

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2010-\_\_\_\_\_

WASTE DISCHARGE REQUIREMENTS  
FOR  
CEMEX  
KERLINGER PLANT  
UNCLASSIFIED LANDFILL AND RECYCLING OPERATIONS  
SAN JOAQUIN COUNTY

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

1. Cemex (hereafter Discharger) owns and operates an unclassified landfill at the Kerlinger Plant, a sand and gravel facility in San Joaquin County. The landfill began operating in 1989 under previous Waste Discharge Requirements (WDRs) Order No. 89-131 and was originally owned and operated by RMC Lonestar. Order No. 89-131 allowed the discharge of broken and returned concrete, clean soil, asphaltic concrete, and comeback concrete slurry to an onsite sand and gravel pit. The capacity of the landfill is approximately 336,000 cubic yards.
2. The 548-acre Kerlinger Plant is between Tracy Boulevard and Mac Arthur Drive south of the City of Tracy as shown in Attachment A, which is incorporated herein and made part of this Order by reference. The landfill occupies approximately 5 acres and is about 55 feet deep, as shown in Attachment B, which is incorporated herein and made part of this Order by reference. The facility is in Section 16, T3S, R5E, MDB&M.
3. Previous WDRs state that the landfill would be filled around 2009 and then closed. Between 1989 and 2004, RMC Lonestar filled the landfill to grade. Cemex took over the operation in 2005 and began recycling the material in the landfill by pulling it out and crushing it for use in recycled concrete mixes. On 16 September 2009, Central Valley Water Board staff inspected the site and observed the recycling operation. Staff requested an amended Report of Waste Discharge (RWD) due to changes in the nature of the operation from just landfilling to landfilling and recycling.
4. On 23 March 2010, the Discharger submitted an amended RWD. The RWD included information about the recycling operation and a conceptual plan for closing the landfill once it eventually reaches final grade if recycling is discontinued.

**WASTES AND THEIR CLASSIFICATION**

5. The Discharger proposes to continue discharging broken and returned concrete (sometimes with steel rebar), clean soil, asphaltic concrete, and comeback concrete slurry to the landfill. These wastes are classified as "inert waste" using the criteria set forth in Title 27, California Code of Regulations (Title 27).

6. Section 20230(a) of Title 27 defines inert waste as a subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste. Section 20230(b) of Title 27 states that inert wastes do not need to be discharged at classified Units (hence the “unclassified landfill” designation). Section 20230(c) of Title 27 states that WDRs for inert waste discharges are optional. WDRs for this discharge are being required so that the Central Valley Water Board has a regulatory mechanism to ensure that only inert wastes are discharged to the landfill, can provide requirements for how the landfill is eventually closed, and to provide requirements for groundwater monitoring at the landfill to verify that the wastes in the unlined landfill are not causing groundwater impacts.

### **SITE DESCRIPTION**

7. Land within 1,000 feet of the landfill is used for an aggregate pit and asphalt and concrete batch plant.
8. The first water-bearing formation is approximately 30 feet below the base of the landfill.
9. The beneficial uses of groundwater, as specified in *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
10. There are two on-site water supply wells upgradient from the landfill. The water is used in washing operations and the sand/gravel pit, and for dust control.
11. There are three groundwater monitoring wells located around the landfill (DW-1, DW-2, and DW-3), as shown on Attachment B. These wells are used to monitor groundwater quality as required by Monitoring and Reporting Program (MRP) No. R5-2010-\_\_\_\_, a part of this Order.
12. The facility receives an average of 8 inches of precipitation per year.
13. The 100-year, 24-hour precipitation event for the facility is 2.3 inches, as calculated by the Department of Water Resources from precipitation readings collected at the Tracy 2 SSE weather station.
14. Surface water drainage is to Corral Hollow Creek, which is an intermittent stream that flows toward the San Joaquin River, but the flow dissipates into the alluvium south of Tracy. During large flood events, flow from the creek can reach the Sacramento-San Joaquin Delta by entering drainage channels that discharge to the San Joaquin River. Corral Hollow Creek is immediately south of the landfill, as shown on Attachment B.

