

California Regional Water Quality Control Board  
Santa Ana Region

February 5, 2021

STAFF REPORT

**ITEM:** 9

**SUBJECT:** Revised Waste Discharge Requirements for Riverside County Department of Waste Resources, for the Closed Corona Sanitary Landfill, City of Corona, Riverside County, Order No. R8-2021-0007

**DISCUSSION:**

The Riverside County Department of Waste Resources (hereinafter the Discharger) and the City of Corona own and formerly operated Corona Sanitary Landfill (Landfill), located at 1300 Magnolia Avenue in the City of Corona. The Landfill is a closed, unlined Class III, non-hazardous municipal solid waste (MSW) landfill that operated from March 1951 to August 1986. The Landfill is currently regulated under Waste Discharge Requirements (WDRs) Order No. 88-65, as amended by Orders No. 98-99 and Monitoring and Reporting Program No. 98-99-02.

The Discharger completed site closure construction in October 1990. Since then, the Discharger has been implementing post-closure maintenance at the Landfill.

The existing WDRs are being revised to include requirements that are consistent with the current federal and State laws and regulations applicable to post-closure maintenance and to reflect current conditions at the Landfill. This Order updates and replaces the existing WDRs for the Landfill and prescribes discharge, monitoring, and reporting requirements for post-closure maintenance and corrective action program implementation.

**CORRECTIVE ACTION PROGRAM**

Since 1995, chlorinated volatile organic compounds (VOCs), primarily trichloroethene (TCE) and cis 1,2-dichloroethene (cis 1,2-DCE), have been detected in groundwater monitoring wells at trace levels or at concentrations moderately exceeding the federal and State Drinking Water Maximum Contaminant Levels.

To address VOCs in groundwater, which are partially caused by diffusion of landfill gas into the underlying water table, the Discharger has been actively operating a landfill gas (LFG) extraction system since 1986. Currently, the LFG system includes 64 vertical gas extraction wells, lateral pipes, header pipes, and an on-site flare station. The final cover also aids in minimizing water infiltration through waste, thereby reducing landfill leachate and gas formation and lessening VOC impact to underlying groundwater.

In October 2012, an updated Joint Technical Document (JTD) was prepared for the Landfill and submitted by the Discharger to the Santa Ana Water Board. The JTD included a Corrective Action Plan (CAP) and a Final Post Closure Maintenance Plan (FPCMP). The JTD identified the final cover and the LFG extraction and collection system as key components of the CAP. In 2013, the Santa Ana Water Board formally approved the CAP described in the JTD as appropriate and acceptable corrective action measures for the Landfill.

## **APPLICABLE LAWS AND REGULATIONS**

The applicable regulations governing the discharge of MSW to land are contained in California Code of Regulations, Title 27, Division 2, Subdivision 1, "*Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste*" (Title 27). Title 27 implements the federal regulations, Code of Federal Regulations Subpart D of Part 258 of Title 40 (Subtitle D), for MSW landfills.

The State and Regional Water Boards are authorized to regulate discharges of waste to land under Title 27. Title 27 generally deals with non-hazardous wastes, and it provides regulatory authority to the Water Boards and CalRecycle (formerly called the California Integrated Waste Management Board); it also clearly defines the responsibilities assigned to each agency. The regulations governing the disposal of waste to land include authority for the Regional Water Boards to adopt waste discharge requirements and to establish site-specific requirements for regulatory compliance, closure design, and post-closure monitoring. The primary purposes of the regulations are to: 1) assure the protection of human health and the environment; 2) ensure waste is properly contained or cleaned up as appropriate; and 3) assure that surface and groundwater are protected from the discharge of waste to land. Title 27, Section 20430 requires the Discharger to implement a corrective action program to remediate releases from the Landfill to ensure that the Discharger achieves compliance with the Water Standards adopted under §20390 for the site.

The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) lists the beneficial uses and water quality objectives for surface and groundwater bodies in the Santa Ana Region. The receiving water bodies for the Landfill include Temescal Creek and the Temescal Groundwater Management Zone.

This Order contains waste discharge requirements that are consistent with Title 27 and Subtitle D Regulations, the Basin Plan, and other pertinent federal and State laws and regulations for post-closure maintenance and are considered to be adequate for the protection of the beneficial uses of the waters of the region.

## **RECOMMENDATION:**

Adopt Order No. R8-2021-0007 as presented.

The draft Order has been sent to the following entities for review and comments:

U. S. Environmental Protection Agency, Region 9 – Steve Wall ([wall.steve@epa.gov](mailto:wall.steve@epa.gov))  
State Water Resources Control Board, Division of Clean Water Program – Brianna St. Pierre ([Brianna.St.Pierre@waterboards.ca.gov](mailto:Brianna.St.Pierre@waterboards.ca.gov))  
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STATE OF CALIFORNIA  
 SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD  
 ORDER NO. R8-2021-0007  
 WASTE DISCHARGE REQUIREMENTS  
 FOR  
 RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES  
 CORONA SANITARY LANDFILL  
 (POST-CLOSURE MAINTENANCE AND CORRECTIVE ACTION PROGRAM)  
 A CLOSED CLASS III SOLID WASTE DISPOSAL SITE  
 RIVERSIDE COUNTY

Discharger	RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES AND THE CITY OF CORONA
Facility	CORONA SANITARY LANDFILL (CLOSED CLASS III SOLID WASTE DISPOSAL SITE) 1300 MAGNOLIA AVE. CORONA, CALIFORNIA

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

1. **Corona Sanitary Landfill** – The Riverside County Department of Waste Resources and the City of Corona (hereinafter the Discharger) own and operated the Corona Sanitary Landfill (the Landfill), an unlined, Class III non-hazardous waste landfill. The Landfill is an 80-acre site located at 1300 Magnolia Avenue in the city of Corona, Riverside County, California. Specifically, the Landfill is located in the central portion of South West ¼ of Section 32 of Township 3 South and Range 6 West, San Bernardino Baseline and Meridian (33.863° N-latitude, - 117.536° W-longitude), as shown in Attachment A, which is hereby made a part of this Order.
  
