMP requires several public outreach efforts that show a true effort at keeping the public informed, and taking public concerns into consideration. BMP 2-1.a and 2-1.b require the permittees to hold a public workshop prior to submitting the Annual Report, and to place the draft Annual Reports on a website preceding the workshop meeting. The information received from the public will then be used to keep the SWMP administrators accountable, to verify or refine the Annual Report content, and to guide the next year’s work plan that is submitted with the Annual Report. Most other entities allow a final Annual Report to be all the information that the public receives, and do not go to such efforts to solicit public input.

A second public workshop is scheduled each year with the primary purpose of educating target audiences as needed based on the Annual Report findings from the previous storm water year (BMP 2-1.c). This BMP demonstrates the responsiveness and flexibility for tailoring the SWMP to meet needs as they are identified. By this and other means, the Monterey Regional Group has created a dynamic, applicable program, rather than a paper-exercise that merely meets regulatory requirements with limited ability to address new situations.

The Phase II General Permit does not have water quality sampling requirements (although Regional Board may require sampling as needed). However, BMP 2-2.d explains where the Monterey Regional Group has gone beyond the minimum requirements. The group continues to provide financial and other resources necessary to support volunteer water quality monitoring programs in the region. The group has accepted the responsibility to support the "Urban Watch" and "First Flush" monitoring programs. These two programs use volunteers to conduct sampling and analysis according to a Regional Board approved quality assurance program plan, deliver data to the Regional Board in a CCAMP-compatible format, have been reviewed by Regional Board staff, and provide valuable data on water quality within the region. The previous water quality data gleaned by these and other programs was used by the Monterey Regional Group to decide what BMPs to include in the SWMP. Because the group is supporting the data collection efforts, and has used the data as a basis for BMP selection, it is logical to conclude that the group will continue to use the sampling data as a resource to tailor the storm water program to meet local needs. The collection and utilization of water quality data is the strongest argument demonstrating that the Monterey Regional Group has applied a genuine concern for water quality and the goals of the storm water program.

MCM #3 - Illicit Discharge Detection and Elimination

The Monterey Regional SWMP BMPs 3-3, 3-4(all), and 3-6 (all) are examples of the detail that makes this SWMP a strong document. These BMPs spell out which industries and businesses are of high concern, and provide inspection and follow-through measures if illicit discharge is discovered. The Monterey Regional Group has demonstrated that they have applied background or institutional knowledge to define the BMPs that are most applicable to their region. The group has also committed to inspect the businesses and industries required for inspection by Attachment 4 MS4s (only a subset of the Monterey Regional Group MS4s are required to apply Attachment 4 requirements). This approach allows the Monterey Regional Group to target suspected problem areas from the outset. When the background knowledge is available, as in this case, this targeted BMP method is superior to the less expedient (but more common) approach of writing generic BMPs into a SWMP and modifying the BMPs if needed to finally reach a regionally-suitable BMP.

#### MCM #5 - Post-Construction Runoff Control

In BMPs 5-3(all), and 5-4.a, the Monterey Regional Group went beyond the standard requirements by agreeing to develop an inspection program, an agreement to be signed by facility owners to comply with the program, and annual self-certification requirements. In the SWMP, the group also committed to the development and implementation of enforcement procedures for site owners out of compliance with the inspection and self-certification program. These detailed, multi-project-phase BMPs are an improvement over the more standard Post-Construction program that typically relies most heavily on design review in the planning stage.

#### MCM #6 – Pollution Prevention/Good Housekeeping

BMP No. 6-4.b,c,d are very specifically written methods which Regional Board staff believe exhibit the authors' forethought and dedication to the storm water permit's intent. The Monterey Regional Group is in a unique

situation in that some of the group members participated in creating the Model Urban Runoff Program (MURP)<sup>1</sup>, and therefore have extensive background knowledge that helps the group identify the most critical local pollutant sources and which potential BMPs would be most suitable and realistic for the locale. The group utilized their background knowledge to directly focus on known pollutants, and to use suitable BMPs. However, the group will be continually collecting water quality data through the volunteer monitoring programs and soliciting public input at the two annual meetings, for the purpose of modifying BMPs to address problems as they arise or are better understood.

In summary, Regional Board staff believe there is ample evidence that the SWMP on the whole meets MEP, and in many cases, exceeds the minimum requirements set forth in the Phase II General Permit.

