

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2006-0078

WASTE DISCHARGE REQUIREMENTS
For
VULCAN MATERIALS COMPANY
Durbin Landfill
(File No. 06-024)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

1. Vulcan Materials Company (Discharger) owns and operates the Durbin Landfill (Site) located at 13000 East Los Angeles Street, Irwindale, California. The site is bounded by Hornbrook Street on the east, East Los Angeles Street on the north, the 605 freeway on the west, and Ramona Boulevard on the south (Figure 1). The Site occupies approximately 334.6 acres of an excavated gravel pit that is centered at approximate latitude 34°05'11"N and longitude 117°59'23"W.
2. The Site is an active quarry pit that has been mined by the Discharger and its predecessors since approximately 1900. The pit has a surface elevation of approximately 350 feet above mean sea level (amsl) along its northern edge and 330 feet amsl along its southern edge. Current excavation depths at the Site range from 175 to 200 feet below surface, which is the maximum depth that is approved by the City of Irwindale. The Discharger is currently applying for a revised land use permit from the City of Irwindale that will allow the site to be mined to a depth of 440 feet below surface.
3. Groundwater at the Site has been exposed by aggregate mining activities and currently occupies approximately one third of the pit. Mining activities at the site include both "wet mining" that involves dredging under exposed groundwater and "dry mining" that involves excavating above groundwater. Current groundwater depths across the Site range from 274 feet amsl (64 feet deep) to 190 feet amsl (148 feet deep).
4. The Discharger has proposed to operate the Site concurrently as an inert debris engineered fill operation (EFO) as defined in Section 17388(1) of Title 14, California Code of Regulation (14 CCR). Approximately 52 million cubic yards of inert material will be required to fill the current quarry to its pre-mining surface elevations.
5. The Discharger has filed with the Regional Board a Report of Waste Discharge (ROWD) in accordance with the California Water Code (CWC) and applied for Waste Discharge Requirements (WDRs) for the discharge of inert solid wastes at the Site.
6. Section 20230(a) of title 27, California Code of Regulations (27 CCR), provides that "*Inert waste is that 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.”

7. Section 20230(c) of 27 CCR provides that the Regional Board can prescribe individual or general WDRs for discharges of inert wastes.
8. The Site overlies an aquifer that is a major source of drinking water in the Main San Gabriel Basin in the Los Angeles-San Gabriel Hydrologic Area. Aquifers within the basin are comprised primarily of coarse sand and gravel. The direction of groundwater flow at the Site is generally to the southwest and south.
9. The Site is in the vicinity of the San Gabriel River. The unlined river has been used for spreading groundwater for recharge purposes.
10. The Site is within a 100-year flood plain hazard zone as defined by the Federal Emergency Management Agency (FEMA) and falls within the FEMA Zone C designation or “zone of minimal flooding”.
11. The Site is subject to reclamation as required by the State Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code §2710 et seq.). The Discharger has developed a reclamation plan for the Site that was approved by the City of Irwindale with Ordinance No. 356, dated March 1988, and Resolution No 90-17-1190, dated June 28, 1990, respectively.
12. The Site currently has the zoning classification of M2 (Heavy Manufacturing) and the General Plan Land Designation is “industrial”. The reclamation plan for the Site specifies the following ultimate land use type: “agricultural, recreational, commercial, industrial, etc.” The Discharger intends to reclaim the land for retail and commercial usage upon completion of fill activities.
13. The City of Irwindale adopted a Negative Declaration regarding the reclamation plan of the Site on May 24, 1990, in accordance with the California Environmental Quality Act (Public Resource Code, §21000 et seq.).
14. On December 20, 2005, the City of Irwindale passed Resolution No. 2005-89-2106 that adopted technical guidelines for the backfilling of open-pit mines within the City, including: Guidelines for Stability Analyses of Open-pit Mine Slopes, Guidelines for Drainage and Erosion Control for Open-pit Mines, Guidelines for Underwater Backfilling of Open-Pit Mines, and Guidelines for Above-Water Backfilling of Open-Pit Mines.
15. Pursuant to section 402 (p) of the Clean Water Act (33 USC §1342(p)) and title 40 of the Code of Federal Regulations (40 CFR) parts 122, 123, and 124, the California State Water Resources Control Board (State Board) adopted a National Pollutant Discharge Elimination System (NPDES) General Permit to regulate storm water discharges associated with industrial activities in California (State Board Order 97-03-DWQ). Storm water runoff from the Site is currently regulated under the general NPDES permit (WDID No. 4

19I002245, enrolled on March 31, 1992). The Discharger is implementing a Storm Water Pollution Prevention Plan (SWPPP) at the Site as required by the general NPDES permit.

16. On June 13, 1994, this Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan (including its subsequent amendments) designates the following beneficial uses for groundwater within the Main San Gabriel Basin: municipal and domestic supply, agricultural supply, industrial process supply, and industrial service supply. The requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.