2. **Waste Discharge Requirements History** – The Landfill was initially regulated by the Regional Board in accordance with Waste Discharge Requirements (WDR) Order No. 57-29, which was adopted in December 1957. In December 1980, the Regional Board adopted WDR Order No. 80-196, which amended Order No. 57-29 and required that the Discharger submit a closure plan for the Landfill 90 days prior to ceasing disposal operations at the site. In June 1988, the Regional Water Board adopted WDR Order No. 88-65 revising and updating waste discharge requirements for the site in accordance with modifications of statutory and administrative laws, revisions of the Santa Ana Regional Board’s Basin Plan, and other State and Regional Board policies that had been developed since adoption of Order No. 57-29 in 1957. Accordingly, Order No. 88-65 rescinded Order No. 57-29 for the site.

3. **Current WDRs** – Currently, the Landfill is regulated under Regional Board Order No. 88-65 as amended by Order No. 98-99, and Monitoring and Reporting Program No. 98-99-02, in compliance with California Code of Regulations, Title 27 and Code of Federal Regulations, Title 40, Part 258 (Subtitle D regulations) for non-hazardous municipal solid waste (MSW) landfills.

## BACKGROUND

4. **Site Location** – The Landfill is located within the City of Corona in an area designated as Mixed Use: Industrial and Commercial. Predominant land uses in the vicinity of the Landfill are Mixed Use: Industrial and Commercial, General Commercial, and Low Density Residential (for the neighborhood located south of the Landfill).
5. **Landfill Status** – The Landfill is a closed, Class III, MSW landfill that was operated from March 1951 to August 1986. The Landfill is not equipped with an engineered liner system or leachate collection and removal system. Since landfill operations ended at the site in 1986, the Discharger is not required to install a waste containment system.
6. **Solid Waste Disposal** – The Landfill consists of a single Waste Management Unit (WMU), as shown in Attachment C-1. The total Landfill waste footprint occupies approximately 80 acres of the 94-acre site. During operation, wastes discharged at the Landfill were comprised primarily of non-hazardous residential, commercial, municipal, industrial, and agricultural solid wastes. The Landfill received approximately 700 tons per day of non-hazardous wastes in the year prior to closure and it is estimated that approximately 6,400,000 cubic yards of solid waste were disposed of at the site.
7. **Liquid Waste Disposal** – Liquid wastes were also accepted at the site during active site operations. These wastes included septic tank and egg washing wastes which were discharged to evaporation ponds located in the southeast corner of the site. In 1985, the waste sludge materials were excavated from the evaporation pond areas until native soil was encountered. The excavated waste materials were placed in the active landfill. In 1987, the excavations were backfilled with clean soils.
8. **Closure and Post-Closure Maintenance** – Construction of the closure cover began at the Landfill in September 1986 and was completed in October 1990. In accordance with the Closure and Post-Closure Maintenance Plans (CPCMP), the final closure cover consists of a 2-foot thick foundation layer, overlain by a 1-foot thick compacted clay layer, and a 1-foot thick vegetative cover layer.

9. **Solid Waste Assessment Test, 1988** – In accordance with the requirements of Chapter 15, a Solid Waste Assessment Test Program (SWAT) was implemented at the Landfill in 1988. Elements of the program included installation of five groundwater monitoring wells (CG-01 through CG-05) and three soil lysimeters to evaluate groundwater quality beneath the Landfill. Chlorinated volatile organic compounds (VOCs) were detected in groundwater samples at concentrations exceeding the federal and State Drinking Water Maximum Contaminant Levels. These VOCs included trichloroethene (TCE), and 1,2-Dichloroethane (1,2-DCA).
10. **Diesel Fuel Tanks** – In 1991, two-partially buried diesel fuel tanks, located in the north corner of the site, were removed in accordance with Riverside County Department of Environmental Health requirements. In addition, a total of twelve soil samples were collected from four soil test borings completed in the area of the tanks and tested for diesel fuel and BTEX compounds. Results showed only low levels of diesel-related hydrocarbons in three of the samples and a very low level of toluene in one of the samples.
11. **Site Geology** – The Landfill is located on an alluvial fan that slopes to the north from the Santa Ana Mountains. The Landfill overlays recent channel deposits of Temescal Wash and is bounded by late Mesozoic age granitic rocks on the north and east. The alluvium is composed of unconsolidated sand and gravel and is approximately 190 feet thick at the northern corner of the landfill. Older alluvium deposits predominate the south and west of the site and consist of semi-consolidated silt, sand, and gravel. Crystalline bedrock (Corona Hornblende Granodiorite Porphyry) outcrops to the south and east of the site. A diatomaceous siltstone member of the Puente Formation outcrops near the southeastern end of the Landfill.
12. **Faulting** – No faults are known to transverse the Landfill property. The northwest-trending Elsinore fault zone is located approximately 3 miles to the southwest of the site.
13. **Site Terrain** – The terrain surrounding the Landfill is characterized by steep to moderately steep mountains and hills. The Landfill is located approximately 1,200 feet southwest of Temescal Wash, the main drainage channel in the vicinity of the Landfill. Temescal Wash is an intermittent stream that flows during periods of heavy precipitation.
14. **Temescal Groundwater Basin** – The Landfill overlies the Temescal Groundwater Management Zone, which is composed primarily of Older and Recent Alluvium deposits. This zone is bounded by Prado Basin Management Zone and Chino South Groundwater Management Zone to the North, the La Sierra Hills, the Arlington Groundwater Management Zone, and El Sobrante de

San Jacinto to the east, the Bedford Groundwater Management Zone on the south, and the Santa Ana Mountains on the west. The Temescal Groundwater Management Zone is designated in the Santa Ana Water Board's Basin Plan as municipal/domestic supply, agriculture supply, industrial process supply, and industrial service supply beneficial uses. Groundwater flow beneath the site is west-northwest, generally towards the Santa Ana River.

