

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION**

**ORDER NO. R8-2012-0014**

**GENERAL WASTE DISCHARGE REQUIREMENTS  
FOR SITE MAINTENANCE AND WATER QUALITY MONITORING  
AT CLOSED, ABANDONED, OR INACTIVE NONHAZARDOUS WASTE LANDFILLS  
WITHIN THE SANTA ANA REGION**

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

1. The current regulations governing nonhazardous solid waste landfills are included in the California Code of Regulations, Title 27, Division 2, subdivision 1, Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste (Title 27), and the Code of Federal Regulations, Title 40, Part 258.
2. Nonhazardous solid wastes mean “all putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded wastes (whether of solid or semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e. designated waste).”<sup>1</sup>
3. Closed, abandoned and inactive nonhazardous landfills (CAI Landfills) are “waste management units that were closed, abandoned, or inactive prior to November 27, 1984”<sup>2</sup>, and have not resumed the receipt of waste since that date. All active landfills in the Santa Ana Region have been regulated under waste discharge requirements (WDRs) for many years, but most CAI landfills have not.
4. Pursuant to Title 27, §20080(d), CAI landfills are not required to be closed in accordance with current Title 27 requirements.
5. If it is determined that a CAI Landfill poses a threat to water quality, the Regional Board may impose additional requirements if necessary to accommodate regional or site-specific conditions (Title 27, §20080(a)(1)).
6. In accordance with §13263(d), the Regional Board may prescribe requirements although no Report of Waste Discharge (ROWD) has been filed.
7. CWC §13273 required the State Water Resources Control Board to develop a ranked list of all known solid waste disposal sites (landfills) throughout the state, based upon the threat they may pose to water quality. CWC §13273 required the operator of each landfill on the

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<sup>1</sup> California Code of Regulations, Title 27 Section 20220(a)

<sup>2</sup> California Code of Regulations, Title 27 Section 20164, Definitions

ranked list to conduct and submit to the appropriate Regional Board by July 1, 1987, the results of a solid waste water quality assessment test (SWAT report) to determine if the site was leaking hazardous waste.

8. The SWAT reports indicated that CAI Landfills containing significant quantities of decomposable waste had leaked waste constituents to groundwater. Volatile organic compounds (VOCs) were the primary contaminants that were discharged to groundwater. The discharges occurred through landfill gas and/or leachate migration. These impacts to groundwater have the potential to cause long-term loss of a designated beneficial use.
9. CAI Landfills that do not contain significant quantities of decomposable waste, such as those that were operated by open burning of refuse, pose a less threat to water quality. However, these landfills still have the potential to impact water quality, such as through the significant erosion of landfill wastes.
10. Pursuant to Title 27, §20080(g), the person, agency or corporation responsible for CAI landfills, i.e., an owner or operator (hereinafter Discharger), may be required to develop and implement a detection monitoring program in accordance with Title 27 (§20380 et seq.). If water quality impairment is found, the Discharger may be required to develop and implement a corrective action program. Appropriate corrective action measures may include, but are not limited to, construction of a final cover system, installation of a gas collection and recovery system, and/or implementation of necessary post-closure maintenance measures.
11. The monitoring requirements of this Order constitute a detection monitoring program. If water quality impairment is detected, Title 27 and the General Monitoring and Reporting Program (General M&RP) for this Order (General WDRs) require the Discharger to implement an Evaluation Monitoring Plan (§20425) and submit a corrective action program that satisfies Title 27, §20430. Section 20430 contains the minimum requirements for a corrective action program. After a Discharger submits an acceptable corrective action plan, individual waste discharge requirements may be issued to include the specific corrective action measures.
12. Attachment No. 1 to this Order contains a list of CAI Landfills that have leaked waste constituents to groundwater and, therefore, pose a significant threat to water quality. Some of these landfills are already in a corrective action program. Attachment No. 1 to this Order may be updated by the Regional Board's Executive Officer, as necessary, when additional information warrants.
13. Attachment No. 2 to this Order contains a list of CAI Landfills that pose a less threat to water quality, but are also subject to these general waste discharge requirements. The sites listed in Attachment 2 are primarily CAI Landfills that were operated by open burning of refuse, but may also include other types of disposal sites. These facilities still pose a potential threat to water quality due to potential erosion of landfill waste, and have existing groundwater monitoring or gas monitoring activities that require staff oversight. Attachment No. 2 to this Order may be updated by the Regional Board's Executive Officer, as necessary, when additional information warrants.
14. Existing CAI landfills that are not listed in Attachment 1 or 2 are currently not considered as posing a threat to water quality at this time. If water quality threat is discovered at any CAI landfill not listed on Attachments 1 or 2, the order requires the Discharger to submit a

complete ROWD and an appropriate filing fee to obtain coverage for that CAI landfill under this general order.

15. All CAI Landfills that currently have individual WDRs, but are not listed in Attachments 1 or 2 and are therefore not presently proposed for coverage by this Order, will be considered for coverage under this Order when the individual WDRs are scheduled for review or renewal.
16. Site maintenance at all landfills is necessary to provide positive drainage, minimize erosion, minimize water infiltration through covers, and to prevent ponding. Under this Order, the Dischargers are required to maintain the existing landfill cover, to minimize erosion, and to provide adequate surface drainage control.
17. An annual fee is required for coverage under this Order. The annual fee is assessed based on the facility's Threat to Water Quality (TTWQ) and Complexity Rating, as defined by California Code of Regulations, Title 23, §2200. A facility's TTWQ and Complexity Rating are based on the type of facility. As such, the TTWQ and Complexity Rating for CAI Landfills that pose a significant threat to water quality (i.e., landfills listed on Attachment 1) is "III-B". The TTWQ and Complexity Rating for CAI Landfills that pose a less threat to water quality (i.e., landfills listed on Attachment 2) is "III-C". The Executive Officer can delete a landfill from one Attachment and add the landfill to the other Attachment based on information submitted by the Discharger (e.g., corrective action verification has been completed), or based on conditions at a landfill that may have changed (e.g., groundwater impacts are detected). The Executive Officer will then change the appropriate annual fee classifications.
18. Monitoring and Reporting Program No. R8-2012-0014 (General M&RP) is attached to this order. The General M&RP requires the Discharger to perform regular monitoring and reporting of groundwater quality, and to perform necessary site maintenance activities. Except for CAI Landfills covered by an Executive Officer issued individual M&RP, the General M&RP applies to all CAI Landfills listed in Attachments 1 and 2. The General M&RP may be modified by the Executive Officer. The monitoring and reporting requirements, including requirements to submit reports of waste discharge, are necessary to assess compliance with this Order, to determine whether and to what extent each covered CAI Landfill is impacting waters of the State, and to ensure implementation of all necessary long-term post-closure maintenance activities.
19. The issuance of this Order replaces any existing individual Orders previously issued to any of the CAI Landfills listed on Attachments 1 and 2.
20. The adoption of General WDRs for CAI Landfills for site maintenance and water quality monitoring will assist in:
  - a. Protecting groundwater and surface waters of the State from pollution.
  - b. Simplifying and expediting the application process for the Discharger.
  - c. Reducing Regional Board time preparing and considering individual WDRs for each landfill.
21. A Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) became effective on January 24, 1995. The Basin Plan, and its subsequent amendments, specifies beneficial uses and water quality objectives for waters in the Santa Ana Region.

