

Los Angeles Regional Water Quality Control Board

April 24, 2014

Mr. Jose Pena, Landfill Supervisor
Vulcan Materials Company
10401 West Tuxford street
Sun Valley, California 91352

RESPONSE TO COMMENTS - TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR RELIANCE PIT LANDFILL, IRWINDALE, CALIFORNIA (File No. 91-060, Order No. 91-120, CI 7106, Geotracker Global ID L10006525481)

Dear Mr. Pena:

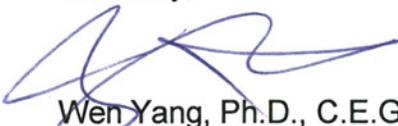
The Regional Water Quality Control Board (Regional Board) is in receipt of a letter from Mr. Pawan Sharma of CDM Smith Inc., dated April 15, 2014, that was submitted on your behalf and includes comments regarding the tentative revised waste discharge requirements (WDRs) for the Reliance Pit Landfill, an inert wastes disposal facility at 15990 Foothill Boulevard, Irwindale, California. The tentative WDRs were sent to you and other interested parties on March 19, 2014.

Regional Board staff has reviewed the comments and prepared the attached responses to comments. Also attached are copies of the comments received and a revised tentative Order that includes all revisions made after March 19, 2014.

In accordance with administrative procedures, this Regional Board, at a public meeting to be held on May 8, 2014, beginning at 9:00 AM., at the City of Simi Valley Council Chambers, at 2929 Tapo Canyon Road, Simi Valley, California, will consider the enclosed tentative WDRs. It is expected that the Regional Board will take action at the meeting, however, as testimony dictates, the Regional Board at its discretion may order further investigation.

If you have any questions or need additional information, please contact Mr. Douglas Cross (Project Manager) at (213) 620-2246 or dcross@waterboards.ca.gov, or me at (213) 620-2253 or wyang@waterboards.ca.gov.

Sincerely,



Wen Yang, Ph.D., C.E.G.
Chief of Land Disposal Unit

Enclosures

cc: Leslie Graves, Land Disposal Program, State Water Resource Control Board
Martin Perez, California Department of Resources Recycling and Recovery
Gerardo Villalobos, Los Angeles County Department of Public Health
Dan Zeller, Vulcan Materials Company
Carol Williams, Main San Gabriel Basin Watermaster
William Tam, City of Irwindale
Pawan Sharma, CDM Smith Inc.



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April 15, 2014

Mr. Douglas Cross
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Comments to Tentative Waste Discharge Requirements
Reliance Pit Inert Landfill, 15900 Foothill Blvd., Irwindale, CA

Dear Mr. Cross:

On behalf of Vulcan Materials Company (Vulcan), CDM Smith Inc. (CDM Smith) submits this letter presenting our comments to the Los Angeles Regional Water Quality Control Board (Water Board) tentative waste discharge requirements (WDRs) for the Reliance Pit Inert Landfill (Landfill). The Water Board provided the tentative WDRs in their letter dated March 19, 2014.

The following are our comments:

1. Page 1, Finding 4: The expected operation of 20 years was not based on a loading rate of 6,000 cubic yards per day. 6,000 cubic yards per day is the peak load rate assumed for the operations. The design average load rate was assumed to be approximately 3,000 cubic yards per day, with 300 working days per year.
2. Page 2, Finding 9: New inert waste was being accepted and discharged to the Landfill during re-compaction operation that ended in 2010. As such, the phrase "at-which-point the Discharger recommenced with accepting new inert waste at the Landfill" appears to be not accurate.
3. Page 2, Finding 12: Groundwater monitoring elevations have varied from 192 to 322 feet amsl, not 200 to 320 feet amsl. This finding could more accurately state that the groundwater elevations have been at least 31 feet below the lowest point of the pit bottom, not approximately 32 feet below. The lowest point of the pit bottom (353 feet amsl) could be restated in this finding for emphasis (it is stated in Finding 2).
4. Page 3, Finding 17: The finding should clarify that the pond was present at the pit bottom, in a portion of the Landfill that had not received waste. The finding could note that this wastewater infiltration practice was conducted in compliance with Los Angeles County Industrial Waste Permit 8110, and not part of Landfill operations or WDRs. The





Mr. Douglas Cross
April 15, 2014
Page 2

finding could state that sediment associated with the pond will be managed to comply with the IDEFO Plan and WDRs. The finding could state more clearly that the Discharger has permanently ceased this wastewater infiltration practice as it is no longer compatible with the Landfill operations and WDRs.

5. Page 4, Acceptable Materials, Paragraph 2: It is not clear as to how Vulcan can determine that a California legal point of disposal is in compliance with their WDRs, and seems overly burdensome to Vulcan to attempt to make such determination. It appears to be more appropriate to state, as stated of out-of-state disposal sites, that Vulcan needs to confirm that California sites are lawfully permitted.
6. Page 5, Groundwater Monitoring, Paragraph 1: The draft WDRs require the addition of a new downgradient monitoring well to the groundwater monitoring program, either (a) existing offsite or (b) new onsite or offsite. The stated purpose is for better establishing groundwater gradient. This contrasts the CDM Smith statement in the ROWD update:

"The hydrogeologic setting presented in the ROWD continues to be applicable and does not require an update. The two existing wells at the Landfill are constructed appropriately to assess significant changes to groundwater elevation and flow direction during the period of anticipated future operations at the Landfill and do not require the WDRs to be updated."