#### IV. BACKGROUND INFORMATION

##### Permit Boundary

The SWMP area boundary is shown on Figure 3-1 from the SWMP, included herein as Attachment 3, and described as follows:

For each incorporated city, the SWMP will be carried out throughout the area bounded by the city's legal jurisdictional boundary, except within

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<sup>1</sup> The Model Urban Runoff Program (MURP) was completed in July of 1998. MURP is a comprehensive how-to guide developed for local governments to address the issues of polluted runoff in the urban environment. The MURP provides options to help small municipalities develop their own urban runoff programs for the Phase II process. The MURP was prepared by the City of Monterey, City of Santa Cruz, MBNMS, California Coastal Commission, Association of Monterey Bay Area Governments (AMBAG), Woodward-Clyde Consultants, and the Central Coast Regional Water Quality Control Board with money from a State 319 (h) grant. Many other local municipal agencies acted as peer reviewers throughout the development of the MURP through semi-annual meetings of the AMBAG Stormwater Task Force, now known as the Monterey Bay Stormwater Information Exchange. The Monterey Bay MURP has been used statewide as a resource for developing storm water programs.

those areas over which the entity does not have jurisdiction. Such excluded areas include, but are not limited to:

- Federal Facilities including the U.S. Defense Language Institute, the U.S. Naval Postgraduate School and its facilities and housing areas, and the Ord Military Community at the former Fort Ord.
- School districts including the Pacific Grove, Monterey Peninsula, and Carmel Unified School Districts
- Colleges and universities including Monterey Peninsula College, California State University at Monterey Bay, and the University of California at Santa Cruz
- Miscellaneous other facilities including the Monterey Peninsula Airport and the Monterey Fairgrounds

From the above list, the schools and universities are required to obtain storm water permitting pursuant to the Phase II Storm Water Permit. The smaller miscellaneous facilities do not require coverage.

For the County of Monterey, the MRSWMP will be carried out in all of the unincorporated areas which have been designated by the U.S. Census Bureau as being "Urbanized Areas" and which are within the County's legal jurisdictional boundary

For the Pebble Beach Company, the MRSWMP will be carried out throughout the area over which it has ownership rights in the area commonly known as Del Monte Forest

### Hydrologic Setting

The Monterey Regional Group is situated adjacent to Monterey Bay, and roughly bordered on the north by the Parajo River, and on the south by the Carmel River, in Monterey County (refer to Attachment 3). In addition to the Pajaro and Carmel Rivers, the larger surface water bodies flowing through the region include the Salinas River, and Alisal,

Tembledaro, Moro Cojo, Espinosa, and Elkhorn Sloughs. All water bodies discharge to the Pacific Ocean.

The State Water Resources Control Board (State Board) has designated 34 Areas of Special Biological Significance (ASBS). Among those ASBS designated are the Carmel Bay ASBS (ASBS No. 34), and the Pacific Grove Marine Gardens and Hopkins Marine Life Refuge ASBS (ASBS No. 19). The Ocean Plan prohibits waste discharges, including pollutants in storm water runoff, to ASBS. Storm water runoff from the Pebble Beach Company, and the City of Carmel by the Sea discharge to the Carmel Bay ASBS (ASBS No. 34). Storm water runoff from the Cities of Pacific Grove and Monterey discharge to the Pacific Grove Marine Gardens Fish Refuge and Hopkins Marine Life Refuge ASBS (ASBS No. 19). Regional Board staff are proposing Cease and Desist Orders for these four ASBS-discharging entities. The Cease and Desist Orders, or another enforcement mechanism, must be adopted prior to enrolling the ASBS-discharging entities in the Phase II Storm Water Permit.

### Beneficial Uses

Storm water from the Monterey Regional Group municipalities' jurisdictions discharge to the water bodies listed above. The beneficial uses of these water bodies include all of those listed in the Basin Plan<sup>2</sup> with the exception of Industrial Process Supply, Hydropower Generation, and Inland Saline Water Habitat. The ultimate goal of the municipal storm water permit is to protect water quality for beneficial uses of receiving

<sup>2</sup> The beneficial uses for the Monterey Regional Group receiving waters include: Municipal and domestic supply, Agricultural supply, Industrial service supply, Ground water recharge, Water contact recreation, Non-contact water recreation, Wildlife habitat, Cold fresh water habitat, Warm fresh water habitat, Migration of aquatic organisms, Spawning, Preservation of biological habitats of special significance, Rare, threatened, or endangered species, Estuarine habitat, Freshwater replenishment, Navigation, Commercial and sport fishing, Aquaculture, and Shellfish harvesting.

waters by implementing best management practices to the maximum extent practicable. The Phase II General Permit states,

Permittees must implement Best Management Practices (BMPs) that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality. In accordance with 40 CFR section 122.44(k)(2), the inclusion of BMPs in lieu of numeric effluent limitations is appropriate in storm water permits.