22. Discharges of pollutants to waters of the State, as a result of inadequate cover maintenance, drainage, erosion control, or other factors, at CAI Landfills, constitute waste discharges, and as such, waste discharge requirements are necessary to ensure that discharges from these sites comply with water quality objectives established in the Basin Plan for groundwater and surface water.
23. This Order establishes minimum standards for post-closure maintenance and monitoring of CAI Landfills. In the event of an inconsistency between the provisions of this Order and the Basin Plan, the more protective water quality provision shall prevail.
24. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or other State or local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.
25. Existing and potential beneficial uses of groundwater within the Santa Ana Region include municipal and domestic supply, agricultural supply, industrial process and service supply. Existing and potential beneficial uses of surface waters within the Santa Ana Region are specified, by water body, in Table 3-1 of the Basin Plan. Surface waters that do not have beneficial uses designated in Table 3-1 of the Basin Plan are assumed to have beneficial uses of municipal and domestic water supply and protection of both recreation and aquatic life.
26. **California Environmental Quality Act (CEQA), and Other Legal References**  
This project of issuing WDRs to CAI Landfills is being initiated by the Regional Board. The action to adopt these General WDRs is intended to maintain or improve water quality. These General WDRs contain prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts to water quality and the environment. These General WDRs are for existing CAI Landfill facilities and as such are exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, section 15301.
27. The Regional Board has notified interested agencies, all currently known Dischargers, and all currently known interested parties of its intent to issue these General WDRs.
28. The Regional Board, in a public meeting, heard and considered all comments pertaining to the adoption of these General WDRs.

**IT IS HEREBY ORDERED**, that each Discharger with a CAI Landfill identified in Attachments No. 1 and 2 to this Order, and any Discharger with a CAI Landfill that the Executive Officer adds to these Attachments in the future, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

**A. ELIGIBILITY**

1. Submit a complete ROWD and an appropriate filing fee for each CAI Landfill. The ROWD shall include the following:
  - a. Form 200 (Application for Facility Permit/Waste Discharge) filled out in accordance with the instructions.
  - b. A description of the landfill and waste characteristics, including:
    - i. Identification of the period during which waste was disposed of at the site.
    - ii. Description of landfill disposal methods, operation and maintenance activities (if known).
    - iii. Description of types of waste disposed.
    - iv. Identification of the total volume of waste disposed.
    - v. Any closure or post-closure activities conducted at the landfill subsequent to ceasing operation.
    - vi. Present and future land use of the landfill area.
  - c. A topographical scale map showing the location, users and uses of all wells located within one mile of the landfill.
  - d. Any other information pertinent to protection of water quality or public health and prevention of nuisance.
2. The Discharger will receive notification from the Regional Board's Executive Officer stating that the CAI Landfill is covered by these General WDRs, and an individual permit is not required.
3. The Executive Officer may require any Discharger covered under these General WDRs to apply for and obtain landfill specific (individual) WDRs. A Discharger covered under the General WDRs may apply for individual WDRs. If individual WDRs are issued, then the applicability of these General WDRs is immediately terminated on the effective date of the alternative individual WDRs.

**B. COMPLIANCE WITH OTHER REGULATIONS, ORDERS AND STANDARD PROVISIONS**

1. If the Executive Officer determines that additional closure or corrective action activities, including the construction of a final cover system or implementation of post-closure maintenance, are necessary to protect water quality, the Discharger shall submit a closure plan or corrective action plan as directed by the Executive Officer.
2. If any applicable requirements in this Order overlap or conflict in any manner, the most water quality protective requirement shall govern, unless specifically stated otherwise or directed by the Executive Officer.
3. Any individual waste discharge requirements for CAI Landfills listed on Attachment 1 and 2 or any CAI Landfills with individual waste discharge requirements that the Executive Officer adds to Attachment 1 or 2 will be rescinded by the Regional Board after the effective date in the Executive Officer's notification of coverage (see Eligibility 2).

### C. PROHIBITIONS

1. Any additional discharge of waste to land at these landfills is prohibited.
2. Odors, vectors, and other nuisances of waste origin beyond the limits of the landfill site are prohibited.
3. The discharge of waste to surface drainage courses is prohibited.
4. The discharge of waste to property not owned or controlled by the Discharger is prohibited.

### D. POST-CLOSURE MAINTENANCE SPECIFICATIONS

1. The Discharger shall implement the attached M&RP No. R8-2012-0014 in order to detect any impacts on waters of the state associated with and or caused by past disposal practices and to ensure implementation of all necessary long-term post closure maintenance activities.
2. The Discharger shall neither cause nor contribute to any surface water contamination, pollution, or nuisance.
3. Basin Plan prohibitions shall not be violated.
4. There shall be no increase in concentration of waste constituents in soil-pore gas, soil-pore liquid, perched water, groundwater or geologic materials outside of the Point of Compliance (as defined by Title 27).
5. Water used over areas underlain by waste within unlined landfill areas shall be limited to the minimum amount necessary for dust control, construction activities and irrigation of vegetated cover.
6. Water collected in any storm water catchment basin or a site water treatment facility may be used in minimum amounts necessary for dust control, compaction, or irrigation of cover vegetation, provided:
  - a. The water does not infiltrate past the vegetation root zones or past a depth where effective evaporation can occur.
  - b. The water does not contain or carry significant concentrations of waste constituents.
7. Surface drainage from tributary areas and internal site drainage from non-landfill surface or subsurface sources shall not contact or percolate through wastes.
8. To prevent erosion and percolation through the waste, drainage ditches crossing over landfill areas shall be lined with a synthetic liner, concrete, or at least a one-foot-thick layer of soil having an in-place hydraulic conductivity of  $1 \times 10^{-6}$  cm/sec or less.
9. **By October 1 of each year**, all necessary runoff diversion and erosion prevention measures shall be implemented. All necessary construction (grading), maintenance, or repairs of precipitation and drainage control facilities shall be completed in order to

minimize rainfall infiltration, prevent ponding, resist erosion or flooding of the landfill, and to prevent surface drainage from contacting or percolating through wastes.