The data collected to date does not indicate that the groundwater gradient has significantly changed since it was evaluated for the 1991 ROWD. The existing well pair is appropriately monitoring groundwater conditions upgradient of Landfill and downgradient of the Landfill. Periodic sampling from the well pair is effectively monitoring potential affects from the Landfill to the underlying groundwater. As such, it seems unnecessary to have a second downgradient well. If the Water Board would like to better evaluate regional groundwater movement in the vicinity, we suggest the Water Board request Vulcan and other well owners in the region to collect data over concurrent periods and submit their data to a single party to compile periodic regional groundwater gradient maps.

7. Page 5, Groundwater Monitoring, Paragraph 1: It appears the forward reference to section D.6 should be C.6.
8. Page T-2, Monitoring and Reporting Program, Water Quality Monitoring, Paragraph A: The additional downgradient well is specified for sampling. Per comment 7 above, a second downgradient well is unnecessary. The current well pair is effectively monitoring potential affects from the Landfill to the underlying groundwater.



Mr. Douglas Cross
April 15, 2014
Page 3

9. Page T-3, Monitoring and Reporting Program, Water Quality Monitoring, Paragraph C:
The draft WDRs state to sample in April and October. We have been sampling in May/June and Nov/Dec, depending on availability. We suggest we continue with current sampling months for consistency.

Please contact Pawan Sharma (SharmaPK@cdmsmith.com) and/or Dan Zeller (zellerd@vmcmail.com) if you have any questions or concerns regarding this letter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Pawan Sharma".

Pawan K. Sharma, P.E.
Senior Environmental Engineer
CDM Smith Inc.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**WASTE DISCHARGE REQUIREMENTS
for
VULCAN MATERIALS COMPANY
(Reliance Pit Landfill)**

RESPONSE TO COMMENTS

The public comment period for the tentative Order started on March 19, 2014, when the tentative Order was mailed to the Vulcan Materials Company (Discharger) and interested persons, and ended on April 21, 2014, which was the deadline for submitting comments set in the cover letter transmitting the tentative revised Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP). During the public comment period, Regional Board staff received comments regarding the tentative Order from the Discharger that were submitted on April 15, 2014, by email. The comments are responded to as follows:

Comment No. 1, from the WDRs (On Page 1, Finding 4 of the tentative WDRs)

Page 1, Finding 4: The expected operation of 20 years was not based on a loading rate of 6,000 cubic yards per day. 6,000 cubic yards per day is the peak load rate assumed for the operations. The design average load rate was assumed to be approximately 3,000 cubic yards per day, with 300 working days per year.

Response: Staff agrees with this comment. Finding 4 of the WDRs has been modified.

Comment No. 2, from the WDRs (On Page 2, Finding 9 of the tentative WDRs)

Page 2, Finding 9: New inert waste was being accepted and discharged to the Landfill during re-compaction operation that ended in 2010. As such, the phrase "at-which-point the Discharger recommenced with accepting new inert waste at the Landfill" appears to be not accurate.

Response: The phrase "at-which-point the Discharger recommenced with accepting new inert waste at the Landfill" has been removed from the WDRs.

Comment No. 3, from the WDRs (On Page 2, Finding 12 of the tentative WDRs)

Page 2, Finding 12: Groundwater monitoring elevations have varied from 192 to 322 feet amsl, not 200 to 320 feet amsl. This finding could more accurately state that the groundwater elevations have been at least 31 feet below the lowest point of the pit bottom, not approximately 32 feet below. The lowest point of the pit bottom (353 feet amsl) could be restated in this finding for emphasis (it is stated in Finding 2).

Response: Staff agrees with this comment. The groundwater elevations have been corrected.

Comment No. 4, from the WDRs (On Page 3, Finding 17 of the tentative WDRs)

Page 3, Finding 17: The finding should clarify that the pond was present at the pit bottom, in a portion of the Landfill that had not received waste. The finding could note that this wastewater infiltration practice was conducted in compliance with Los Angeles County Industrial Waste Permit 8110, and not part of Landfill operations or WDRs. The finding could state that sediment associated with the pond will be managed to comply with the IDEFO Plan and WDRs. The finding could state more clearly that the Discharger has permanently ceased this wastewater infiltration practice as it is no longer compatible with the Landfill operations and WDRs.

Response: Staff agrees with the comment. The finding has been revised accordingly.

Comment No. 5, from the WDRs (On Page 4 of tentative WDRs, Section A.2.)

Page 4, Acceptable Materials, Paragraph 2: It is not clear as to how Vulcan can determine that a California legal point of disposal is in compliance with their WDRs, and seems overly burdensome to Vulcan to attempt to make such determination. It appears to be more appropriate to state, as stated of out-of-state disposal sites, that Vulcan needs to confirm that California sites are lawfully permitted.

Response: Staff disagrees with this comment. This requirement is included in all current WDRs for landfills in the Region. The Discharger can ascertain from the Regional Board whether a landfill has violated their WDRs. No revision is made to the tentative WDRs in response to this comment.

Comment No. 6, from the WDRs (On Page 5 of tentative WDRs, Section C.1)

Page 5, Groundwater Monitoring, Paragraph 1: The draft WDRs require the addition of a new downgradient monitoring well to the groundwater monitoring program, either (a) existing offsite or (b) new onsite or offsite. The stated purpose is for better establishing groundwater gradient. This contrasts the CDM Smith statement in the ROWD update:

"The hydrogeologic setting presented in the ROWD continues to be applicable and does not require an update. The two existing wells at the Landfill are constructed appropriately to assess significant changes to groundwater elevation and flow direction during the period of anticipated future operations at the Landfill and do not require the WDRs to be updated."