#### IV. DISCHARGE CHARACTERISTICS

The Phase II General Permit, Findings No. 2, 3, 4 and 5 are as follows:

2. 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. (Finding No. 2)
3. During urban development, two important changes occur. First, where no urban development has previously occurred, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants providing a very effective purification process. Because pavement and concrete can neither absorb water nor remove pollutants, the natural purification characteristics of the land are lost. Second, urban development creates new pollutant sources as human population density increases and brings with it proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc.,

which can be washed into the MS4. As a result of these two changes, the runoff leaving a developed urban area may be significantly greater in volume, velocity, and/or pollutant load than pre-development runoff from the same area. (Finding No. 3)

4. A higher percentage of impervious area 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. (Finding No. 4)
5. 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. (Finding No. 5)

#### V. DISCHARGE PROHIBITIONS

Phase II General Permit Discharge Prohibitions read as follows:

1. "Discharges of waste that are prohibited by Statewide Water Quality Control Plans or applicable Regional Water Quality Control Plans (Basin Plans) are prohibited.
2. Discharges from the MS4s regulated under this General Permit that cause or threaten to cause nuisance are prohibited.
3. Discharges of material other than storm water to waters of the U.S. or another permitted MS4 must be effectively prohibited, except as allowed under Provision D.2.c, or as

otherwise authorized by a separate NPDES permit.”

**VI. EFFLUENT LIMITATIONS**

The Phase II General Permit reads,

1. “Permittees must implement BMPs that reduce pollutants in storm water to the technology-based standard of MEP.
2. Storm water discharges regulated by this General Permit shall not contain a hazardous substance in amounts equal to or in excess of a reportable quantity listed in 40 CFR Part 117 or 40 CFR Part 302.”

**IX. COMMENTS**

The Storm Water Management Plan was posted to the State Board website, [http://www.swrcb.ca.gov/stormwtr/sm\\_municipal\\_swmp.html](http://www.swrcb.ca.gov/stormwtr/sm_municipal_swmp.html), and Regional Board website, <http://www.waterboards.ca.gov/centralcoast/Permits/Index.htm>, and a notice was electronically mailed on December 23, 2004, to all persons listed on the interested parties list. Comments were due back to the Regional Board by January 24, 2005. Comments and responses will be available as a supplement to this report.

**X. PUBLIC HEARING**

The Regional Board will hold a public hearing to consider enrolling the Monterey Regional Group in the Phase II Storm Water Permit. The public hearing is scheduled to be held on February 11, 2005, in Salinas, California. Exact location address and Regional Board hearing agenda will be posted to the Regional

Board website, <http://www.waterboards.ca.gov/centralcoast/>.

Further information regarding the conduct and nature of the public hearing concerning this draft order may be obtained by writing or visiting the Central Coast Regional Water Quality Control Board office, at 895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401, attention Donette Dunaway, (805) 549-3698, or [ddunaway@waterboards.ca.gov](mailto:ddunaway@waterboards.ca.gov).

**XII. RECOMMENDATIONS**

Accept the December 2005 Monterey Regional Storm Water Management Program as complete.  
Approve enrollment of the Monterey Regional Group pursuant to the Phase II General Permit.

**XIII. ATTACHMENTS**

The Attachments to this Staff Report have been provided in hard copy for the Board Member packets. All other reviewers are directed to the Regional Board website, <http://www.waterboards.ca.gov/centralcoast/Permits/Index.htm> to see Attachments, or may reach Donette Dunaway at the above listed contact to arrange a document review in person at the Regional Board offices.

1. - SWMP Commenter’s June 8, 2004 Agenda and summary points
2. - SWMP BMPs and Measurable Goals Table 4
3. – Monterey Regional SWMP area boundary map.  
S:\Storm Water\Municipal\Monterey Co\Phase II\Monterey co SWMP, 2004\December 2004 Final\Staff Report, 1-2005 final.doc