10. Drainage facilities shall be designed, constructed, and maintained to accommodate anticipated precipitation and peak surface runoff flows from a 100-year, 24-hour rainstorm event.
11. Storage facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm, or otherwise managed, to maintain the design capacity of the system.
12. The structural integrity and effectiveness of all containment structures, including the landfill cover, shall be maintained as necessary to correct the effects of settlement or other adverse factors.
13. The migration of landfill gas from the site shall be controlled as necessary to ensure that landfill gases and gas condensate are not discharged to surface waters or groundwater. Gas condensate shall be collected and removed from the site except as allowed by Title 27, Section 20090(e).
14. All landfill areas with visible erosion damage, cracking, exposed waste, lack of vegetation or ponding shall be repaired as soon as practicable after being discovered.

#### **E. WATER QUALITY PROTECTION STANDARDS**

1. Discharge of waste shall not cause the concentration of any Monitoring Parameter to exceed its respective background value in any monitored media (i.e., soil or groundwater) at any Monitoring Point pursuant to M&RP No. R8-2012-0014.
2. The Monitoring Parameters for groundwater are listed in M&RP No. R8-2012-0014.
3. The discharge of waste shall not cause a statistically significant difference in water quality over background concentrations or Concentration Limit of Monitoring Parameter at the Point of Compliance.
4. The Point of Compliance for each CAI Landfill follows the edge of the landfill's waste disposal area, and extends vertically down through the uppermost aquifer.
5. Monitoring results are subject to the most appropriate statistical or non-statistical test, as required by the attached M&RP.
6. The Discharger shall install groundwater, soil pore liquid, soil pore gas, surface water, and leachate monitoring devices as necessary to comply with this Order.

#### **F. PROVISIONS**

1. The Discharger shall comply with General M&RP Order No. R8-2012-0014.

2. The Discharger shall have a continuing responsibility for waste containment and monitoring, and to assure protection of the waters of the State from discharged wastes, landfill gas, and leachate, during the landfill's closure and post-closure maintenance periods and during subsequent use of the property for other purposes. The Discharger is also responsible for correcting any problems that may arise in the future as a result of the waste discharged. This responsibility continues as long as the waste poses a threat to water quality.
3. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate, groundwater, vadose zone liquid and gas, surface waters, and leachate from CAI Landfills throughout the post-closure monitoring and maintenance period.
4. The Discharger shall furnish the Regional Board, within a reasonable time, any information that the Executive Officer may request to determine compliance with these General WDRs.
5. All technical and monitoring reports, including reports of waste discharge, required by this Order are pursuant to §13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to §13268 of the California Water Code.
6. The Discharger shall notify Regional Board staff within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance that threatens the CAI Landfill's containment integrity shall be promptly corrected. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the CAI Landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or duly authorized representative, may waive the written report on a case by case basis if the oral report provides sufficient information and is received within 24 hours. This provision includes, but is not limited to:
  - a. Violation of a Discharge Prohibition.
  - b. Violation of any Water Quality Protection Standard.
  - c. Slope failure.
  - d. Leachate seep occurring on, or in proximity to, the Landfill.
7. This Order is not transferable to any person except after notice to the Executive Officer. The Discharger shall notify the Regional Board in writing of any proposed change in ownership or responsibility for construction or operation of the CAI Landfill in accordance with Title 27, §21710(c)(1). Failure to submit the notice in writing shall be considered a violation of §13264 of the Water Code. Written notice shall be given at least 90 days prior to the effective date of change in ownership or responsibility and shall:

- a. Be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with these General WDRs.
  - b. Contain the requesting entity's full legal name, the state of incorporation if a corporation, the name, address and telephone number of the persons responsible for contact with the Regional Board.
  - c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order.
8. Requests for a change in ownership or responsibility may be approved or disapproved in writing by the Executive Officer. In the event of any change in ownership of the CAI Landfill, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Executive Officer.
9. The Discharger shall file a deed notice with the Recorder of the County in which the CAI Landfill is located, which identifies the prior use of the property as a solid waste disposal site. The notice shall include a property description and a map that identifies the location of the former solid waste disposal site and shall state that the site is subject to this General Order. The notice will serve to alert potential buyers to the CAI Landfill presence in order to prevent nuisance. Confirmation of recordation and a copy of the deed notice shall be provided to the Executive Officer within 120 days of adoption of this Order or 120 days following a landfill's coverage under this Order, whichever occurs first.
10. By no later than **August 30, 2012**, the Discharger shall submit a complete ROWD and an appropriate filing fee, as specified under Eligibility, above. In addition to the information specified in section A.1, the ROWD shall consist of, but not limited to, the following information:
- a. A formal proposal to achieve compliance with the requirements of the General Order and M&RP, as deemed appropriate by the Discharger.
  - b. A proposed Monitoring Plan or a request for a waiver from monitoring, as required by the General M&RP.
  - c. A schedule for the installation of any proposed monitoring systems.
  - d. A proposed Sampling and Analyses Plan, designed specifically for the proposed groundwater monitoring program and as required by the General M&RP.
11. The Discharger shall give notice to the Regional Board as soon as possible of any planned alterations to a CAI Landfill that may change the nature or concentration of pollutants in the discharge. This requirement applies to any proposed site development or land use change, or any other proposed land disturbance at the site.
12. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:
- a. Violation of any terms or conditions of this Order.
  - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
13. 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.

14. The Discharger shall furnish to the Executive Officer, any information that the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Executive Officer upon request, copies of records required to be kept by this Order.
15. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Executive Officer, proposing appropriate modifications to a CAI Landfill's M&RP. The Executive Officer will either reject the proposal, or will incorporate the proposed changes into a revised M&RP.
16. The Discharger shall file a new ROWD at least 120 days prior to the following:
  - a. Significant change in post-closure maintenance activities, which would significantly alter existing drainage patterns and slope configurations, or pose a potential threat to the integrity of the site.
  - b. Change in land use other than as described in the findings of this Order or the Executive Officer approved closure plan.
  - c. Significant change in disposal area (e.g. excavation and relocation of waste on site).
  - d. Any planned change in the regulated facility or activity, which may result in noncompliance with this Order.
17. The Discharger shall submit a work plan at least 30 days prior to any maintenance activities that could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but are not limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells and other devices for site investigation purposes.
18. Formal Site Closure – The Regional Board may require formal closure of a CAI Landfill in accordance with Title 27, §21090 through §21200 under any of the following conditions:
  - a. When there is a site development or land use change that jeopardizes the integrity of the existing cover;
  - b. When water quality impairment is found as part of a water quality monitoring program; or
  - c. When nuisance conditions exist that warrants a closure activity.
19. Where the Discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.
20. The Discharger must comply with all conditions of these General WDRs. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of the CAI Landfill's coverage under these General WDRs by the Regional Board. [CWC Sections 13261, 13263, 13265, 13267, 13268, 13300, 13301, 13304, 13340, 13350].
21. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for: (a)

enforcement action; (b) termination, revocation and re-issuance, or modification of this Order; or (c) denial of a Report of Waste Discharge application for new or revised Waste Discharge Requirements.