15. Designated beneficial uses of the Sacramento-San Joaquin Delta, as designated in the Basin Plan, are: municipal and domestic supply; agricultural supply; industrial service supply; industrial process supply; water contact and non-contact water recreation; warm freshwater habitat; cold fresh water habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; wildlife habitat; and navigation.

### **LANDFILL OPERATION AND CLOSURE**

16. In the 2010 RWD, the Discharger states that the landfill is currently about half full and is actively receiving new clean comeback concrete, reclaimed/broken concrete, asphaltic concrete, and minor amounts of clean inert soil material. The RWD also states that material is periodically removed from the landfill to augment the annual aggregate production of the plant, and that this is done by an independent contractor whenever there is a market demand for recycled aggregate base product.
17. As was required by the previous WDRs, this Order requires that comeback concrete slurry be dried before discharge to the landfill (see Discharge Specification No. 4).
18. Runoff/run-on berms surround the landfill, and the site is graded to divert stormwater away from the landfill unit. The Discharger inspects the landfill on a monthly basis.
19. In the 2010 RWD, the Discharger proposes the conceptual closure of the landfill. The proposed closure is as follows:
  - All remaining empty space in the landfill will be filled.
  - Clean material will be added and compacted until the surface layer/top cap extends two feet above surrounding grade.
  - The perimeter edges of the top cap will be tapered at a rise-to-run ratio of 0.5 to 1.
  - The former unit will be allowed to re-vegetate to match surrounding area.
  - Inspections and groundwater monitoring will continue in accordance with the MRP.
20. Since the landfill is unclassified, there are no regulatory prescriptive standards for how it must be closed. However, the most important goal of a landfill closure should be to divert water away from the landfill and the waste. The Discharger's proposed conceptual plan for closure requires some adjustments to achieve this goal. Primarily, this will require that the landfill cover be sloped for drainage. This Order therefore also requires that the landfill final cover be sloped at a minimum of one percent for drainage. To achieve this, the Discharger may need to alter the proposed final cover configuration.
21. This Order requires the following basic elements in the final closure of the landfill:
  - The final surface layer of the landfill shall consist of at least two feet of clean, compacted soil, and shall be vegetated to prevent erosion.

- The final cover shall be sloped at least one percent for drainage.

This Order requires the Discharger to submit a Final Closure Plan that meets the requirements of this Order prior to closing the landfill.

### **CEQA AND OTHER LEGAL REFERENCES**

22. The action to adopt WDRs for the inert waste landfill is exempt from the California Environmental Quality Act in accordance with Section 15304 of Title 14, California Code of Regulations.
23. This Order implements the Basin Plan.
24. Section 13267 of the California Water Code states, in part, *“(a) A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region”* and *“(b) (1) In conducting an investigation..., the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state 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 reports and the benefits to be obtained from the reports. In requiring these reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify evidence that supports requiring the person to provide the reports.”*
25. The technical reports required by this Order and the attached Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. Cemex is responsible for the discharges of waste at the facility subject to this Order and are, therefore, subject to CWC Section 13267(b).

### **PROCEDURAL REQUIREMENTS**

26. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.
27. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

28. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
29. 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 Section 13320 of the California Water Code and Title 23, California Code of Regulations Sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the 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.

**IT IS HEREBY ORDERED**, pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. 89-131 is rescinded, and Cemex and its agents, assigns and successors, 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. DISCHARGE PROHIBITIONS**

1. The discharge of wastes defined as "hazardous" at the facility, is prohibited. For the purposes of this Order, the term "hazardous" is as defined in Title 27.
2. The discharge of wastes defined as "designated" at the facility, is prohibited. For the purposes of this Order, the term "designated" is as defined in Title 27.
3. The discharge of waste to surface waters, surface water drainage courses, or groundwater is prohibited.
4. The discharge of liquid waste to the landfill is prohibited.
5. The discharge of wastes containing greater than one percent (>1%) friable asbestos to the landfill is prohibited.
6. The discharge of wastes to the landfill other than those listed in Finding No. 5 of this Order is prohibited.