The data collected to date does not indicate that the groundwater gradient has significantly changed since it was evaluated for the 1991 ROWD. The existing well pair is appropriately monitoring groundwater conditions upgradient of Landfill and downgradient of the Landfill. Periodic sampling from the well pair is effectively monitoring potential affects from the Landfill to the underlying groundwater. As such, it seems unnecessary to have a second downgradient well. If the Water Board would like to better evaluate regional groundwater movement in the vicinity, we suggest the Water Board request Vulcan and other well owners in the region to collect data over concurrent periods and submit their data to a single party to compile periodic regional groundwater gradient maps.

Response: Staff disagrees with the comment. Groundwater gradients can vary, particularly when intermittent groundwater spreading takes place at the proximity to a site. A third monitoring point

is necessary to determine the groundwater gradient at the site. However, the additional groundwater monitoring point does not have to be a down gradient well. The word "downgradient" has therefore been removed from the requirement.

Comment No. 7, from the WDRs (On Page 5 of tentative WDRs, Section C.1)

Page 5, Groundwater Monitoring, Paragraph 1: It appears the forward reference to section D.6 should be C.6.

Response: Staff agrees with the comment. Page 5 Section C.1. (Paragraph 1) has been revised to reference the correct section.

Comment No. 8, from the MRP (On Page T-2 of tentative MRP, Item No. II.A.)

Page T-2, Monitoring and Reporting Program, Water Quality Monitoring, Paragraph A: The additional downgradient well is specified for sampling. Per comment 7 above, a second downgradient well is unnecessary. The current well pair is effectively monitoring potential affects from the Landfill to the underlying groundwater.

Response: Staff disagrees with this comment. See the Response to Comment No. 6. The language has been revised to make it clear that the third well is for the monitoring of groundwater elevation only.

Comment No. 9, from the MRP (On Page T-3 of tentative MRP, Item No. II.C.)

Page T-3, Monitoring and Reporting Program, Water Quality Monitoring, Paragraph C: The draft WDRs state to sample in April and October. We have been sampling in May/June and Nov/Dec, depending on availability. We suggest we continue with current sampling months for consistency.

Response: Staff agrees with this comment. The requirement has been revised to coincide with your regular sampling periods.

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

ORDER NO. R4-2014-XXXX

WASTE DISCHARGE REQUIREMENTS

For

VULCAN MATERIALS COMPANY

Reliance Pit Landfill

(File No. 91-060)

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

1. CalMat Properties Company, doing business as Vulcan Materials Company (Discharger), owns and operates the Reliance Pit (formerly Reliance Pit No. 2) Landfill (Landfill) located at 15990 Foothill Boulevard, Irwindale, California. The Landfill is bounded by Foothill Boulevard on the north, Irwindale Avenue on the east, the 210 freeway on the south, and Las Lomas Road on the west (Figure 1). The Landfill occupies former gravel mining pit of approximately 89 acres that is centered at approximate latitude 34°07'53"N and longitude 117°56'15.5"W (Figure 2).
2. The former mining pit has a surrounding surface elevation from 560 to 580 feet above mean sea level (amsl) and a maximum low point within the pit of 353 feet amsl.
3. On December 2, 1991, the Regional Board adopted Order No. 91-120 that includes waste discharge requirements (WDRs) for the discharge of inert solid wastes for the reclamation of the Landfill. Waste fill placed at the Landfill is non-water soluble, non-decomposable inert solids of the following nature: earth, rock, gravel, concrete, glass, bricks, broken asphalt, and inert aggregate mining wastes.
4. The capacity of the Landfill was estimated at 17.6 million cubic yards with an expected operation of 20 years based on a loading rate of 63,000 cubic yards per day, with 300 working days per year. The most recent evaluation of the operations in December 2013 indicates that the Landfill has approximately 11.3 million cubic yards of capacity left, which will be filled over an anticipated period of 7 to 15 years
5. 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.*"
6. Section 20230(c) of 27 CCR provides that the Regional Board can prescribe individual or general WDRs for discharges of inert wastes.

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7. California Water Code (CWC) section 13263 (e) provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Board to comply with changing state or federal laws, regulations, policies, or guidelines. This Order revises the WDRs for the Landfill to include updated requirements and describe current site conditions. The Discharger has submitted to the Regional Board a revised report of waste discharger (ROWD) in accordance with the CWC, dated January 31, 2014, to facility the revision of the WDRs.
8. The City of Irwindale adopted a Negative Declaration regarding the reclamation plan of the Landfill on February 29, 1993, in accordance with the California Environmental Quality Act (Public Resource Code, §21000 et seq.) Revision of existing waste discharge requirements is exempt from CEQA in accordance with the CWC Section 13389.
9. In 2005 the Discharger submitted an Inert Debris Engineered Fill Operations (IDEFO)¹ Plan (Engineered Fill Plan) to the Los Angeles County Department of Health Services (LA County DHS) after determining that the placement of waste, at 90% relative compaction, would not support the desired end use of commercial and retail development for the property. The Discharger decided to remove the material that had been placed since the Landfills start-up in 1993 to and redispose of such waste with 93% relative compaction. The LA County DHS approved the Engineered Fill Plan with a letter dated May 31, 2005. The re-compaction operation was completed in 2010, ~~at which point the Discharger recommened with accepting new inert waste at the Landfill.~~
10. In November 2006 the Discharger submitted a Revised Engineered Fill Plan to, and was approved by, the LA County DHS to establish protocols for future placement of waste and stated that the material would be placed in accordance with title 14 of California Code of Regulations (14 CCR) Division 7, Chapter 3 and 27 CCR Division 2, Chapter 3.
11. The Landfill overlies an aquifer that is a major source of drinking water in the Main San Gabriel Basin in the Los Angeles-San Gabriel Hydrologic Unit. The San Gabriel River is located approximately one mile west of the Landfill. The unlined river has been used for spreading groundwater for recharge purposes. Aquifers within the basin are comprised primarily of coarse sand and gravel which has a reported permeability of 5,000 feet/day parallel to and 100 feet/day transverse to the depositional axis of the river. The direction of groundwater flow at the Landfill is generally to the south and southwest.
12. In 1990, groundwater elevation was reported at the up-gradient monitoring well (Well 4266A) to be approximately 250 feet amsl at a neighboring site. Since then groundwater