22. The Discharger shall take all reasonable steps to minimize or correct any adverse impacts on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
23. The Discharger shall, at all times, properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate laboratory and process controls including appropriate quality assurance procedures.
24. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.
25. The Regional Board shall be allowed, at any time and without prior notification to:
  - a. Enter upon the Discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order.
  - b. Have access to and copy any records that must be kept under the conditions of this Order.
  - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
  - d. Photograph, sample or monitor for the purposes of assuring compliance with this Order.
26. A copy of this Order shall be maintained at the local offices of the Discharger and shall be available to operating personnel at all times.
27. Provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
28. Except for data determined to be confidential under Section 13267(b) of the California Water Code, all reports prepared in accordance with this Order are considered public record and shall be sent to the appropriate contact at the CalRecycle (former Integrated Waste Management Board) and County Environmental Health Department. All reports shall be signed as follows:
  - a. For a public agency - by either a principal executive officer or ranking elected official\*.
  - b. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively\*.
  - c. For a corporation - by a principal executive officer of at least the level of vice-president\*.

- d. For engineering reports and monitoring reports - by a California Registered Civil Engineer or Certified Engineering Geologist.
- e. For a military installation - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.

\* or their "duly authorized representative".

29. Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

**30. Regional Board Address**

The Discharger shall submit reports required under this Order and other information requested by the Executive Officer, to:

California Regional Water Quality Control Board  
Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501

31. The California Water Code provides that any person who intentionally or negligently violates any Waste Discharge Requirements issued, reissued, or amended by this Regional Board is subject to administrative civil liability of up to 1,000 dollars per day of violation. The Superior Court may impose civil liability of up to 10,000 dollars per day of violation or, if a cleanup and abatement order has been issued, up to 15,000 dollars per day of violation.
32. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and may be subject to administrative civil liability of up to 1,000 dollars per day of violation.
33. Closure of CAI Landfill(s) may be subject to regulations of CalRecycle and the Southern California Air Quality Management District.
34. The term "discharge of waste" includes seeps, runoff and leachate containing waste that was previously deposited at a CAI Landfill. Definitions of undefined terms used in this Order shall be as set forth in California Code of Regulations Title 27.
35. The issuance of this CAI Order rescinds the following Orders:
  1. Resolution No. 55-5 for Crestmore landfill, and those portions of M&RP Order No. 98-99-03 that pertain to this site.
  2. Resolution No. 55-14 for Belltown landfill, and those portions of M&RP Order No. 98-99-02 that pertain to this site.
  3. Resolution No. 62-026 for Cooley Ranch landfill.

I, Kurt V. Berchtold, 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, Santa Ana Region, on March 16, 2012.

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Kurt V. Berchtold  
Executive Officer

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION**

**ORDER NO. R8-2012-0014**

**GENERAL MONITORING AND REPORTING PROGRAM**

**FOR SITE MAINTENANCE AND WATER QUALITY MONITORING  
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WITHIN THE SANTA ANA REGION**

**INTRODUCTION**

Closed, abandoned and inactive landfills (CAI Landfills) are landfills that were closed, abandoned, or inactive on or before November 27, 1984. In accordance with §20080(g) of the California Code of Regulations (CCR), Title 27, these CAI Landfills may be required to develop and implement a detection monitoring program. If water quality impairments are found, these CAI Landfills may be required to implement a corrective action program. This general monitoring and reporting program (M&RP) satisfies the requirements of Title 27, §20380 et seq. for CAI units.

**MONITORING AND OBSERVATION SCHEDULE**

**A. Site Inspections**

The Discharger shall inspect the CAI Landfill according to the following schedule, and record, at a minimum, the following standard observations:

**1. Site Inspection Schedule:**

At least one pre-rain season (October through April) inspection shall be conducted prior to October, and one post-rain season inspection shall be conducted after April, unless otherwise directed by the Executive Officer, based on site-specific conditions, such as severe rain events.

**2. Standard Observations:**

**a. For Receiving Waters<sup>3</sup>:**

- i. Floating and suspended materials of waste origin, presence or absence, source, and size of the affected area.
- ii. Discoloration and turbidity – description of color, source, and size of the affected area.
- iii. Evidence of odors – presence or absence, characterization, source, and distance of travel from source.
- iv. Evidence of beneficial use – presence of water-associated wildlife.
- v. Flow rate to receiving water.
- vi. Weather condition.

**b. Landfill Property and Along the Perimeter of the Landfill:**

- i. Evidence of liquids leaving or entering the landfill, estimate size of the affected area, and flow rate (show affected area on a map).

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<sup>3</sup> Receiving Waters refer to any surface water or groundwater and its tributaries with designated beneficial uses as specified in the Basin Plan

- ii. Evidence of ponded water at any point on the landfill site (show affected area on map).
- iii. Evidence of odors – presence or absence, characterization, source, and distance of travel from source.
- iv. Evidence of erosion and/or exposed refuse.
- v. Inspection of all storm water discharge locations for evidence of non-storm water discharges during dry seasons, and integrity during wet seasons.

**c. Drainage Systems Inspection**

The Discharger shall inspect drainage control systems following each storm event on a monthly basis, and record the following information:

- i. Condition of the drainage system controls, and whether the storm water storage basins and drainage ditches contain any liquids.
- ii. Any apparent seepage from the landfill.
- iii. Steps taken to correct any problems found during the inspection and dates when taken.

**B. Rainfall Data**

The Discharger shall record the following information using data from the nearest atmospheric station:

1. Total precipitation during the Reporting Period.
2. Number of storms ( $\geq 1$ " in 24-hours) received during the Monitoring Period.
3. Return interval of most intense 24-hour storm that occurred during the reporting period (e.g. 25 year, 100 year, etc.).

