

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2012-XXXX

TO AMEND SPECIAL ORDER 98-165  
FOR  
CLEAN HARBORS BUTTONWILLOW, LLC  
BUTTONWILLOW, KERN COUNTY  
FOR CLOSURE OF CLASS II WASTE MANAGEMENT UNITS

The California Regional Water Quality Control Board, Central Valley Region, (hereinafter Board) finds that:

1. Clean Harbors Buttonwillow, LLC (herein after Discharger) owns and operates a waste treatment and disposal facility at 2500 West Lokern Road, approximately eight miles west of the community of Buttonwillow, CA., which is shown in Attachment A, which is attached to and made part of this Order. The facility accepts Class I and Class II solid waste, and Class II liquid waste, for treatment and disposal. The site is fenced and covers 320 acres, encompassing the east half of Section 16, T29S, R22E, MDB&M. The Assessor's Parcel Number is 99-290-17. The land is owned by the Discharger.
2. In 2002, Clean Harbors, Inc., a Massachusetts-based corporation, assumed ownership and operation of the Buttonwillow facility from Safety-Kleen (Buttonwillow), Inc. The transfer of ownership and subsequent name change of the facility from that documented in Order 96-094, was updated through the adoption of Order R5-2002-0191. The current name of the facility is Clean Harbors Buttonwillow, LLC, operating as a subsidiary of Clean Harbors, Inc.
3. The facility is regulated by Waste Discharge Requirements Order 96-094, which implement California Code of Regulations (CCR), title 23 and title 27 (Title 27). Special Order 98-165 amended Order 96-094 to reclassify the former impoundments as Class II solid waste landfills and to regulate the closure of the five former nonhazardous surface impoundments – Waste Management Units (WMUs) 18, 21, 22, 23, and 27, which are shown in Attachment B, which is attached to and made part of this Order. The former surface impoundments were put into service between June 1985 and August 1986 and accepted only non-hazardous liquids from petroleum exploration and production operations. Municipal solid waste has not been accepted at the facility. This Order amends Special Order 98-165.
4. The Discharger submitted a *Revised Final Design Report and Revised Supplemental Final Closure Plan*, both dated July 2011, and a subsequent response to Board staff comments dated 30 November 2011. The revised plan proposes closure of WMUs 18, 21, 22, 23, and 27 as Class II landfills. Only dry nonhazardous solid waste will be contained in the closed landfills.

### **CLOSURE OF WMUs 18, 21, 22, 23 AND 27 AS CLASS II LANDFILLS**

5. Sludge in WMUs 22, 23, and 27 is being dried and solidified using appropriate dry, solid, nonhazardous waste and other dry soil and/or pozzolanic agents. Solidification of the residual sludge is complete in WMUs 18 and 21. Additional nonhazardous, dry solid waste will continue to be discharged to the WMUs until final design grade elevations are reached. Moisture content of the solidified sludge and other material is controlled to ensure that the moisture holding capacity of the material is not exceeded.
6. Following solidification, the sludge in the WMUs will be compacted. Once grading of the compacted sludge is complete, on-site soil will be used as engineered fill between WMUs 21 and 22, 22 and 23, and 23 and 27. The *Revised Final Design Report and Revised Supplemental Final Closure Plan* describe one inclusive final cover system for WMUs 21, 22, 23, and 27. A separate final cover system for WMU 18 is needed since a pipeline right-of-way easement divides the WMU from the other WMUs.
7. Closure and post-closure maintenance requirements for landfills are contained in Title 27, section 21090. The prescriptive standard for the final cover is contained in Title 27, section 21090(a). The minimum cover design required is (from top down) a one-foot vegetative layer, one foot of soil compacted to a maximum permeability of  $1 \times 10^{-6}$  cm/sec, and a two-foot foundation layer. Title 27, section 20080(b) allows the Central Valley Water Board to consider the approval of an engineered alternative to the prescriptive standard. The Discharger must demonstrate that the proposed engineered alternative cover system is consistent with the performance goals addressed by the particular prescriptive standard, and provides protection against water quality impairment equivalent to the prescriptive standard in accordance with Title 27, section 20080(b)(2).