¹ Title 14 of California Code of Regulations (14 CCR), Chapter 3, Article 5.95, Section 17388 (l) defines that "Inert Debris Engineered Fill Operation" means a disposal activity exceeding one year in duration in which fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), brick, ceramics, clay and clay products, which may be mixed with rock and soil, are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading as necessary, and having other characteristics appropriate for an end use approved by all governmental agencies having jurisdiction (e.g., roads, building sites, or other improvements) where an engineered fill is required to facilitate productive use of the land. The engineered fill shall be constructed and compacted in accordance with all applicable laws and ordinances and shall be certified by a Civil Engineer, Certified Engineering Geologist, or similar professional licensed by the State of California.

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elevations have varied from 200–192 feet amsl to 320–322 feet amsl, which is approximately 32 feet below the lowest point of the pit bottom.

13. The Landfill 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”.
14. The Landfill is subject to reclamation as required by the State Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code § 2710 et seq.) and the Surface Mining Ordinance of the City of Irwindale. The Discharger has developed an amendment reclamation plan for the Landfill that was approved by the City of Irwindale with Resolution No. 2012-37-2576, dated July 25, 2012. The amendment reclamation plan was prepared by the Discharger to combine the Reliance I Quarry and Reliance II Landfill in Irwindale and the Reliance-Azusa Quarry in Azusa, California, under one reclamation plan. The requirements in this Order, as they are met, are in conformance with the requirements of SMARA.
15. The Landfill currently has the zoning classification of M2 (Heavy Manufacturing) and the General Plan Land Designation is “industrial”. The land uses in the vicinity of the Landfill are the following type: “agricultural, recreational, commercial, and industrial” The Discharger intends to reclaim the land for retail and commercial usage upon completion of fill activities.
16. 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.
17. Until recently, operations of the Landfill have included infiltration of aggregate wash water from the adjacent gravel mining operations to the north at an unlined pond in the south west corner of the Landfill. However, such practice has been ceased and will not be resumed in the future. The wash water pond was located in a portion of the Landfill that had not received waste. Such practice has been permanently ceased and will not be resumed in the future. Sediment associated with the pond will be managed to comply with the IDEFO Plan and the WDRs.
18. All surface runoff is 100% contained onsite. All storm water infiltrates the unpaved site.
19. 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.

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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 Landfill:

A. Acceptable Materials:

1. Wastes disposed of at the Landfill 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.) and materials that are acceptable at an Inert Debris Engineered Fill Operations as defined in Section ~~17381~~17388(1) of 14 CCR, including uncontaminated concrete, crushed glass, bricks, ceramics, clay and clay products, rock and clean soil, and fully cured asphalt.
2. The Discharger shall remove and relocate to a legal point of disposal any wastes that are discharged in violation of the requirements of this Order. 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. In the event that the Discharger opts 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 the Landfill.
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 Landfill.
3. Materials of a toxic nature such as insecticides and poisons shall not be deposited at the Landfill.
4. No radioactive material as determined by a regulatory agency with jurisdictional authority shall be deposited at the Landfill.
5. No asbestos or asbestos products shall be deposited at the Landfill.

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6. Erosion of deposited materials by surface flow shall be prevented.
7. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.
8. No chemical additives shall be used at the Landfill unless such use is approved by the Executive Officer in advance.

C. Groundwater Monitoring:

1. Within 90 days of the adoption of this Order, the Discharger shall submit a report to the Regional Board, for approval of the Executive Officer, providing information for the addition of one more ~~downgradient~~ groundwater monitoring point for the Landfill, for the measurement of groundwater elevation only, so that an accurate groundwater gradient can be established. If an existing groundwater monitoring well is not available with-in a reasonable distance for determining groundwater gradient, the Discharger shall propose the installation of a new groundwater monitoring well pursuant to section DC.6 of this Order.
2. The Discharger shall implement the attached Monitoring and Reporting Program (MRP) No. CI-7106, and revisions thereto, which is incorporated herein by reference, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill or any unreasonable impairment of beneficial uses associated with (or caused by) discharge of wastes from the Landfill. MRP No. CI-7106 is designed to satisfy both federal and state regulatory monitoring requirements.
3. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to MRP No. CI-7106. The Discharger shall implement any changes in the revised MRP approved by the Executive Officer upon receipt of a signed copy of the revised MRP.
4. Unless otherwise approved by the Executive Officer, all analyses shall be conducted at a laboratory certified by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "*Test Methods for Evaluating Physical/Chemical Methods*" (SW-846) promulgated by the United States Environmental Protection Agency.
5. The Discharger shall provide for proper handling and disposal of water purged from monitoring wells at the Landfill during sampling. Water purged from a monitoring well shall not be returned to that well (or any other monitoring well).
6. For any monitoring wells installed at the Landfill in the future, the Discharger shall submit technical reports for approval by the Executive Officer prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells. These reports shall be accompanied by:
 - a. A map depicting the locations of the groundwater monitoring wells and a rationale for their number, depths, and spatial distribution.