**C. Monitoring**

1. All or a portion of the monitoring program contained in this section may be waived by the Executive Officer for the following reasons:
  - a. CAI landfills that do not pose a significant threat to water quality; or
  - b. CAI landfills which have demonstrated through either the completion of the appropriate SWAT reporting requirements (i.e., SWAT Reports) or assessment activities that there has not been a significant discharge to groundwater.
2. Groundwater monitoring for the Monitoring Parameters listed in Table 1 is required during a minimum of eight semi-annual monitoring events at each background monitoring point. Unless otherwise directed by the Executive Officer, all Table 1 Monitoring Parameters confirmed "non-detect" for each background datum for that constituent of concern, may be dropped from the sampling and analysis list.
3. **Monitoring Points:** The Discharger shall establish and maintain an appropriate number of monitoring points for all media (groundwater, surface water, and gas), for implementing the water quality-monitoring program. Within 120 days of receipt of this Order, the Discharger shall submit either a proposed Monitoring Plan (if the site does not have one already) for its landfill site or a request for a waiver from monitoring. The proposed Monitoring Plan shall consist of at least three (existing or new) groundwater monitoring points designed to confirm groundwater conditions immediately below and adjacent to the landfill site. It shall also include proposed monitoring points for surface water and gas, as appropriate. The proposed Monitoring Plan must include a proposed list of monitoring parameters and monitoring frequency for all monitored media,

particularly if the proposed monitoring parameters and monitoring frequency differs from the requirements of this Order. All waiver requests must be adequately supported.

4. **Monitoring Frequency:** Monitoring of each monitored medium and monitoring of all Monitoring Points shall be carried out once during each Reporting Period. Analysis of Monitoring Parameters (MonPar) shall be carried out **semi-annually** at each of the site's groundwater monitoring points. Surface water monitoring points shall be sampled in accordance with storm water monitoring requirements, if applicable. If required, gas monitoring points shall be sampled on a semi-annual basis. Semi-annual monitoring shall be performed during the 2<sup>nd</sup> and 4<sup>th</sup> calendar quarters, **spring** (April 1 to June 30) and **fall** (Oct. 1 to Dec. 31). **Annual monitoring** shall be performed in accordance with this Order and submitted with the Spring/summer semi-annual monitoring report due on October 31 of each year. The due date for any given report is 30 days after the end of its Reporting Period, unless otherwise stated.
5. Changes to any of the monitoring provisions require approval by the Executive Officer.

**D. Analytical Monitoring**

1. Groundwater Monitoring Parameters: The Monitoring Parameters listed in Table 1 are typical parameters detected at landfill sites investigated during active implementation of the Solid Waste Water Quality Assessment Test (SWAT) Program.
2. All groundwater samples from all Monitoring Points shall be analyzed for the Monitoring Parameters listed in **Table 1**, below:

**Table 1: Monitoring Parameters**

<b>Constituent/Parameter</b>	<b>USEPA Method<sup>(1)</sup></b>	<b>Units<sup>(3)</sup></b>
Water Elevation <sup>(4)</sup>	-----	feet
Electrical Conductivity	2510B	µmhos/cm
PH	Field	pH Units
Temperature	Field	°F/C
Turbidity	Field	NTU
Total Dissolved Solids (TDS)	160.1	mg/l
Chloride, Sulfate	300	mg/l
Nitrate (as nitrogen)	9200	mg/l
VOCs <sup>(2)</sup>	8260	µg/l

(1) The Discharger shall analyze for all constituents using the USEPA analytical methods indicated or the most recently approved SW-846 USEPA method or other equivalent USEPA method.

(2) Include all Volatile Organic Compounds (VOCs) detectable using USEPA Method 8260, including at least all 47 VOCs listed in Appendix I to 40 CFR 258, **MTBE** and all unidentified peaks.

(3) mg/l – milligrams per liter, °F/C – degrees Fahrenheit and Celsius, NTU – natural turbidity units, µmhos/cm – micro-mhos per centimeter, and µg/l – micrograms per liter.

(4) Water elevation shall be recorded from all monitoring wells.

3. **Groundwater Flow Rate and Direction:** For each monitored groundwater body, the water level in each well shall be measured. Semi-annual water level measurements shall be collected, unless the Executive Officer specifically requires or allows otherwise.

Horizontal and vertical gradients, groundwater flow rate, and flow direction for the respective groundwater body shall be determined across an annual hydrogeologic cycle. Groundwater elevations for all wells in a given groundwater body shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction. The observed groundwater characteristics shall be compared with those of previous determinations, noting the appearance of any trends, and of any indications that a change in the hydrogeologic conditions beneath the site has occurred. This information shall be reported in Annual Monitoring Reports.

4. **Sample Procurement Limitation:** For any given monitored medium, the samples taken from Monitoring Points to satisfy the initial data analysis requirements for that Reporting Period shall be taken within a span not exceeding the first five days of that Period. The first retest sample, if needed, shall be taken at mid-Period, and the second retest sample (if needed, for a statistical data analysis method) shall be taken just prior to the end of the Period. If a statistical method uses that second retest, then there is no need to take the initial sample (for that MonPt/MonPar pair) at the start of the next Reporting Period.

## SAMPLE COLLECTION AND ANALYSIS

### A. Sampling and Analytical Methods

Sample collection, storage, and analysis specified in this monitoring and reporting program shall be performed according to the most recent version of Standard USEPA Methods (USEPA publication "SW-846"), and in accordance with an Executive Officer approved Sampling and Analysis Plan (SAP). By June 30, 2012 along with the required Report of Waste Discharge (ROWD), the Discharger must submit a SAP for Executive Officer approval. All future changes to the SAP must be submitted for Executive Officer approval prior to implementation. Laboratories shall be certified by the State Department of Public Health for all analytical procedures they perform. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. Calibration and maintenance records shall be kept and made available upon request by the Regional Board. The Discharger is responsible for seeing that the laboratory analysis of all samples from all Monitoring Points meet the following restrictions:

1. **Method Selection:** The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., "trace") in historical data for that medium, the SW-846 analytical method having the lowest Method Detection Limit (MDL) shall be selected from among those methods that would provide valid results in light of any Matrix Effects involved.
2. **Trace Results:** Results falling between the MDL and the Practical Quantitation Limit (PQL) shall be flagged as "trace", and shall be accompanied by both the (nominal or estimated) MDL and PQL values for that analytical run, and the estimated concentration

shall be provided in square brackets. Likewise, any non-detect ("ND") determination shall include the nominal or estimated MDL concentration for that run.

3. **Estimated MDL and PQL:** The MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly and an estimate of the detection limit and/or quantitation limit actually achieved shall be included.
4. **Quality Assurance/Quality Control (QA/QC) Data:** All QA/QC data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include the following information:
  - a. Method, equipment, and analytical detection limits.
  - b. Recovery rates and an explanation for any recovery rate that is outside the USEPA specified recovery rate.
  - c. Results of equipment and method blanks.
  - d. Results of spiked and surrogate samples.
  - e. Frequency of quality control analysis.
  - f. Chain of custody logs.
  - g. Name and qualifications of the person(s) performing the analysis.
5. **Common Laboratory Contaminant:** Upon receiving written approval from the Executive Officer, a statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, 2-Butanone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or down-gradient sample shall be reported and flagged for easy reference by Regional Board staff.
6. **Unknowns:** Unknown chromatographic peaks shall be identified, quantified, and reported to a reasonable extent. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed in an attempt to identify and more accurately quantify the unknown analyte.
7. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged for easy reference.