15. **Temescal Creek** – Surface drainage from the Landfill is tributary to Temescal Creek. The beneficial uses of Temescal Creek Reach 1b (from Arlington Channel to 1400 ft. Upstream of Magnolia Avenue) include:
  - a. Secondary contact recreation,
  - b. Warm freshwater habitat, and
  - c. Wildlife Habitat.
16. **Groundwater Monitoring** – Groundwater monitoring at the Landfill began in 1988 under the SWAT program. Since then, the Discharger has installed a total of eight groundwater monitoring wells (CG-01 through CG-08) at the Landfill. The current groundwater monitoring network, which includes Wells CG-01 through CG-08, is shown in Attachment C-2. VOCs were detected in groundwater during implementation of the SWAT program and have been detected periodically in site monitoring wells at concentrations above federal and State Maximum Contaminant Levels since that time.
17. **Landfill Gas Extraction System** – A landfill gas extraction system was installed at the Landfill in the 1986. Currently, the system includes 64 vertical gas extraction wells, lateral pipes, header pipes, and an on-site flare station. Twenty-five of the LFG wells have been turned off or disconnected due to low methane gas quality. The pipe system conveys LFG from the vertical extraction wells to the onsite flare station where LFG is combusted or vaporized. LFG condensate that collects in the system flows by gravity to a City of Corona owned sewer line, and then continues to gravity flow to the Corona sewage treatment plant for treatment. The locations of the LFG wells, pipelines, and flare station are shown in Attachment C-1.
18. **Landfill Gas Monitoring System** – To monitor potential offsite migration of LFG, a total of 35 perimeter gas probes have been installed to date at the Landfill. These gas probes were periodically installed in groups over the years – 7 were installed in 1988, 15 in 1995, and 13 in 2019. These probes are also used for vadose zone monitoring to provide initial detection of gas migration to groundwater. Gas probes are monitoring monthly for pressure, methane, carbon dioxide, and balance gas. A gas sample is collected for laboratory analyses from

any probe with levels that exceed specified thresholds. Otherwise, a gas sample is collected annually for analysis from the probe with the lowest oxygen.

19. **Adoption of Order No. 93-57** – In 1991, USEPA promulgated a new final rule for solid waste disposal facilities, which was designated at 40 CFR Part 258. It established revised minimum federal criteria for landfills. The regulations became effective in October 1993. This revision to landfill regulations required that California implement corresponding landfill regulations and requirements that complied with the new federal regulations to become a federally approved state. There was insufficient time to adequately revise existing regulations (Chapter 15) before the October 1993 federal deadline. Accordingly, the State Board adopted Resolution No. 93-62 which directed each Regional Board to revise the WDRs for each landfill in their respective regions to comply with the new federal landfill regulations. Accordingly, the Santa Ana Regional Board adopted Order 93-57 in September 1993 amending WDRs for existing landfills in the Santa Ana Region, including Corona Landfill. The requirements of Order No. 93-57 amended Order No. 88-65 and were subsequently amended by Order No. 98-99.
20. **Adoption of Order No. 94-17** – Review of WDRs for existing landfills in the Santa Ana Region found that the WDRs did not contain adequate requirements for on-site drainage control or for regular maintenance of on-site drainage control systems. Accordingly, the Santa Ana Regional Board adopted Order No. 94-17 delineating specific requirements in existing WDRs that were inadequate and providing specific language that replaced these inadequate requirements. The requirements of Order No. 94-17 amended Order No. 88-65 and were subsequently amended by Order No. 98-99.
21. **Adoption of Order No. 98-99, and MRP No. 98-99-02** – Following adoption of Orders #93-57 and #94-17, Dischargers and Regional Board staff found that there was some overlap between the two Orders that caused some confusion. Accordingly, the Regional Board adopted Order #98-99, which combined the requirements of Orders #93-57 and #94-17 and eliminated overlap, thus providing a unified and user-friendly format. In addition, MRPs were adopted for groups of similar landfills operated by the same Discharger providing appropriate monitoring and reporting guidance. Corona Landfill was included under MRP Order #98-99-02. The requirements of Order #98-99 and MRP Order #98-99-02 currently apply to Corona Landfill.
22. **Evaluation Monitoring Program (EMP)** – The Regional Water Board approved the Discharger's proposed EMP in July 1997. The EMP focused on monitoring the five existing monitoring wells installed as part of the SWAT Program (CG-01 though CG-05) to delineate the extent of VOC contamination. Another groundwater monitoring well, CG-06, was installed in November 2000, but was



replaced with monitoring well CG-06a in October 2007 due to nearby road construction. Groundwater monitoring wells CG-07 and CG-08 were installed in August and September 2017 to supplement existing wells which had gone dry due to drought conditions during the preceding years.