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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;
- method of joining sections of casing;
- nature and emplacement of filter pack and rationale for them;
- depth, composition, and emplacement of seals; and
- method and timetable for well development.

Within 30 days of the installation of a groundwater monitoring well at the Landfill, the Discharger shall submit an as-built report to the Regional Board and the California Department of Water Resources (DWR), including delineation of the stratigraphy encountered, all water bearing zone(s) encountered and water quality data.

7. As of the effective date of this Order, the compliance monitoring wells at the Landfill shall consist of those wells listed in section II.B of the MRP. All monitoring wells shall be monitored pursuant to this Order or as directed by the Executive Officer through future revisions of the MRP
8. The Discharger shall install any additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with the MRP, as adopted or as revised by the Executive Officer.
9. The point of compliance (POC) for groundwater monitoring for the Landfill is a vertical surface located at the hydraulically downgradient limit of the Landfill that extends through the uppermost aquifer underlying the Landfill pursuant to 27 CCR section 20405(a).

D. Water Quality Protection Standards:

1. In accordance with the Basin Plan, the following groundwater quality protection standards are established for the Landfill:

Parameter	Units	Water Quality Protection Standard*
Total dissolved solids	mg/L	450
Sulfate	mg/L	100
Chloride	mg/L	100
Nitrate (as NO ₃)	mg/l	45
Boron	mg/L	0.5
pH	pH unit	6.5 - 8.5

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* Based on the water quality objectives in the Basin Plan for the western area of the Main San Gabriel Basin.

2. Groundwater protection standards for other inorganic and organic pollutants for the site are the MCLs adopted by the California Department of Public Health pursuant to the California Safe Drinking Water Act, or subsequent revisions.
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 points of compliance of groundwater protection standards for the Landfill shall be the downgradient groundwater monitoring points established in the MRP No. CI 7106, which is incorporated herein by reference.

F. Provisions:

1. The Discharger shall take any and all necessary measures to prevent unauthorized disposal of wastes at the Landfill by instituting a load-checking program. An updated load-checking program shall be submitted to the Regional Board within 90 days of the adoption of this Order. 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 MRP.
3. 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 MRP, as directed by the Executive Officer. Additionally, monitoring reports shall be prepared

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- and signed by a California professional civil engineer or professional geologist. The MRP is subject to periodic revisions as warranted and approved by the Executive Officer.
4. 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.
 5. 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.
 6. 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 Landfill, then the Discharger shall institute a corrective action monitoring program in accordance with 27 CCR section 20430.
 7. If the Discharger becomes aware that it failed to submit any relevant facts in any report to the Regional Board, it shall submit such facts or information within fourteen days of its discovery of the omission.
 8. All applications, reports, or information submitted to the Regional Board shall be signed and certified as follows:
 - a. Applications, ROWDs, or similar documents shall be signed as follows:
 - i. For a corporation - by a principal executive officer of at least the level of vice-president.
 - ii. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - iii. For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
 - iv. For a military installation - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
 - b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph [a] of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in paragraph [a] of this provision;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - iii. The written authorization is submitted to the Executive Officer.

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- c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

9. The Discharger shall maintain copies of this Order at the Landfill so as to be available at all times to personnel operating the Landfill.
10. 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.
11. The Regional Board shall be notified of any incident at the Landfill that are in violation of this Order and that may endanger the environment, by telephone within 24 hours from the time the Discharger becomes aware of the circumstances, and in writing within 14 days of the time that the Discharger becomes aware of the circumstances. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence of the incident. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above, and shall also be included in the next scheduled monitoring report.
12. 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.
13. Ninety (90) days prior to cessation of disposal operations at this Landfill, 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

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shall be prepared under the direct supervision of a California registered geologist or professional civil engineer, or a California-certified engineering geologist.

14. 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 Landfill during subsequent use of the land for other purposes.
15. 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 Landfill which may be contained in other statutes or required by other agencies.
16. 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.
17. 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. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order
18. 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.

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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.