## B. Laboratory Records

Water quality records shall be maintained by the Discharger and retained throughout the post-closure maintenance period. The period of retention shall be extended during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following for each sample:

1. Identity of sample and the actual monitoring point designation from which it was taken, along with the identity of the individual who obtained the sample.
2. Date and time of sampling.

3. Date and time that analysis was started and completed, and the name of the personnel performing each analysis.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
5. Chromatographs and calculation of results.
6. A complete chain of custody log.
7. Results of analysis, and the Method Detection Limit and Practical Quantitation Limit for each analysis.

### C. Concentration Limits

1. The concentration limit is the value for a constituent specified in the water quality protection standard under §20390 and §20400, including but not limited to values for concentration, temperature, pH, conductivity, and resistivity. The concentration limits for the monitoring parameters specified in Table 1 shall equal to the respective background values.
2. The concentration limits for VOCs shall be determined as follows:
  - a. In cases where the constituent's Method Detection Limit (MDL) is exceeded in less than ten percent of the historical samples making up the reference background data set, Practical Quantitation Limit (PQL) is the concentration limit.
  - b. In cases where the constituent's MDL is exceeded in ten percent or more of the historical samples, the concentration limit shall be determined using an approved statistical method. In order to run a statistical analysis, at a minimum, eight rounds of sampling must have been completed to provide adequate data points.
3. The Discharger shall review concentration limits every three years using all data collected from the applicable background sampling locations pursuant to Section 5.3 of the USEPA's Unified Guidance.

### D. Release Indication

Exceedance of a concentration limit is an indication of a release. In cases where the PQL is the concentration limit, a single PQL exceedance at a single monitoring point is an indication of a release. If a release is indicated, the **Re-Test Procedure** shall immediately be carried out.

### E. Re-test Procedure

1. In the event the Discharger concludes that a release has been tentatively indicated, the Discharger shall carry out the appropriate reporting requirements and, within 30 days of receipt of analytical results, collect two new suites of samples for the indicated Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.
2. Analyze each of the two suites of re-test analytical results using the same statistical method (or non-statistical comparison) that provided the tentative indication of a release. If the test results of either (or both) of the re-tested data suites confirm the original indication, the Discharger shall conclude that a release has been discovered and shall carry out the appropriate requirements.

3. Re-tests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Monitoring Parameter(s) which triggered the indication. When a VOC analyte is re-tested, the results of the entire VOC test method analyzed shall be reported.

## REPORTING

### A. Monitoring and Reporting Schedule

Unless otherwise indicated, all required monitoring and observations shall be reported in an **Annual Monitoring Report**. The Annual Monitoring Report shall be written and submitted in accordance with the time frames provided in Table 2, below.

**Table 2: Reporting Frequency**

SEMI-ANNUAL MONITORING PERIOD	Annual Report	REPORT DUE DATE
Spring/Summer (April 1- Sep. 30)	(Oct. 1 – Sep. 30)	Oct. 31
Fall/Winter (Oct. 1 to Mar. 31)		

The Monitoring Report shall include the results of all Monitoring Parameters analyzed as required by this Monitoring and Reporting Program. Monitoring Reports will be submitted in an electronic format, with text, tables, figures, laboratory analytical data (MS Excel Format), graphs, and appendices placed on a CDROM or DVDROM in word-searchable PDF format. In accordance with CCR, Title 23, Division 3, Chapter 30 for electronic submittal of information, all monitoring reports and lab results must be uploaded to the State Board's Geotracker database. Accompanying the electronic version of the report will be a hard copy transmittal letter, with signatures of preparers and submitters, (in accordance with requirements stated in General Waste Discharge Requirements Order No. R8-2012-0014), along with an executive summary of the report. The Monitoring Report shall address all facets of CAI Landfill monitoring. All monitoring reports shall be comprised, as appropriate, of at least the following information:

1. **Letter Of Transmittal:** A letter summarizing the groundwater monitoring results shall accompany each report. The letter shall include a discussion of any violations found since the last report was submitted, and shall describe actions taken or planned for correcting those violations. If a detailed time schedule has been previously submitted for correcting violations, a reference to the schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. The discussion shall also include a summary of the groundwater analysis, indicating any changes made or discovered since the previous report. The letter shall include a comprehensive discussion of the compliance record, a review of the past year's significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects with water quality significance completed or commenced in the past year or planned for the upcoming Monitoring Period. The transmittal letter shall be signed by a principal officer at the level

of vice president or above, or by his/her duly authorized representative, if such a representative is responsible for the facility. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signers' knowledge, the report is true, complete, and correct. All technical and monitoring reports shall be signed and stamped by a registered civil engineer or a certified engineering geologist in accordance with Title 27, §21710(d).

2. **Compliance Evaluation Summary** - The summary shall contain the following information:
  - a. **Determination Of The Velocity And Direction Of Groundwater Flow Within Each Water-Bearing Zone:** For each monitored groundwater body, a description and graphical presentation of the velocity and direction of groundwater flow under/around the facility, based upon water level elevations taken during the collection of the water quality data submitted in the Monitoring Report (i.e., groundwater elevation contour map for each water-bearing zone, beneath and adjacent to the facility). The analysis shall include a discussion of how the observed groundwater flow rate and flow direction compare with those from previous determinations, the appearance of any trends, and any other items which may indicate a potential change in the hydro-geological conditions beneath and adjacent to the facility.
  - b. **Pre-Sampling Purge:** For each monitoring point addressed by the report, a description of the method and time of water level measurement, the type of pump used for purging and the placement of the pump in the well, and the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of the field equipment, results of the pH, temperature, conductivity, dissolved oxygen, and turbidity testing, the well recovery time, and the method of disposing of the purge water).
  - c. **Sampling:** For each Monitoring Point addressed by the report, a description of the type of pump, or other device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; the type of containers and preservatives used; the date and time of sampling; the name and qualifications of the person actually taking the samples; and a description of any anomalies).
3. **Corrective Action Summary:** When appropriate, discuss significant aspects of any corrective action measures performed during the Monitoring Period. Calculate the mass removed from the sites' impacted media (groundwater) by mass removal system(s), as applicable. Mass removal calculations shall be based on actual analytical data. Present discussions and indications relating mass removal data to the violation the corrective action is addressing.
4. **Graphical Presentation of Analytical Data:** For each Monitoring Point in each medium, submit, in graphical format, the laboratory analytical data for all samples taken within at least the previous five calendar years. Graphs shall effectively illustrate trends and/or variations in the laboratory analytical data. Each graph shall plot a single constituent concentration over time at one (for intra-well comparison) or more (for inter-well comparisons) monitoring points in a single medium. When multiple samples are taken, graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot down gradient data.