23. **Groundwater Remedial Measures** – Currently, the remedies in place for the VOC contamination attributable to the Landfill are: 1) the LFG extraction system, which minimizes gas migration to groundwater; and 2) the final cover, which minimizes infiltration of rainwater through waste and the formation of leachate. The LFG extraction and collection system has been in operation since 1986, and the final cover was completed in 1990. The Discharger continues to evaluate and optimize the operation of the LFG extraction system to minimize gas migration to groundwater, and to inspect and maintain the Landfill final cover to facilitate rainwater runoff and minimize infiltration.
24. **Joint Technical Document, 2012** – In October 2012, an updated Joint Technical Document (JTD) was prepared for the Landfill and submitted by the Discharger to the Regional Board. The JTD included a Corrective Action Plan (CAP) and a Final Post Closure Maintenance Plan (FPCMP). The JTD identified the final cover and the LFG extraction and collection system as key components of the CAP. In 2013, the Regional Board formally approved the CAP described in the JTD as appropriate and acceptable corrective action measures for the Landfill.
25. **Southeastern Channel Reconstruction, 2017** – A natural drainage channel, designated as the Southeastern Channel, runs along the southern perimeter of the landfill. In previous years, the Discharger has had to periodically perform various modifications and enhancements to the channel to repair damage due to high storm flows during winter storms. Increasing development in the area upstream of the Landfill has gradually resulted in higher and more intense flows in the channel which has caused damage to the channel and erosion of the Landfill slope. Accordingly, the Discharger determined that a significant reconstruction of the channel was needed to protect the Landfill during storm events from likely severe erosion and exposure of solid waste from the Landfill areas adjacent to the channel. Based on this determination, the Discharger developed an upgraded design for the channel, which accounted for the development upstream and the increased and more intense runoff. In 2017, the Discharger implemented the re-design and reconstructed the channel. Reconstruction included excavating and relocating approximately 14,600 cubic yds. of solid waste from locations adjacent to the channel to a location along the southwestern portion of the Landfill on top of the existing cover. To ensure proper protection of water quality, additional cover materials were placed over the relocated solid waste. These materials consisted of monolithic earth materials with proper thickness and equivalent protection.

26. **Terms and Acronyms** – The terms and acronyms used in this Order are defined in Title 27, §20164 and are included as Attachment B to this Order.
27. **Recission of Previous Orders** – This Order updates and replaces Order #88-65 as amended by Order #98-99, and MRP #98-99-02, to prescribe revised waste discharge requirements for post-closure maintenance and CAP implementation at the Landfill, and the corresponding monitoring and reporting program requirements in compliance with current federal and State regulations for MSW landfills.
28. **California Environmental Quality Act (CEQA)** – This Order revises and updates waste discharge requirements for an existing closed landfill; therefore, it is categorically exempt from the provisions of CEQA (Public Resources Code, § 21000 et seq) in accordance with California Code of Regulations, Title 14, Chapter 3, Section 15301.
29. **Public Notice** – The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to update the existing waste discharge requirements for the Landfill and has provided them with an opportunity to submit their written views and recommendations.
30. **Public Meeting** – The Regional Water Board, in a public meeting, heard and considered all comments pertaining to updating the existing waste discharge requirements.

**IT IS HEREBY ORDERED that the Discharger, in order to meet the applicable provisions contained in the California Code of Regulations (CCR), Title 27, shall comply with the following:**

**A. DISCHARGE SPECIFICATIONS**

1. **Water Quality Protection Standards** – The Discharger shall maintain the Landfill so that it shall not cause the concentration of any Constituent of Concern (COC) to exceed its respective concentration limit in any monitored medium at any monitoring point or well specified in the MRP, which is attached to this Order.
2. **Minimize Infiltration** – The Discharger shall maintain the Landfill closure cover to minimize the infiltration of water into the waste, thereby, minimizing the production of leachate and gas [Title 27, §20950(a)(2)(A)(1)].
3. **Post-Closure Maintenance** – The Discharger shall perform post-closure maintenance at the Landfill in accordance with the approved PCMP. Landfill

post-closure maintenance shall continue until such time as the Landfill waste no longer constitutes a potential threat to water quality [Title 27, §20950(a)(2)(A)(2)].

4. **Corrective Action Program** – When requested by the Executive Officer of the Regional Water Board (the Executive Officer), the Discharger shall implement, and evaluate the effectiveness of, a CAP in remediating releases, and if necessary, shall propose alternative(s) and/or additional corrective measures such as, but not limited to:
  - a. Expansion of the LFG extraction system;
  - b. Improvements to the landfill cover; and
  - c. Performance of additional site characterization and/or environmental control system evaluation to identify and implement additional corrective measures.
5. **Discontinuing Corrective Action Measures** – Corrective action measures implemented to remediate a water quality release may be discontinued when the concentrations of Constituents of Concern (COCs) have been reduced to acceptable levels consistent with the concentration limits, defined in Attachment D of these WDRs and specified in Section B of the attached Monitoring and Reporting Program No. R8-2021-0007 (the MRP) of this Order, throughout the entire zone affected by the release. However, such discontinuance of corrective action measures shall not include any environmental control systems, such as a landfill gas extraction system, that are also required by other regulatory agencies to maintain site compliance during post-closure. To demonstrate completion of CAP, the concentrations of each COC must remain at or below its respective concentration limits at the Point of Compliance (POC) for a minimum of eight sampling events within three consecutive years after suspending the corrective action measures [Title 27, §20430(g)(2)].
6. **Pollution or Nuisance** – The Discharger shall maintain the Landfill so that it will neither cause nor contribute to a pollution or nuisance, as defined in the California Water Code (CWC), §13050.

## **B. PROHIBITIONS**

1. **Discharge of Liquids** – The discharge of unauthorized liquids, such as groundwater, leachate or landfill gas condensate, or their use for dust control or irrigation, at the Landfill is prohibited. This prohibition does not apply to the discharge of liquids in accordance with a disposal plan approved by the Executive Officer, or that are regulated under a separate permit issued by the Regional Water Board or a conditional waiver of waste discharge requirements.

2. **Disposal of Waste** – The disposal of waste at the Landfill is prohibited. Should illegal dumping occur at the site, the Discharger shall remove and properly dispose of any wastes or relocate those wastes to a permitted waste disposal facility.
3. **Odors, Vectors, and Other Nuisances** – Odors, vectors, and other nuisances associated with waste at the Landfill beyond the limits of the Landfill are prohibited.
4. **Discharge Off-Site** – The discharge of waste to property not owned or controlled by the Discharger is prohibited.