The Regional Board has notified the Discharger and interested agencies and persons of its intent to adopt WDRs for this disposal of waste to land, and has provided interested persons with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that the Discharger shall comply with the following at the Site:

A. Discharge Specifications:

1. Wastes discharged at the Site shall be limited to inert wastes as defined in 27 CCR, section 20230(a), including but not limited to: native geological materials (such as clay, silt, gravel, etc.) generated by mining activities at the Site, processed concrete, stucco, ceramics, bricks, rock, gravel, stone, clay, asphalt, and clean fill soils, under the following conditions:
 - a. No wastes other than native geological materials generated at the Site shall be discharged until water quality protection standards are established and approved by the Executive Officer, as required in Section D of this Order.
 - b. Asphalt material shall not be dumped into standing water nor shall it be placed below the highest anticipated groundwater elevation, which is estimated to be at 310 feet amsl at the Site.
 - c. **Re-opener:** When waste fill reaches 270 feet amsl at the Site, if groundwater replenishment in the area is not proceeding as currently anticipated, the Regional Board may revise this Order to allow the placement of asphalt material at elevations below 310 feet amsl.
2. The Discharger shall remove and relocate to a legal point of disposal any wastes that are discharged in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which WDRs have been established by a California regional water quality control board, and is in full compliance therewith. For a legal point of disposal outside the State of California, the legal point of disposal means

a facility that is lawfully permitted under applicable state and federal laws to receive the type of waste improperly disposed of at the Site.

B. Prohibitions:

1. No hazardous wastes, designated wastes, tires, or liquid wastes shall be deposited at this disposal Site.
2. Non-hazardous solid wastes (decomposable organic refuse such as, but not necessarily limited to, ordinary household and commercial refuse, tin cans, metals, paper and paper products, plasterboard, cloth and clothing, wood and wood products, lawn clippings, sod, shrubbery, hair, hide, bones, dead animals, roofing paper, tar paper, unquenched ashes mixed with refuse, market refuse, garbage, etc.) shall not be deposited at the Site.
3. Materials of a toxic nature such as insecticides and poisons shall not be deposited at the Site.
4. No radioactive material as determined by a regulatory agency with jurisdictional authority shall be deposited at the Site.
5. No asbestos or asbestos products shall be deposited at the Site.
6. Wastes deposited at the Site shall be confined thereto, and shall not be permitted to enter drainage ditches or watercourses.
7. Erosion of deposited materials by surface flow shall be prevented.
8. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.
9. No chemical additives shall be used at the Site unless such use is approved by the Executive Officer in advance.

C. Groundwater Monitoring:

1. Within ninety (90) days of date of this Order, the Discharger shall submit a workplan acceptable to the Executive Officer that describes the locations and construction details of a groundwater (including exposed groundwater) monitoring network that will adequately detect any contamination to groundwater by this disposal site. The workplan must include:
 - a. A map depicting the locations of the groundwater monitoring wells and a rationale for their number, depths, and spatial distribution.
 - b. Drawings and data depicting construction details of the proposed groundwater monitoring network. These must include:

- casing, borehole diameters and methods of drilling;
 - casing materials to be used;
 - depth of each borehole;
 - size, length, and position of screen;
 - nature and emplacement of filter pack and rationale for them;
 - depth, composition, and emplacement of seals; and
 - method and timetable for well development.
 - c. Operating procedures and testing protocols for all well installation and sampling activities to be conducted at the site;
 - d. A health and safety plan for well installation and groundwater sampling;
 - e. The date (no later than 120 days from the date the Board’s approval of the workplan) when the groundwater monitoring network is anticipated to be completed.
2. The Discharger shall monitor the quality of groundwater at the Site as required in the attached Monitoring and Reporting Program (M&RP).

D. Water Quality Protection Standards:

1. In accordance with 27 CCR section 20390, the water quality protection standards (WQPSs) for the Site are established as the natural background groundwater quality, which is set to either the statistically predicted value (if the constituent naturally exists) or the laboratory detection limit (if the constituent does not naturally exist in the water). Water quality standards at the Site shall not exceed the applicable water quality objectives specified in the Basin Plan for drinking water, unless the Discharger can demonstrate to the satisfaction of the Executive Officer that such exceedance is not caused by activities at the Site.
2. At least 90 days prior to receiving any inert wastes other than native geological materials, the Discharger shall submit a technical report to this Regional Board, for the approval of the Executive Officer, establishing WQPSs for all constituents of concern at the Site. The WQPSs shall be calculated with a statistical method acceptable to the Executive Officer and shall be updated at least every five years based on concurrent monitoring data.
3. WQPSs may be modified by the Regional Board based on more recent and/or more complete groundwater monitoring data, changes in background water quality, or for any other valid reason. The down-gradient groundwater monitoring points (including exposed groundwater) approved by the Executive Officer pursuant to Section C.1. of this Order shall serve as the compliance points for purposes of these WQPSs.

4. Based on historic land use, the existing and proposed activities at the Site, and the beneficial uses of local groundwater, the following constituents are designated as constituents of concern:

- pH
- Electrical conductivity
- Chemical oxygen demand
- Total dissolved solids
- Nitrate
- Chloride
- Sulfate
- Boron
- Metals
- Oil and Grease
- Diesel
- Volatile Organic Compounds (VOCs) (USEPA Method 8260B)

Additional constituents of concern may be added if future monitoring data indicate that such constituents exist in the groundwater as contaminants.