5. **Map(s):** All monitoring reports shall include the following maps:
  - a. A map or aerial photograph clearly showing the locations of all monitoring locations and relative physical features.
  - b. A map showing the area of waste disposal.
  - c. For each groundwater body monitored, a map depicting groundwater contours to the greatest degree of accuracy possible.
  - d. For any landfill in a corrective action program, a separate plume map shall be provided for each formation (groundwater bearing zone) showing the extent of known contamination, defining monitoring points, and groundwater flow direction.
6. **Laboratory Results:** Laboratory statements, concerning the results of all analyses, demonstrating compliance with the most recently Executive Officer approved sampling and analysis plan. Additionally, results of all sampling and analyses performed at the Landfill, outside the requirements of this monitoring and reporting program, shall be summarized and reported. The following information must also be presented:
  - a. All monitoring analytical data obtained during the previous year, presented in tabular form as well as on CDROM, in MS-EXCEL format or in another file format acceptable to the Executive Officer. Additionally, complete data histories of each well shall be submitted on CDROM. Original laboratory analytical reports shall be maintained and made available upon request.
  - b. The evaluation and interpretation of all available data.
  - c. Groundwater elevation contour map for each water-bearing zone.
  - d. Copy of sampling log (record) for each well.
7. An evaluation of the effectiveness of the run-off/run-on control facilities.
8. A summary and certification of completion of all Standard Observations for the CAI Landfill, for the perimeter of the landfill, and for the Receiving Waters.
9. The approximate quantity and types of wastes discharged and the locations in the landfill where waste disposal operations are known or suspected to have occurred.

## **B. Notification Requirements**

1. The Discharger shall notify the Executive Officer within 24 hours by telephone or via email and within 7 days in writing, of:
  - a. Any noncompliance potentially or actually endangering health or the environment.
  - b. Any flooding, equipment failure, or other change in site conditions that could impair the integrity of the site or any portion thereof, or of precipitation and drainage control structures.
2. The Discharger, or persons employed by the Discharger, shall comply with all notice and reporting requirements of the State Department of Water Resource, and with concurrence of the Executive Officer, regarding the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this monitoring program, as required by §13750.5 through §13755 and §13267 of the California Water Code.
3. **Response to an Initial Indication of a Release:** Should the initial statistical or non-statistical comparison indicate that a release is tentatively identified, the Discharger shall:

- a. Within 24 hours, notify their designated Regional Water Board staff contact verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved;
- b. Provide written, notification by certified mail within seven days of such determination; and
- c. Either of the following:
  - i. Shall carry out a Re-Test Procedure. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger shall perform the appropriate Release Discovery Response (Item C.3 below). In any case, the Discharger shall inform the Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted by mail within seven days.
  - ii. Make a determination, in accordance with Title 27, §20420(k)(7), that a source other than the landfill site caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the groundwater, surface water, or the unsaturated zone.

### C. Contingency Response/Reporting

1. **Leachate Seep:** The Discharger shall within 24 hours report by telephone the discovery of any previously unreported seepage from the Landfill disposal area. A written report shall be filed with the Board within seven days, containing at least the following information:
  - a. **Map** - a map showing the location(s) of seepage.
  - b. **Flow rate** - an estimate of the flow rate.
  - c. **Description** - a description of the nature of the discharge (e.g., all pertinent observations and analysis).
  - d. **Location** - Location of sample(s) collected for laboratory analysis, as appropriate.
  - e. **Corrective measures** - approved (or proposed for consideration) by the Regional Water Board Executive Officer.
2. **Physical Evidence of a Release:** If either the Discharger or the Regional Board Executive Officer determines that there is significant physical evidence of a release, per Title 27, §20385(a)(3), the Discharger shall confirm that a release has been discovered and shall:
  - a. Within seven days, notify the Regional Board of this fact by mail (or acknowledge the Regional Board's determination).
  - b. Carry out the appropriate Release Discovery Response for all potentially-affected monitored media.
  - c. Carry out any additional investigations stipulated in writing by the Regional Board Executive Officer for the purpose of identifying the cause of the indication.
3. **Release Discovery Response:** If the Discharger or the Executive Officer concludes that a release has been discovered, the following steps shall be carried out:
  - a. The Discharger shall, within 30-days, sample for all monitoring parameters at all monitoring points in the affected medium and submit the samples for analyses. Within seven days of receiving the laboratory analytical results, the Discharger shall notify the Executive Officer, by mail, of the concentration of all monitoring parameters at each monitoring point. This notification shall include a synopsis showing, for each monitoring point, those constituents that exhibit an unusually high concentration.

- b. Within 90 days of discovering the release, submit an Amended Report of Waste Discharge proposing an Evaluation Monitoring and Reporting Program that;
    - i Meets the requirements of Title 27, §20425.
    - ii Commits to install at least one monitoring well at the facility boundary directly down gradient of the center of the release.
  - c. The Discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Title 27, §20430.
  - d. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the Discharger can meet the requirements of Title 27, §20425 to submit a delineation report within 90 days of when the Executive Officer directs the Discharger to begin the Evaluation Monitoring and Reporting Program.
4. **Release Beyond Facility Boundary:** Any time the Discharger concludes that a liquid- or gaseous-phase release from the Landfill site has traveled beyond the facility boundary, the Discharger shall make the following notifications to all persons who either own or reside upon land that overlies any part of the plume (Affected Persons):
- a. Initial notification to **Affected Persons** shall be accomplished within 14 days of confirming a release and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
  - b. Subsequent to the initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
  - c. Annually, the Discharger shall notify Affected Persons concerning the status of the release and any corrective action being taken or planned.
  - d. Each time the Discharger sends a notification to the Affected Persons (under a. or b., above), the Discharger shall, within seven days of sending such notification, provide the Regional Board with both a copy of the notification and the mailing list of the Affected Persons. In the case of an annual notification to the Affected Persons (c. above), notification to the Regional Board shall be via the Annual Report.
  - e. All notifications to all Affected Persons shall include (at a minimum) the following information:
    - i A summary of the release and corrective action information.
    - ii Contact information (i.e., Regional Water Quality Control Board, City, and County Environmental Health Department).
    - iii The results of the most recent monitoring data and its availability.

#### D. Response to VOC Detection in Background

1. Except as indicated in **D.2.** below, any time the laboratory analysis of a sample from a Background Monitoring Point shows either three or more VOCs above their respective Method Detection Limit, or one VOC above its respective Practical Quantitation Limit, the Discharger shall:
  - a. Within 24 hours, notify the Regional Board by phone that possible Background Monitoring Point contamination has occurred.
  - b. Follow up with written notification by mail within seven days.
  - c. Immediately obtain one new independent VOC sample from the Background Monitoring Point and send for laboratory analysis of all detectable VOCs.