**C. PROVISIONS**

1. **General** – The Discharger shall comply with all discharge specifications, prohibitions, and provisions, and shall implement the attached MRP immediately upon its adoption.
2. **Drainage and Erosion Control System** – The Discharger shall inspect and maintain the Landfill to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout that could occur as a result of precipitation from a 100-year, 24-hour storm. This shall be accomplished by designing, constructing, and maintaining the following at a minimum:
  - a. Components of a facility drainage system that will withstand site-specific maximum intensity precipitation (peak flow from a 100-year, 24-hour storm).
  - b. A run-on drainage control system to prevent flow from off-site sources onto the Landfill, and to collect and divert the peak flow calculated volume from off-site sources that result from a 100-year, 24-hour storm;
  - c. A runoff drainage control system to collect and divert both the calculated volume of precipitation and the peak flow from on-site surface runoff that results from a 100-year, 24-hour storm; and
  - d. Top deck surfaces that achieve a minimum of one percent (1%) slope, and that include structures that direct water to downdrains or other necessary drainage conveyance structures;
  - e. Drainage conveyance structures for all sideslopes;

- f. Drainage control structures that divert natural seepage from native ground and that prevent such seepage from entering the waste disposal area.
3. **Site Inspection and Maintenance** – All drainage and containment structures shall be protected and maintained to assure their effectiveness. The Discharger shall inspect the Landfill on a regular basis to assess the conditions of site drainage and erosion control systems, and to assess site waste containment structures to ensure their effectiveness and prevent commingling of leachate and gas condensate with surface run-on and runoff. Maintenance and corrective actions for these systems and structures shall be performed as necessary to maintain compliance with the requirements of this Order.
4. **Landfill Maintenance and Winterization** – Annually, by October 1, all final cover and drainage control system maintenance to prepare the site for the winter rainy season shall be completed.
5. **New Drainage Structures** – At least 30 days prior to the construction of any significant new structures or elements of the drainage control system, the Discharger shall submit a workplan outlining all design parameters and calculations, construction details, project schedule, and a construction quality assurance plan for approval by Regional Water Board staff.
6. **As-Built Drawings** – The Discharger shall submit as-built drawings within 4 weeks of completing construction of any significant new elements or structures of the drainage control systems at the Landfill.
7. **Site Supervision** – All design plans, construction plans, and operation and maintenance plans shall be prepared by, or prepared under the direct supervision of, a registered civil engineer or a certified engineering geologist.
8. **Facility Survey** – The Landfill shall be topographically surveyed by aerial surveillance, or by a registered civil engineer or licensed surveyor in accordance with the schedules in Table 1A of the attached MRP.
9. **Reporting and Notification Requirements** – The Discharger shall notify Regional Water Board staff by telephone or email within 48 hours (or 2 business days) of any non-compliance items or failure of facilities necessary to maintain compliance with the requirements of this Order. Within 7 days, the Discharger shall submit a written report, documenting the non-compliance items and proposing corrective measures to achieve compliance with this Order.
10. **Leachate Seep Notification** – The Discharger shall notify the designated Regional Water Board staff within 48 hours by telephone or email upon discovery of any seepage from, or soil staining at, the Landfill. If feasible, a sample of the

seep shall be collected and analyzed. In response to such seepage, the Discharger shall submit a corrective action report to the Regional Water Board for approval by the Executive Officer within 7 days, containing at least the following information:

- a. Map – a map showing the location(s) of seepage;
- b. An estimate of the flow rate or volume;
- c. A description of the nature of the discharge (e.g., all pertinent observations and analyses); and
- d. Corrective measures proposed to address any seep(s).

**11. Water Quality Monitoring Requirements** – The Discharger shall conduct all water quality monitoring for the Landfill in accordance with this Order's Monitoring and Reporting Program (MRP) and in accordance with the appropriate sections of Title 27.

**12. Concentration Limits** – The Concentration Limit for any given Constituent of Concern (COC) or Monitoring Parameter in a given monitored medium at the Landfill shall be determined as described in the MRP for this Order.

**13. Response and Reporting of a New Release** – If either the Discharger or Regional Water Board staff determines that there is significant physical evidence of a new release, the Discharger shall confirm that a release has been discovered and shall:

- a. Within 7 days, notify Regional Water Board staff of this fact by mail (or acknowledge the Regional Board staff's determination).
- b. Within 90 days of discovering a release, either:
  - i. Propose revised concentration limits and/or additional corrective measure(s), for review and approval by the Executive Officer, to address the new release, or
  - ii. Submit an amended Report of Waste Discharge, proposing an evaluation monitoring program (EMP) required under Title 27, §20385(a)(3).
- c. Carry out any additional investigations stipulated in writing by the Executive Officer.

**14. Release Beyond Facility Boundary Notification** – Any time the Discharger concludes that a new liquid- or gaseous-phase release has traveled beyond the Landfill 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 Summary 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 Board, City, and County Environmental Health Department).
  - iii. The results of the most recent monitoring data and its availability.