The Discharger submitted a design plan for the proposed closure of WMUs 18, 21, 22, 23, and 27 in the *Revised Final Design Report and Revised Supplemental Final Closure Plan*, both dated July 2011, as well as a subsequent response to Board staff comments dated 30 November 2011. The plans were determined to be adequate in correspondence from Central Valley Water Board staff dated 15 December 2011. The proposed final cover design for the WMUs is an evapo-transpirative (ET) cover consisting of a vegetated soil layer, constructed to a minimum thickness of three feet. A cross-section of the cover system is shown on Attachment C, which is attached to and made part of this Order. The ET cover provides an equivalent performance system that relies on water balance components of the soil layer, designed to minimize potential percolation through transpiration and/or evaporation, in lieu of a conventional prescriptive final cover. The facility is in an arid environment, with average annual precipitation of approximately five inches and an average annual pan evaporation of approximately 108 inches.

8. The final configuration of WMUs 18, 21, 22, 23, and 27 exceeds the minimum prescriptive requirements of Title 27. Therefore, WMUs 18, 21, 22, 23, and 27 meet the design and construction standards contained in Title 27 for non-MSW Class II landfills.

### **MONITORING**

9. Monitoring at the facility is regulated by Monitoring and Reporting Program 96-094, which is attached to and part of Order 96-094.
10. Groundwater monitoring at the point of compliance of the WMUs is provided by the existing groundwater monitoring well network.
11. Title 27 requires monitoring of the unsaturated zone. Since the landfill contents will be dried, solidified, and tested during closure, the only source of moisture would be infiltration through the cover. Therefore, monitoring beneath the cover should provide the earliest detection of moisture infiltration. Monitoring will be conducted using a gravel pan lysimeter to be installed on the upper deck below the final cover for WMUs 21, 22, 23, and 27.

### **CEQA AND OTHER REGULATORY CONSIDERATIONS**

12. Kern County adopted the Supplemental Environmental Impact Report (SEIR) for the facility on 12 December 1994, in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, §21000 et seq.) and (Cal. Code Regs., tit. 14, §15000 et seq.). Kern County filed the Notice of Determination on 19 December 1994. The Board considered the SEIR and incorporated measures in the Special Order and in WDRs 96-094 which are intended to mitigate significant effects on the environment.
13. The Board adopted the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, (Revised 2004)*, which designates beneficial uses and contains water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
14. This Order implements the prescriptive standards and performance goals of Title 27. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the facility.
15. Water Code section 13267(b)(1) states in relevant part that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the

regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

Technical reports required by this Order and the attached MRP are necessary to assure compliance with these WDRs. The Discharger owns and operates the facility that discharges the waste subject to this Order.

### **PROCEDURAL REQUIREMENTS**

16. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe the Order for the Buttonwillow facility, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the Order.

**IT IS HERBY ORDERED**, that pursuant to California Water Code sections 13263 and 13267, Special Order 98-165 is amended, and that Clean Harbors Buttonwillow, LLC, its agents, successors, and assigns in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

#### **A. PROHIBITIONS**

1. The discharge of waste to WMUs 18, 21, 22, 23, and 27, other than dry, nonhazardous, non-municipal solid waste is prohibited.

#### **B. DISCHARGE SPECIFICATIONS**

1. WMUs 18, 21, 22, 23, and 27 shall have a final closure cover consisting of a three-foot thick ET cover and a one-foot foundation layer of soil in accordance with the design plans approved by Central Valley Water Board staff on 15 December 2011. .
2. One gravel pan lysimeter shall be constructed beneath the final ET cover over WMUs 21, 22, 23, and 27, designed to measure moisture flux through the cover in accordance with the Monitoring and Reporting Program.
3. During closure, the Discharger shall monitor and control the moisture content of the solidified sludge and other material discharged to WMUs 18, 21, 22, 23, and 27 in accordance with the approved closure plan to ensure that the moisture holding capacity of the material is not exceeded.

4. **Within 90 days** following the completion of construction of the final cover system, the final documentation required in Title 27, section 20324(d)(1)(C) shall be submitted to the Executive Officer for review and approval. The report shall be certified by a civil engineer or a certified engineering geologist registered in the State of California. It shall contain sufficient information and test results to verify that construction was in accordance with the design plans and specifications, with this Order, and with the standards and performance goals of Title 27.
5. A third party independent of both the Discharger and the construction contractor shall perform all of the construction quality assurance (CQA) monitoring and testing during the construction of a cover system. The CQA program shall be supervised by a registered civil engineer or a certified engineering geologist who shall be designated the CQA officer.

### **C. PROVISIONS**

1. Order 96-094 remains in full force and effect except as amended by this Order. The Discharger shall also comply with the requirements of this Order.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 29 November 2012.

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PAMELA C. CREEDON, Executive Officer