2. If the sample collected pursuant to D.1.c, above, validates the presence of a VOC(s) at the Background Monitoring Point, the Discharger shall:
  - a. Within 24 hours, notify the Regional Board that the VOC(s) have been verified to be present at that Background Monitoring Point.
  - b. Provide written notification by mail within seven days of validation.
  - c. Within 180 days of validation, submit a report, acceptable to the Executive Officer, which examines the possibility that the detected VOC(s) originated from other than the Landfill, and proposes appropriate changes to the Monitoring and Reporting Program.
3. If the Executive Officer determines, after reviewing the report, that the VOC(s) detected originated from a source other than the Landfill, the Executive Officer will make appropriate changes to the Monitoring and Reporting Program.
4. If the Executive Officer determines, after reviewing the report, that the detected VOC(s) most likely originated from the Landfill, the Discharger shall assume that a release has been detected and shall immediately begin carrying out the appropriate Release Discovery Response of this monitoring and reporting program.

All reports required in this monitoring and reporting program are required pursuant to California Water Code §13267. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with §13320 of the California Water Code and Title 23, California Code of Regulations, §2050. The petition must be received by the State Water Resources Control Board within 30 days of the date of this Order. Copies of the laws and regulations applicable to filing petitions will be provided upon request.

I, Kurt V. Berchtold, 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, Santa Ana Region, on March 16, 2012.

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Kurt V. Berchtold  
Executive Officer

<b>Attachment 1<sup>4</sup> - Facilities that pose a significant threat to water quality</b>				
NO.	Landfill Name	Facility Location	Facility Owner(s) W/Address	Facility Operator(s) w/Address
1	Crestmore	SW Corner of Jurupa Avenue and Linden Avenue, Bloomington	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415
2	Lane Road	SE corner of Michelson Drive and Harvard Avenue, Irvine	American Golf Corporation 2951 28th Street Santa Monica, CA 90405	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
3	Pedley	Jurupa and Van Buren Riverside	California Department of Fish and Game 1416 9th Street 12th Floor Sacramento, CA 95814	RCWMD 14310 Frederick Street Moreno Valley, CA 92502
4	San Joaquin	SE corner of Fairchild Road and MacArthur Blvd., Irvine	University of California Irvine Environmental Health and Safety 4600 Health Science Road Irvine, CA 92697	OCW&R 300 N. Flower Street Suite 400 Santa Ana, 92703

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<sup>4</sup> Landfills listed under Attachment 1 have a threat to water quality and complexity rating on 3B in accordance with Section 2200, California Code of Regulations, Title 23, Division 3, Chapter 9, Waste Discharge Reports and Requirements, Article 1, Fees

<b>Attachment 2<sup>5</sup> - Facilities that Do Not pose a significant threat to water quality</b>				
NO.	Landfill Name	Facility Location	Facility Owner(s) W/Address	Facility Operator(s) w/Address
1	Gothard Street	18131 Gothard Street Huntington Beach	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
2	Huntington Beach	Huntington Beach Central Sports Complex	City of Huntington Beach 2000 Main Street Huntington Beach, CA 92648	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
3	La Habra	NE corner of Las Lomas Dr. and S. Idaho Street, La Habra (now Vista Grande Park)	City of La Habra Public Works Dept. 201 E. La Habra Blvd. La Habra, CA 90631	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
4	Reeve Pit	Santiago Blvd. West of Santiago Canyon Road, Orange	Thomas Reeve 19132 Ridge View Road Villa Park, CA 92677	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
5	Belltown	NW corner of 26th Street and Hall Avenue, Riverside	Oldcastle Precast, Inc. 2434 Rubidoux Blvd. Riverside, CA 92509	RCWMD 14310 Frederick Street Moreno Valley, CA 92502
6	Waterman	Northwest of Carnegie Drive and Brier Drive, San Bernardino	Glenborough Inland Realty Corp. 650 E. Hospitality Lane Suite 150 San Bernardino, CA 92408	City of San Bernardino 300 North "D" Street San Bernardino, CA 92418-0001
7	La Veta	2241 E. Palmyra Orange	YMCA 2241 E. Palmyra Orange, CA 92869  Santiago Creek Estate P.O. Box 11927 Santa Ana, CA 92711  Robert Schrimmer Trust Arroyo Casa Apartments 601 Lunar Ave. Brea, CA 92821  Guillermo Benitez 334 S. Jennifer Lane Orange, CA 92869	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
8	Longsdon Pit North	Harbor BLVD. and Chapman Ave, Anaheim	City of Garden Grove 11222 Acacia Parkway Garden Grove, CA 92840	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703

<b>Attachment 2<sup>5</sup> - Continued</b>				
NO.	Landfill Name	Facility Location	Facility Owner(s) W/Address	Facility Operator(s) w/Address
9	Longsdon Pit South	Harbor BLVD. and Chapman Ave, Anaheim	Inland American Lodging Garden Harbor LLC 200 South Orange Avenue Suite 1200 Orlando, FL 32801-1672	OCW&R 300 N. Flower Street Suite 400 Santa Ana, 92703
10	Yorba Street	Southwest Corner of Chapman and Santiago Canyon Blvd, Brea	City of Orange Community Services Department, C/O Dana Robertson 230 E. Chapman Avenue, Orange, CA 92866	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
11	Sparks/Rains	SE Corner of Beach Blvd. and Lincoln Avenue, Anaheim	City of Anaheim 201 South Anaheim Blvd. Suite 1003 Anaheim, CA 92805 Westgate Investment Group LLC 141 N. Richmont Drive Anaheim, CA 92801	OCW&R 300 N. Flower Street Suite 400 Santa Ana, CA 92703
12	Cooley Ranch	Washington Street, Colton	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415
13	Villa Park	5545 E. Santiago Canyon Road Orange	OCW&R 300 N. Flower Street Suite 400 Santa Ana, 92703 City of Orange 300 E. Chapman Ave. Orange, CA 92866	OCW&R 300 N. Flower Street Suite 400 Santa Ana, 92703
14	Beaumont	NW corner of Fourth Street and Nicholas Road, Beaumont	RCWMD 14310 Frederick Street Moreno Valley, CA 92502	RCWMD 14310 Frederick Street Moreno Valley, CA 92502
15	Plunge Creek	South of 5th Street between Alabama and Church Streets, San Bernardino	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415	San Bernardino County 222 West Hospitality Lane 2nd Floor San Bernardino, CA 92415

<sup>5</sup> Landfills listed on Attachment 2 have the threat to water quality and complexity rating of 3C in accordance with Section 2200, California Code of Regulations, Title 23, Division 3, Chapter 9, Waste Discharge Reports and Requirements, Article 1, Fees