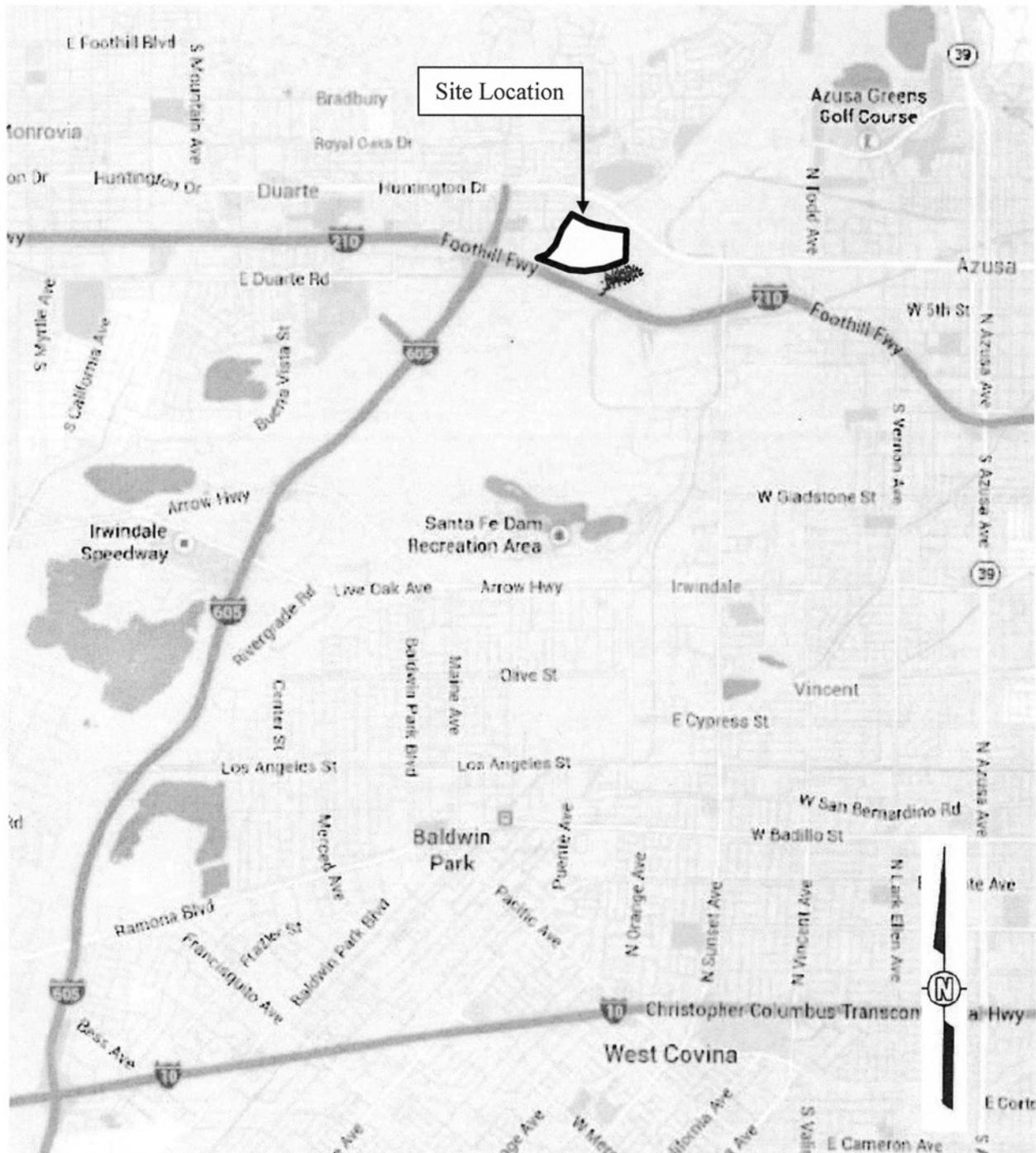
E. Termination

Except for violation enforcement purposes, Regional Board Order No. 91-120, adopted October 3, 1991, is hereby terminated.

I, Samuel Unger, P.E, 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 May 8, 2014.

Samuel Unger, P.E
Executive Officer

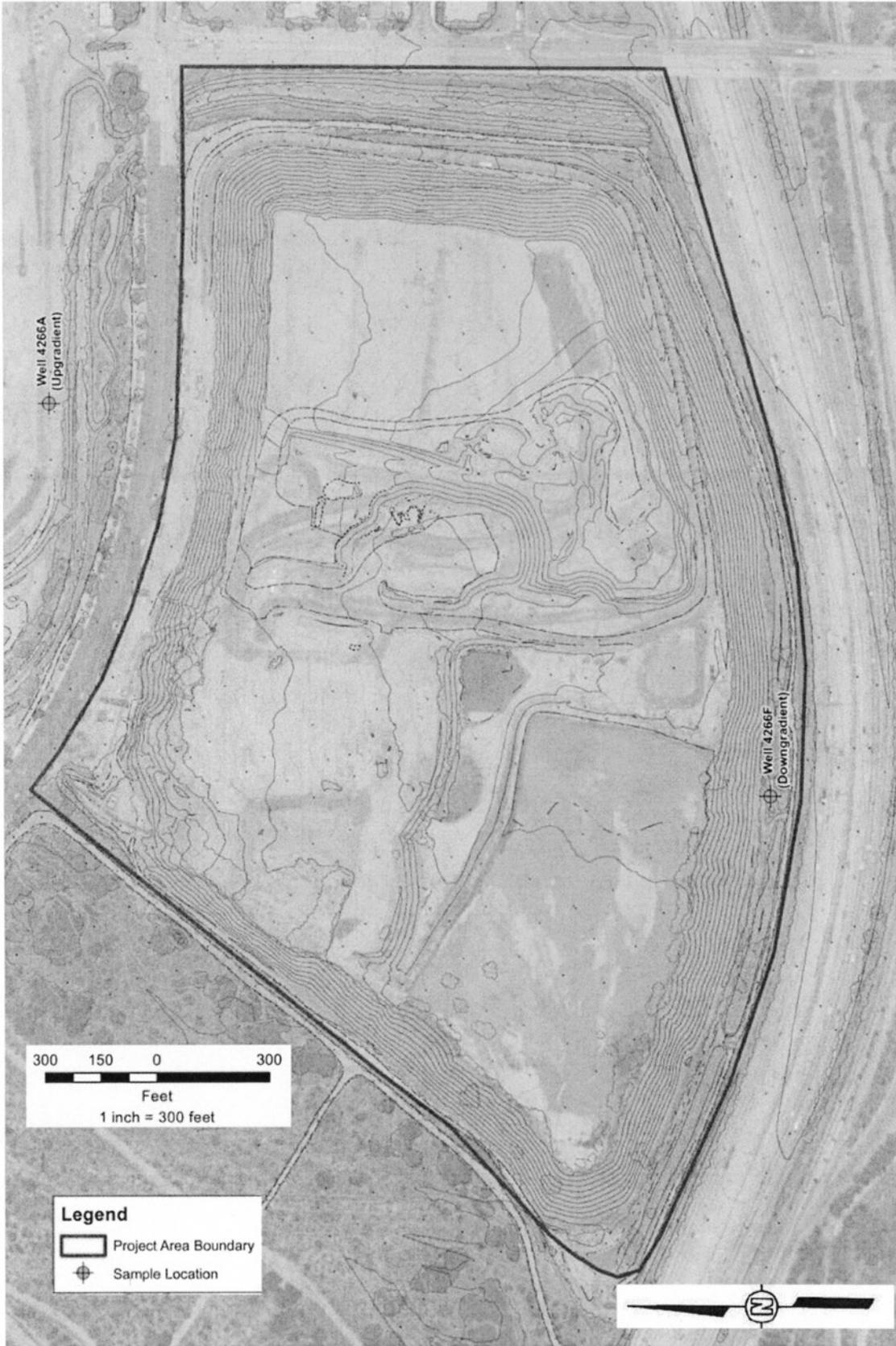
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Site Location Map