E. Provisions:

1. The Discharger shall take any and all necessary measures to prevent unauthorized disposal of wastes at the Site by instituting a load-checking program. Such a load-checking program must be submitted to the Executive Officer for approval at least ninety (90) days before any wastes other than native geological materials may be discharged at the Site. As a minimum, the load-checking program shall include the following:
 - a. A computerized waste-tracking system that, for each load of waste, records at least the following information: the hauler's name, type of material, the source where the waste was generated, and the general area at the landfill where the waste is disposed of;
 - b. A surveillance system that includes visual and instrumental inspections of each load of waste and questioning the hauler if necessary;
 - c. A training and education program for all landfill employees concerning acceptable and unacceptable materials as provided in this Order; and
 - d. In addition to regular load-checking activities at the landfill, for any project that involves the generation of more than 1,000 cubic yards of wastes from a single site during a calendar year, the Discharger shall require the generator and/or hauler of the wastes, before discharge the wastes to the landfill, to provide background information, including laboratory analytical data and environmental assessment reports (if available), to ensure that the wastes are not contaminated.

Such information shall be documented and included in the quarterly reports required in the M&RP.

2. The Discharger shall implement the attached M&RP, which is incorporated herein by reference and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents or any unreasonable impairment of beneficial uses associated with (or caused by) discharges of waste at the Site.
3. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Regional Board Executive Office (Executive Officer), proposing modifications to the M&RP. The Discharger shall implement any changes in the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.
4. The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with CWC section 13267. Failure or refusal to furnish these reports or falsifying any information provided therein renders the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC section 13268. Monitoring reports shall be submitted in accordance with the specifications contained in the M&RP, as directed by the Executive Officer. Additionally, monitoring reports shall be prepared and signed by a California professional civil engineer or professional geologist. The M&RP is subject to periodic revisions as warranted and approved by the Executive Officer.
5. The Discharger shall use the statistical procedures contained in 27 CCR section 20415(e)(7), to determine if there is a statistically significant increase for any background indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.
6. In the event that a statistically significant increase is observed for any background indicator parameter, the Discharger shall establish an evaluation program in accordance with 27 CCR section 20425, unless such a program has already been submitted.
7. If evaluation monitoring determines that there is a statistically significant increase of any background indicator parameter that is resulted by the discharge of waste at the Site, then the Discharger shall institute a corrective action monitoring program in accordance with 27 CCR section 20430.
8. The Discharger shall maintain copies of this Order at the Site so as to be available at all times to personnel operating the Site.
9. The Discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, boundaries or quantity of this waste discharge at least 120 days prior to the date of such proposed change.

10. Within thirty (30) days of any change in name of operator or in control or ownership of land or waste disposal facilities owned or controlled by the Discharger, the Discharger shall:
 - a. Notify this Regional Board in writing of such a change; and
 - b. Notify the succeeding owner or operator by letter, a copy of which shall be filed with this Regional Board, of the existence of this Order.
11. Ninety (90) days prior to cessation of disposal operations at this Site, the Discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land. Such methods and controls shall comply with the foregoing technical report and the WDRs. The report shall be prepared under the direct supervision of a California registered geologist or professional civil engineer, or a California-certified engineering geologist.
12. This Regional Board considers the Discharger to have continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to the Site during subsequent use of the land for other purposes.
13. These requirements do not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of wastes at the Site which may be contained in other statutes or required by other agencies.
14. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the State are privileges, not rights.
15. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Noncompliance with this Order constitutes a violation of the CWC and is grounds for:
 - a. enforcement action;
 - b. termination, revocation and re-issuance, or modification of this Order;
 - c. denial of a ROWD in application for new or revised WDRs; or
 - d. any combination of the foregoing.
16. Failure to comply with the terms and conditions of this Order may result in imposition of civil liability against the Discharger by this Regional Board, either by the Board or judicially by the Superior Court, in accordance with CWC section 13350 et. seq. and/or referral to the Attorney General of the State of California for such legal action as may be deemed appropriate.
17. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment "W"), which is incorporated herein by references. If there

is any conflict between provisions stated hereinbefore and the attached “Standard Provisions Applicable to Waste Discharge Requirements”, those provisions attached hereinbefore prevail.

18. In accordance with CWC section 13263, these requirements are subject to periodic review and revision by this Regional Board.
19. The filing of a request by the Discharger for the modification, revocation and re-issuance, or termination of this Order or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
20. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
21. Pursuant to section 13320 of CWC, any aggrieved party may seek review of this Order by filing a petition with the State Board. The petition must be received by the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of the date this Order is adopted.
22. This Order becomes effective on the date of adoption by this Regional Board.

I, Jonathan S. Bishop, 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, Los Angeles Region on October 24, 2006.

/Original Signed by/
Jonathan S. Bishop
Executive Officer

Figure 1