

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 94-106

CLOSURE AND POST-CLOSURE MAINTENANCE REQUIREMENTS
FOR
SAN JUAN MEADOWS-LP AND THE COUNTY OF ORANGE
FORSTER CANYON LANDFILL
ORANGE COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On August 11, 1994, this Regional Board adopted Order No. 94-106, *Closure and Post-Closure maintenance requirements for San Juan Meadows-LP and the County of Orange, Orange County*. Order No. 94-106 established closure and post-closure landfill maintenance and water quality monitoring requirements for the Forster Canyon Landfill, which ceased operation in March 1976.
2. San Juan Meadows and Orange County IWMD (hereinafter Dischargers), are responsible for the protection of usable waters from discharge of wastes, gases, and leachate during the landfill maintenance period, and for as long as the wastes in the Forster Canyon Landfill pose a threat to water quality. This responsibility continues with subsequent change in land use of the landfill area, for purposes other than open space.
3. Pursuant to CCR Title 27, Chapter 1, Article 1, Section 20080(g), landfills which were closed, abandoned, or inactive on or before November 27, 1984 are not specifically required to be closed in accordance with Title 27, Subchapter 5, Articles 1 and 2. However, these landfills are subject to post-closure maintenance requirements in accordance with Title 27, Section 21090 (b) and (c); and other requirements for the protection of water resources (Section 20380 *et seq.*).
4. Pursuant to CCR Title 27, Chapter 1, Article 1, Section 20080(g), persons responsible for discharges at waste management units that are closed, abandoned, or inactive may be required to develop and implement a monitoring program. If water quality impairment is found, such persons may be required to develop and implement a corrective action program based on the provisions of Title 27.
5. Landfill cover at inactive landfills which ceased operation prior to 1984 may not be adequate to minimize percolation of liquids through wastes as described in Title 27, Section 20705.

6. As part of the FY 2000/2001 **Waste Discharge Order Update Program**, WDR Order No. 94-106 has been reviewed by Regional Board staff as required by Section 13263 of the California Water Code. This Order updates the findings and requirements of WDR Order No. 94-106 in order to address current State and Regional Board policies, regulations and the current status of the landfill.
7. Inactive landfills are existing facilities, and as such are exempt from the provisions of the California Environmental Quality Act in accordance with CCR Title 14, Chapter 3, Article 19, Section 15301.
8. A variety of approaches may be effective as Best Management Practices (BMPs) for control of surface water runoff and erosion of cover materials. BMPs for control of surface water runoff should be used in areas where cover materials have been placed and in areas undergoing landfill containment system construction or maintenance. Effective BMPs are best implemented on a site-specific basis and may include, but are not limited to, the use of: bonded fiber matrix materials, anchored fiber rolls, fiber blankets, and other measures as appropriate.
9. In March 1994, the Responsible Parties submitted a Final Closure and Post-Closure Maintenance Plan (FCPCMP) for the Forster Canyon Landfill. This plan was later modified by FCPCMP Amendment (October 1998). The FCPCMP and Amendment were submitted for closure of the Forster Canyon Landfill in order to facilitate development of the San Juan Meadows Development Project, to be located at the site. To date, the Regional Board has not received any indication that the development of former landfill site, and therefore final closure, will occur.
10. The Regional Board has considered all water resource related environmental factors associated with the discharge of waste associated with the Forster Canyon Landfill.
11. The Regional Board has notified interested parties of its intent to amend landfill maintenance requirements for the Forster Canyon Landfill.
12. The Regional Board, in a public meeting, heard and considered all comments pertaining to landfill maintenance of the Forster Canyon Landfill.
13. Adoption of Addendum No. 1 would establish interim site maintenance and monitoring program requirements for the Forster Canyon Landfill, until development of the former landfill site, and final closure occurs.

IT IS HEREBY ORDERED, That Order No. 94-106 be amended as follows:

1. Add the following as **Prohibition A.2.g**:

“Cause pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters as established in the Basin Plan.”

2. Add the following as **Prohibition A.7**:

“The use of pressurized water lines overlying waste is prohibited unless the water lines are designed in accordance with Maintenance Specification B.17.”

3. Replace **B. CLOSURE SPECIFICATION & POST-CLOSURE MAINTENANCE** with the following:

B. MAINTENANCE SPECIFICATIONS

General Maintenance Requirements

1. The discharger shall prepare a maintenance plan by **September 28, 2001**, which contains, but is not limited to, the following:
 - a. The persons, companies, or agencies responsible for each aspect of landfill maintenance, along with their addresses and phone numbers.
 - b. Location maps indicating property boundaries and the existing limits of waste, internal roads, and structures located inside the property boundary.
 - c. A location map of the current environmental monitoring and waste control systems including drainage and erosion control systems, and landfill gas monitoring and control systems.
 - d. A description of the methods, procedures, schedules and processes that will be used to maintain, monitor and inspect the landfill.
2. Annually by **April 30**, the discharger shall submit any and all modifications to the landfill maintenance plan as part of the Annual Summary Report. If no modifications have been made since the previous year, the discharger shall provide to the Regional Board a written statement to that effect.