**15. VOC Detection** – If a VOC or VOCs are detected in a background monitoring point, the Discharger shall respond in accordance with the steps described below:

- a. Except as indicated in 15.b, 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 (MDL), or one VOC above its respective Practical Quantitation Limit (PQL), the Discharger shall:

- i. Within 48 hours, notify Regional Water Board staff by phone or email that possible background monitoring point contamination has occurred.
    - ii. Follow up with written notification by mail within 7 days.
    - iii. Immediately obtain one new independent sample from the background monitoring point and send it for laboratory analysis of the VOC or VOCs that were initially detected above the concentration limit.
  - b. If the sample collected pursuant to 15.a.iii, above, validates the presence of a VOC or VOCs at the background monitoring point, the Discharger shall:
    - i. Within 48 hours, notify Regional Water Board staff that the VOC or VOCs have been verified to be present at that background monitoring point.
    - ii. Provide written notification by mail within 7 days of validation.
    - iii. Within 180 days of validation, submit an Optional Demonstration Report [Title 27, §20420(k)(7)], which examines the possibility that the detected VOC(s) originated from a source or sources other than the Landfill, and proposes appropriate changes to the concentration limits.
  - c. If the Executive Officer determines, after reviewing the Optional Demonstration Report required in 15.b.iii, above, that the detected VOC or VOCs originated from a source other than the Landfill, the Discharger may propose appropriate changes to the concentration limit(s).
  - d. If the Executive Officer determines, after reviewing the Optional Demonstration Report, that the detected VOC or VOCs originated from the Landfill, the Discharger shall carry out the appropriate responses under Section B.8 of the MRP.
16. **CAP Completion Demonstration** – Within 60 days, or other time schedule approved by the Executive Officer, following the completion of the CAP in Section A.4, above, the Discharger shall submit a report, demonstrating the completion of the CAP.



17. **Copy of This Order** – The Discharger shall maintain a copy of this Order at the Discharger’s headquarters, to be made available for review at all times.
18. **Site and Record Access** – The Discharger shall permit Regional Board staff to:
  - a. Enter upon the Landfill;
  - b. Copy any records required to be kept under the terms and conditions of this Order;
  - c. Photograph or obtain video records of any structures, facilities, activities, or other phenomena that could result in adverse impacts to water quality and that are pertinent to compliance with this Order; and
  - d. Sample any discharges from the Landfill.
19. **Technical Report Request** – The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports, requested by the Executive Officer of the Regional Water Board, in accordance with CWC, §13267. Failure or refusal to furnish these reports or falsifying any information provided therein may render the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC, §13268. Additionally, technical and monitoring reports shall be prepared and signed by a registered civil engineer or registered geologist.
20. **Information Request** – The Discharger shall furnish, within 90 days of notification, unless the Executive Officer specifies an alternative date, any information the Regional Water Board may request to determine whether cause exists for modifying, reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Water Board, upon request, copies of records that this Order requires the Discharger to maintain.
21. **Signatory Requirement** – Applications, reports or information submitted to the Regional Water Board shall be signed and certified by either a principal executive officer or ranking elected/appointed official of the Discharger.
22. **MRP Modification** – At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the MRP. The Discharger shall implement any monitoring changes in the revised MRP approved by the Executive Officer upon receipt of a signed copy of the revised MRP.
23. **Addendum to ROWD** – The Discharger shall file an addendum to the Report of Waste Discharge, in the form of a joint technical document, at least 180 days prior to the following:

- a. Any proposed change in site maintenance activities, which would significantly alter existing drainage patterns and slope configurations, or pose a potential threat to the integrity of the closure cover.
  - b. Any proposed change in waste limit (e.g. excavation and relocation or consolidation of waste).
  - c. Any proposed significant change in remedial measure(s) to address a groundwater release.
  - d. Any proposed change in post-closure land use.
  - e. Any planned change in the regulated facility or activity, which may result in noncompliance with the Order.
24. **Land Ownership Change** – In the event of any change in control or ownership of the Landfill property currently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter. A copy of this letter shall be signed by the new owner, accepting responsibility for complying with this Order and shall be forwarded to the Executive Officer. The notification letter shall be given to the succeeding owner/operator prior to the effective date of the change and shall include a statement by the new discharger that design, construction, and operations associated with post-closure maintenance at the Landfill will be in compliance with this Order and any revisions thereof.
25. **Post-Closure Monument Survey** – The Discharger shall establish and maintain monuments in California coordinates (or equivalent) to define the boundary of the Landfill footprint and to monitor differential settlement at the Landfill. The control benchmarks shall be certified by a licensed surveyor or a professional civil engineer authorized to practice in California.
26. **Financial Assurance Plans** – The Discharger shall maintain assurances of financial responsibility for:
- a. Post-Closure maintenance activities pursuant to Title 27, §22212; and
  - b. Corrective action activities pursuant to Title 27, §22222.
27. **Rescission of Orders** – This Order hereby rescinds and replaces Order No. 88-65, and removes all portions of WDRs in Order No. 98-99 and monitoring and reporting requirements in MRP No. 98-99-02 that are specific to the Landfill;

therefore, Order No. 98-99 and Monitoring and Reporting Program No. 98-99-02 are no longer applicable to the Landfill.

I, Hope A. Smythe, 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 February 5, 2021.

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Hope A. Smythe  
Executive Officer

February 5, 2021

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD  
MONITORING AND REPORTING PROGRAM NO. R8-2021-0007

FOR

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

CORONA SANITARY LANDFILL  
CLOSED CLASS III SOLID WASTE DISPOSAL SITE RIVERSIDE COUNTY

<b>Discharger</b>	RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES AND CITY OF CORONA
<b>Facility</b>	CORONA SANITARY LANDFILL (CLOSED CLASS III SOLID WASTE DISPOSAL SITE) SOUTHWEST CORNER OF EL CAMINO AVE AND MAGNOLIA AVE. CORONA, CALIFORNIA

**A. GENERAL**

- 1. Monitoring and Reporting Program** – The Riverside County Department of Waste Resources (hereinafter the Discharger) shall perform monitoring activities specified in Monitoring and Reporting Program No. R8-2021-0007 (the MRP), in accordance with California Code of Regulations, Title 27 (Title 27), §§20380 - 20430 (Water Quality Monitoring and Response Programs), for the Corona Sanitary Landfill (the Landfill).
- 2. Test Methods** – Sample collection, storage, and analyses shall be performed in accordance with the latest edition of "Test Methods for Evaluating Physical/Chemical Methods" (SW-846) promulgated by the United States Environmental Protection Agency (USEPA), and in accordance with a sampling and analysis plan acceptable to the Executive Officer of the Regional Water Board (the Executive Officer). A State of California accredited laboratory must be used to perform water quality analyses. Specific methods of analysis must be identified.
- 3. Modifications to the MRP** – At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the MRP. The Discharger shall implement any changes in the revised MRP approved by the Executive Officer upon receipt of a signed copy of a revised monitoring and reporting program.