Figure 1



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Site Map with Well Locations
Figure 2

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

MONITORING AND REPORTING PROGRAM NO. CI 7106

for

VULCAN MATERIALS COMPANY

Reliance Pit Landfill

(File No. 91-060)

This Monitoring and Reporting Program (MRP), No. CI-7106, is issued by the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) to the CalMat Properties Company, doing business as Vulcan Materials Company (Discharger) for the Reliance Pit Landfill (Landfill) pursuant to California Water Code (CWC) section 13267(b). This MRP is incorporated by reference into Regional Board Order No. **R4-2014-xxxx** (Order), adopted on May 8, 2014. The Discharger shall begin implementing this MRP following the adoption of the Order. This MRP is required to assure compliance with the conditions of the Order and is issued to the Discharger, which is the owner of the Landfill. The first monitoring report under this program is due by February 15, 2015.

I. Reporting

A. Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
1 st Semi-Annual Report (for the period from January 1 to June 30)	August 15
2 nd Semi-Annual Report (for the period from July 1 to December 31)	February 15

The semi-annual reports shall include both groundwater monitoring data as required in Section II and the waste disposal information as required in Section III of this MRP. The 2nd Semi-Annual report shall include an annual summary of the data obtained during the calendar year.

B. A transmittal letter that contains the essential points of the report shall accompany each report. Such a letter shall include a discussion of any violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the Discharger has previously submitted a detailed time schedule for correcting said violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or above, or by his/her duly authorized representative, if such a representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

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- C. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
- D. In the event that hazardous or other unacceptable wastes are detected, the Regional Board shall be notified by telephone or facsimile within 24 hours and by writing within 7 days. The type, source, and final disposition of those wastes shall also be reported.
- E. If the Discharger performs analyses for any parameter more frequently than required by this MRP, using approved analytical methods, the results shall be included in the monitoring report.
- F. The Discharger may submit additional data to the Regional Board that are not required by this MRP in order to simplify reporting to other agencies.
- G. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation, and copies of all data submitted to regulatory agencies, for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire Landfill.
- J. The reporting period and the compliance file number (CI 7106) must be clearly displayed on the title page to facilitate routing to the appropriate staff and file.
- K. Electronic Data Submittal: Unless it is otherwise required by the Executive Officer, all reports required under this MRP shall be submitted to the State Water Resources Control Board (State Board) Geotracker database system in the form of searchable Portable Document Format (PDF) files. In addition, any groundwater monitoring data shall also be submitted to Geotracker in Electronic Deliverable Format (EDF). A hard copy of the report, including all original laboratory reports and field records that are used in preparation of the reports, must be kept in the Landfill's Operating Record and be available for review by Regional Board staff.

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II. Water Quality Monitoring

- A. The groundwater monitoring network of the Landfill shall include background monitoring well 4266A located just north of the Landfill, downgradient groundwater monitoring well 4266F located onsite along the south side of the Landfill (Figure T-1), and one additional groundwater monitoring point, for the monitoring of groundwater elevation only, as required in Section C.1 of the Order. All groundwater monitoring points must be ~~sampled~~ monitored semi-annually. The Executive Officer may require the Discharge to install additional groundwater monitoring points, including the installation of monitoring wells, with the progress of landfill operations at the Landfill.

B. All water samples shall be analyzed for the following constituents:

<u>Parameter</u>	<u>Units</u>
pH	pH units
Electrical conductivity	umhos/cm
Alkalinity	mg/l
Chemical oxygen demand	mg/l ¹
Total dissolved solids	mg/l
Hardness	mg/l
Oil and Grease	mg/l
Gasoline and Diesel	mg/l
Nitrate (as NO ₃)	mg/l
Chloride	mg/l
Sulfate	mg/l
Boron	mg/l
Cadmium	µg/l ²
Chromium	µg/l
Iron	µg/l
Nickel	µg/l
Volatile organic compounds (VOCs) (USEPA Method 8260B)	µg/l

- C. Semi-annual sampling shall be performed during the months of ~~April~~ May and ~~October~~ November. In the event sampling is not performed as above because of unforeseen circumstances, substitute sampling shall be performed as soon as possible after these times, and the reason for the delay shall also be given.
- D. The groundwater-monitoring program is to be continued even during periods when no wastes are deposited at the Landfill, and throughout the active life of the Landfill.
- E. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency (EPA), and the laboratory must meet EPA Quality Assurance/Quality Control criteria.
- F. For any analyses performed for which no procedure is specified in the EPA guidelines, or in this Order, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.
- G. Analytical data reported as "less than" shall be reported as less than a numeric value, or below the limit of detection, for that particular analytical method.

¹ ml/l = milligram per liter.

² µg/l = microgram per liter.