**B. DISCHARGE SPECIFICATIONS**

1. The Discharger shall implement landfilling in a manner that does not cause, or threaten to cause, a condition of contamination, pollution or nuisance (including odor), as defined in the California Water Code, Section 13050.

2. The discharge of wastes shall not cause water quality degradation.
3. Wastes shall only be discharged into, and shall be confined to, Units specifically designed for their containment as described in this Order.
4. Comeback concrete slurry shall be allowed to dry for at least 48 hours prior to being discharged to the landfill.
5. The Discharger shall, in a timely manner, remove and relocate any wastes discharged at this facility in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Central Valley Water Board explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence. If the waste is a hazardous waste, the Discharger shall immediately notify the California Department of Toxic Substances Control.

#### **C. FACILITY SPECIFICATIONS**

1. The Discharger shall conduct at least monthly inspections and maintain landfill structures such as berms and groundwater monitoring wells. Monitoring wells shall be protected from equipment and vehicles, and shall be locked.
2. The Discharger shall submit a Final Closure Plan at least six months prior to the landfill being filled to grade. At closure, the landfill shall receive a final cover consisting of at least two feet of clean soil, and shall be sloped at least one percent for drainage. The cover shall be vegetated to prevent erosion.

#### **D. PROVISIONS**

1. The Discharger shall comply with these WDRs and the attached MRP No. R5-2010-\_\_\_\_, and any revisions thereto as ordered by the Executive Officer. A violation of the MRP is a violation of these waste discharge requirements.
2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referred to as "Standard Provision(s)."
3. The Discharger shall submit reports required by this Order pursuant to Section 13267 of the California Water Code. Failure to submit the reports by the due dates shown may lead to enforcement action pursuant to Section 13268.
4. By **1 November 2010**, the Discharger shall submit a Water Quality Protection Standard report with a proposed statistical analysis method for calculating Concentration Limits for groundwater at the landfill. The report shall also include proposed Concentration Limits for each of the monitoring parameters listed in

Table 1 of the attached MRP using the available background data from monitoring well DW-2.

5. By **1 December 2010**, the Discharger shall submit a report with the estimated cost to close the landfill in compliance with this Order, the estimated cost for annual post-closure maintenance, and that identifies the source of funding for completing landfill closure and conducting post-closure maintenance.
6. If the Discharger, through a detection monitoring program, or the Central Valley Water Board finds that there is a statistically significant increase in indicator parameters or waste constituents over the Water Quality Protection Standard at or beyond the Point of Compliance, the Discharger shall notify the Central Valley Water Board or acknowledge the Board's finding in writing within seven days, and shall immediately resample for the constituent(s) or parameter(s) at the point where the standard was exceeded. Within 90 days, the Discharger shall submit to the Central Valley Water Board the results of the resample and either:
  - a. A report demonstrating that the Water Quality Protection Standard was not, in fact, exceeded; or
  - b. An amended Report of Waste Discharge for the establishment of an Evaluation Monitoring Program which is designed to determine the horizontal and vertical extent of the release.
7. If the Discharger, through an Evaluation Monitoring Program, or the Central Valley Water Board verifies that Water Quality Protection Standard have been exceeded at or beyond the Point of Compliance, the Discharger shall notify the Central Valley Water Board or acknowledge the Board's finding in writing within seven days. Within 180 days, the Discharger shall submit to the Central Valley Water Board an amended Report of Waste Discharge for the establishment of a Corrective Action Program which is designed to achieve compliance with the Water Quality Protection Standard.
8. The Discharger shall maintain waste containment facilities and precipitation and drainage control systems, and shall immediately notify the Central Valley Water Board of any flooding equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures.
9. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator in writing of the existence of this Order prior to the change in ownership. A copy of that notification shall be sent to the Central Valley Water Board.
10. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

11. The Central Valley Water Board will review this Order periodically and will revise these requirements when necessary.

I, PAMELA C. CREEDON, 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, Central Valley Region, on \_\_\_\_\_.

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PAMELA C. CREEDON, Executive Officer

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