4. **General Monitoring Requirements** – The Discharger shall implement general monitoring requirements in accordance with Title 27, §20415(e) for well installation, water quality sampling and analysis, and data analysis.
5. **Monitoring Well Installation** – For any monitoring wells proposed for installation at the Landfill, the Discharger shall submit well design and construction documents for approval by Regional Board staff prior to installation. All monitoring wells shall be designed and constructed in accordance with California Department of Water Resources California Well Standards, Bulletin 74-9, or the revised version thereafter. The well design and construction documents shall be submitted at least 60 days prior to the anticipated date of installation of the well(s), and shall include the following:
  - a. Proposed locations of the monitoring well(s); and
  - b. Proposed design and construction details of the monitoring well(s). These details shall include:
    - i. well casing and borehole diameters;
    - ii. well casing, annular, and filter materials;
    - iii. well depth and well screen intervals;
    - iv. the means by which the size and position of perforations shall be determined, or verified, if in the field;
    - v. method of drilling and joining sections of casing;
    - vi. filter and annular material placement methods;
    - vii. depth and composition of soils; and
    - viii. well development procedures.
6. **Monitoring Well Construction Report** – For any wells installed at, or in association with the Landfill, a final well construction report shall be submitted within 60 days after completion of well installation.
7. **Disposal of Purged Well Water** – 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. Purged water may be discharged to the ground, outside of the Landfill footprints, in a manner so that it will percolate back into the aquifer in the same general area from which it came, provided that adequate measures are taken to contain purge water within the property controlled by the Discharger.

## **B. WATER QUALITY MONITORING**

1. **Implementation** – The Discharger shall implement the water quality monitoring program specified in Tables 1A and 1B of Attachment D of the MRP and as follows for the Landfill:

- a. **Detection Monitoring Program (DMP)** – The discharger shall implement a DMP, pursuant to Title 27, §20420, to detect a new release from the Landfill. The Discharger shall implement Sections B.16 and B.17 of the MRP to identify and verify a new release.
  - b. **Evaluation Monitoring Program (EMP)** – In the event of the discovery and confirmation of a new release from the Landfill, the Discharger shall implement the requirements of Title 27, §20425 to assess the nature and extent of the new release and to design a corrective action program meeting the requirements of Title 27, §20430.
  - c. **Corrective Action Program (CAP)** – The Discharger shall implement the CAP, pursuant to Title 27, §20430, for the release of volatile organic compounds (VOCs). The compliance period of the CAP shall end when the Discharger successfully demonstrates, and the Regional Water Board concurs, after termination of the corrective action remediation measures and that the Landfill has been in compliance with its Water Quality Protection Standard (WQPS) for a period of, at least, three consecutive years.
  - d. **Unsaturated (or Vadose) Zone Monitoring Program** – The Discharger shall conduct unsaturated zone monitoring in accordance with Title 27, §20415(d) to provide the best assurance of the earliest possible detection of a release from the Landfill.
2. **Water Quality Protection Standard (WQPS)** – The Discharger shall perform the monitoring activities in compliance with the WQPS specified in Title 27, §20390. The WQPS shall consist of a list of Monitoring Points or Wells, the Point of Compliance (POC), COCs and their respective concentration limits. The WQPS shall apply during post-closure maintenance period.
  3. **Monitoring Points** – In accordance with Title 27, §20405, the monitoring points or wells for the CAP and DMP are shown in Attachment C-2 and listed in Table 3 of Attachment D in the MRP.
  4. **Point of Compliance (POC)** – In accordance with Title 27, §20405, the POC is a vertical surface located at the hydraulically downgradient limit of each WMU that extends through the uppermost aquifer underlying the WMU at the Landfill. The POC for the Landfill is delineated by the POC wells listed in Table 3 of Attachment D.

5. **Monitoring Parameters** – The Discharger shall analyze groundwater samples for the monitoring parameters listed in Table 4 of Attachment D, and shall include:
  - a. Metal surrogates;
  - b. Appendix I organic constituents (see Table 5 of Attachment D);
  - c. COCs, which are Appendix II constituents (see Table 6 of Attachment D) and general minerals (see Table 7, Attachment D) that are detected and confirmed at one or more monitoring points during a 5-year COC analysis using approved data analysis methods; and
  - d. Any degradation by-products of confirmed VOCs.
6. **Monitoring Parameter List Update** – The Monitoring Parameter list identified in #5 above shall be updated at least every 5 years with new constituents detected and confirmed in landfill gas condensate and 5-year COC testing.
7. **Uninvolved Monitoring Parameters** are Appendix II Constituents that are not Monitoring Parameters.
8. **Concentration Limits** – The concentration limit for each COC shall be determined as follows:
  - a. **Less Than 10% Exceedance** – In cases where the constituent's (e.g. a VOC) method detection limit (MDL) is exceeded in less than 10 percent (%) of the historical samples, the concentration limit is the highest Practical Quantification Limit (PQL) value associated with the Monitoring Point/COC (Well/COC) pair's historical data set.
  - b. **Inorganic Constituents 10% Exceedance** – In cases where the inorganic constituent's (e.g. metal surrogates) MDL is exceeded in 10% or more of the historical samples, a statistically-based concentration limit must be defined and regularly updated as follows:
    - i. Statistically analyze the historical background data set and propose to the Executive Officer a statistically derived concentration limit for each COC at each Monitoring Point (Well) for which there are at least 8 reference (background) data points. The statistical analysis shall comply with Title 27, §20415.
    - ii. In cases where there are less than 8 reference data points, for a given Well/COC pair, the Discharger shall collect samples quarterly until each such data deficient Well/COC pair has at least 8 reference data points, at which point, the Discharger shall submit proposed concentration limits, together with a proposed data

analysis method for each Well/COC pair to the Executive Officer for approval. This data collection and submittal to the Executive Officer shall take no longer than 2 years.