3. The landfill maintenance period shall continue until the Regional Board determines that remaining wastes in the waste management unit (WMU) will not threaten water quality.
4. The dischargers shall comply with all applicable requirements of CCR Title 27, Subchapter 5, Article 2.
5. The landfill area shall be adequately protected from any washout, erosion of wastes or cover materials. The surface drainage system shall be designed to adequately handle the rainfall from a 100-year 24-hour storm event.
6. The structural integrity and effectiveness of all containment structures and the existing cover shall be maintained as necessary to correct the effects of settlement or other adverse factors.
7. Vegetation used at the site shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of containment structures including the existing cover.
8. The migration of landfill gas from the site shall be controlled as necessary to ensure that landfill gases and gas condensate are not discharged to surface waters or ground waters. Condensate shall be collected and removed from the site except as defined in CCR Title 27 Section 20090(e).

Erosion Control

9. Annually, prior to the anticipated rainy season but not later than **October 31**, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion, ponding, flooding, or to prevent surface drainage from contacting or percolating through wastes at the facility. In addition, maintenance and repairs necessitated by changing site conditions can be made at any time.
10. Structural and non-structural Best Management Practices (BMPs) shall be used to prevent erosion of cover materials and in areas undergoing landfill containment system construction and/or maintenance.
11. All areas, including surface water drainage courses, shall be maintained to minimize erosion. The landfill cover shall be maintained to minimize percolation of liquids through wastes.

Surface Water Drainage

12. Surface water runoff within the boundary of the landfill (i.e., precipitation that falls on the landfill cover) shall be collected by a system of berms, ditches, downchutes, swales and drainage channels, and shall be diverted off the landfill to either the detention basins or to the natural watercourses offsite.
13. Surface water runoff from tributary areas and internal site drainage from surface and subsurface sources shall not contact or percolate through waste and shall either be contained onsite or be discharged in accordance with applicable storm water regulations.
14. Surface Drainage from the landfill is subject to State Board Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, "*Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*"
15. Where surface water runoff results in erosive flow velocities, surface protection such as asphalt, concrete, riprap, silt fences or other erosion control material shall be used for protection of drainage conveyance features. Interim bench ditches shall be provided with erosion control material and riprap to control erosion where necessary.
16. Where surface water runoff occurs at terminal ends of downchutes or where downchutes cross the landfill cover access roads, erosion control material shall be applied to exposed soil surfaces.
17. Energy dissipators shall be installed to control erosion at locations where relatively high erosive flow velocities of surface water runoff are anticipated.

Irrigation Systems Control

18. For inactive landfills with water lines overlying waste, the design shall consider, but not be limited to, the following:
 - a. Flexible connectors;
 - b. Secondary containment;
 - c. Moisture sensors within secondary containment;
 - d. Rain sensors;
 - e. Annual leak testing;
 - f. Automatic shutoff valves; and
 - g. Maintenance plan describing the inspection and maintenance schedule for all mitigation devices.

3. Replace **Provision C.2.** with the following:

“The discharger shall comply with the applicable provisions of California Code of Regulations Title 27 and all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for: (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a Report of Waste Discharge in application for new or revised Waste Discharge Requirements.”

4. Add the following as **Provisions C.14:**

“Alternatives, exceptions, and exemptions or waivers from requirements of California Code of Regulations Title 27 (“27CCR”) shall be subject to the approval of the Regional Board and shall be authorized only as provided for by 27CCR. Implemented alternatives to 27CCR requirements shall meet the conditions for approval of such alternatives established in 27CCR throughout the post-closure period.”

5. Add the following as **Provisions C.15:**

“This Order is not transferable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to, change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order’s responsibility and coverage as described under Reporting Requirement D.3.”

6. Replace **Reporting Requirement D. 17** with the following:

“The discharger shall submit reports and other information required under this Order to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124-1331
Attn: Land Discharge Unit Supervisor”

7. Add the following as **Reporting Requirement D.18:**


“The discharger shall submit a copy of the Storm Water Pollution Prevention Plan by **April 30, 2001**. Subsequently, the discharger shall submit any and all modifications to the SWPPP as part of the Annual Summary Report due April 30. If no modifications have been made since the previous year, the discharger shall provide a statement to that effect in the Annual Summary Report.”

8. Add the following as **Reporting Requirement D.19**:

“The discharger shall perform quarterly inspections of the landfill site and report the results to the Regional Board in a **quarterly** letter report. The report shall contain information on the site condition and a discussion of any significant findings with regard to:

- a. General site condition;
- b. Surface cover and slope;
- c. Drainage facilities;
- d. Ground water and vadose zone monitoring networks;
- e. Methane gas control system;
- f. Observation of seepage from the site; and
- g. Maintenance activities at the site”

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on March 14, 2001.



JOHN H. ROBERTUS
Executive Officer