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- H. All analytical samples obtained for this MRP shall be grab samples.
- I. The water quality monitoring report must also include the following:
 - 1. Sampling protocol and analytical methods used;
 - 2. Chain of custody documentation;
 - 3. Well purge data;
 - 4. If any required samples were omitted during the reporting period, a statement to that effect shall be made and reasons given for any omission;
 - 5. Groundwater elevations measured to the nearest 0.01 foot relative to mean sea level. The velocity and direction of ground water flow under the Landfill shall be determined after each monitoring event and reported;
 - 6. For any monitored waste parameter which is listed as such by the EPA or by the State of California, the discharger shall compare such data to the most stringent allowable concentrations under all existing Federal and State regulations;
 - 7. An evaluation of the results of the testing signed by a California professional geologist or professional civil engineer.

III. Waste Disposal Reporting

All semi-annual reports to the Regional Board shall include the following information:

- A. A map showing the areas at the landfill where wastes were deposited during the monitoring period.
- B. A tabular list of the estimated average monthly quantities (in cubic yards or tons) of materials deposited each month and the methods of disposal.
- C. Quantities (in tons or cubic yards) of unacceptable materials (such as household trash, wood, etc.) that were removed and sent out from the Landfill in each month. The places where these unacceptable materials were sent to shall also be reported.
- D. Quantities (in tons or cubic yards) of recycled materials (such as steel, crashed concrete, asphalt, etc.) that were sent out from the Landfill in each month.
- E. An estimate of the remaining life of the Landfill in years and months.
- F. A certification that all wastes disposal operations at the Landfill were in compliance with the Regional Board's requirements.

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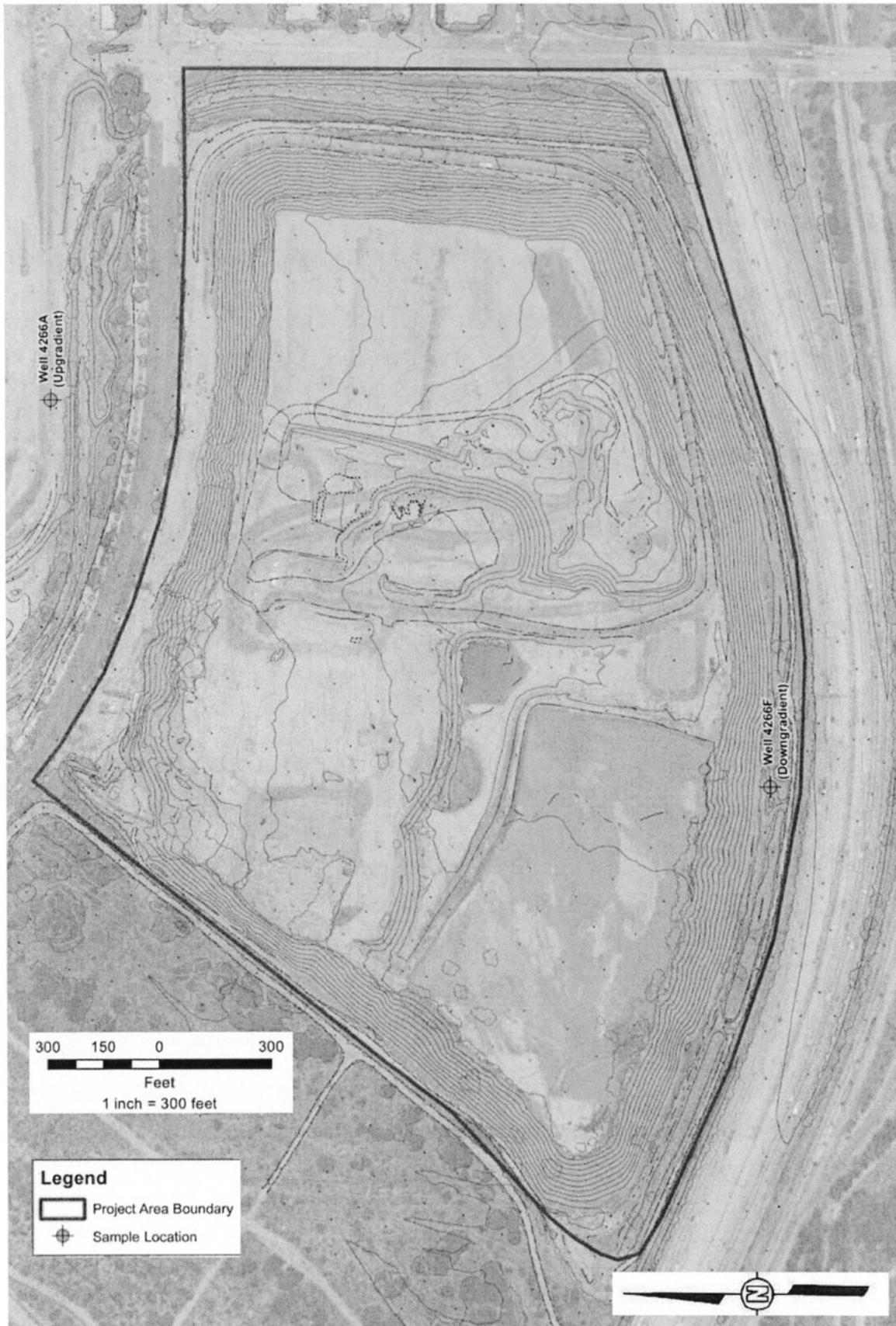
G. If purged groundwater from the monitoring wells is used at the Landfill, the total volume, and areas of usage shall also be reported.

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by: _____
Samuel Unger, P.E., Executive Officer

Date: May 8, 2014

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