- c. **Organic Constituents 10% Exceedance** – In cases where the organic or synthetic constituent's PQL is exceeded in 10% or more of the historical data set, and:
  - i. **Landfill Source** – The organic or synthetic constituent is from the Landfill. Each such Well/COC pair's concentration limit shall be the highest PQL value associated with the Well/COC pair's historical data set. The Discharger may propose a concentration limit greater than background (CLGB), provided that the proposed concentration limit is in accordance with Title 27, §20400. The proposed CLGB shall not be effective until approved by the Executive Officer.
  - ii. **Non-Landfill Source** – The organic or synthetic constituent is from a source other than the Landfill. Each such Well/COC pair must have its concentration limit determined by applying an approved data analysis method to its historic data set, just like a readily detectable inorganic constituent would be addressed. The Discharger shall submit an Optional Demonstration Report in accordance with Section C.17 of the WDRs to demonstrate that a source other than the Landfill caused the evidence of a release and shall propose appropriate changes to the concentration limit(s). Changes to the concentration limits shall not be effective until approved by the Executive Officer.
9. **Concentration Limits Greater Than Background (CLGBs)** – Pursuant to Title 27, §20400, the Discharger has proposed, and the Executive Officer has approved, CLGBs for COCs in groundwater at the Landfill. The CLGBs are presented in Table 8 of Attachment D of the MRP.
10. **Concentration Limit Update** – As part of the annual summary reporting, the Discharger shall review and update the statistically-derived concentration limits every 2 years. Recent data that have been statistically analyzed in accordance with Section B.12.b, below, and are determined to be statistically similar to existing background data, shall be made a part of the revised background data set. This new background data set shall be used to statistically-derive the revised concentration limits. The revised background data set and concentration limits shall be effective during the reporting period upon approval by Regional Water Board staff. Concentration Limits along with corresponding COCs shall be presented in a separate table and included in each annual summary report.



11. **Concentration-vs-Time Plots** – Throughout the CAP, for each Well/COC pair that has shown a verified release indication, the Discharger shall create and maintain a concentration-versus-time plot with the pair's concentration limit shown as a horizontal line on the plot. This line serves as the pair's remediation goal. The Discharger shall include these plots in the Landfill's Annual Summary Monitoring Report. This report shall identify which release-affected Well/COC pairs are responding well to the existing corrective action measures (i.e. they are trending down toward, or have reached their respective concentration limit) and shall identify all other release-affected Well/COC pairs as indicating a need to augment existing corrective action measures or propose additional corrective measure(s). At the request of the Executive Officer, the Discharger shall propose, as part of the monitoring report for the next reporting period, revised corrective action measures that will provide positive remediation effects on all release-affected Well/COC pairs. The revised corrective action measures become effective immediately upon approval by the Executive Officer.
12. **Concentration Limits After CAP Completion** – After demonstrating completion of the CAP in accordance with Section C.16 of the WDRs, the Discharger shall propose concentration limits for COCs in accordance with Section B.8, above, with a time schedule, for review and approval by the Executive Officer.
13. **Data Analysis** – The Discharger shall analyze water samples from each monitoring well for the Monitoring Parameters and test the resulting data using one of the statistical or non-statistical methods under Title 27, §20415(e)(8) to evaluate a release from the Landfill.
14. **Statistical Methods** – The Discharger shall use the methods described in this section for Monitoring Parameters requiring the use of statistical data analysis methods:
  - a. For Well/Monitoring Parameter pairs that require the use of a statistical data analysis method, the Discharger shall use data analysis methods, that meet the requirements of Title 27, §20415(e)(6-12) and are approved by the Executive Officer. The data analysis method shall use a Pass 1-of-2 Retesting approach that involves taking the first sample at the very start of the reporting period with subsequent period retest sample, if needed, and that are developed to meet US EPA's Unified Guidance (2009), including validation of the method's statistical power by comparison to that agency's relevant Reference Power Curve, as therein described.
  - b. Monitoring Parameters subject to such testing include inorganic constituents such as pH, total dissolved solids (TDS), nitrate-nitrogen, chloride, or other constituents as approved.

15. **Non-Statistical Methods** – The Discharger shall use the methods described in this section for Monitoring Parameters requiring the use of non-statistical data analysis methods:
- a. VOCs and other organic constituents that are not naturally occurring in the background and that are detected less than 10 percent of the time as specified in Section B.8.a, above, shall use the California Non-statistical Data Analysis Method (CSNDAM) described in Section B in Attachment E of the MRP.
  - b. All Well/Monitoring Parameter pairs in Tracking Status (verified release indication) shall use the Concentration-Versus-Time Plotting Method described in Section B.4 in Attachment E of this MRP; and
  - c. All Well/COC pairs that are monitored every 5 years (i.e. 5-year COC analysis) shall use the Upper 85th Percentile Non-Statistical Data Analysis Method described in Section C in Attachment E of this MRP.
16. **Alternative Monitoring Parameters** – The Executive Officer may approve alternative monitoring parameters that meet the requirements of Title 27, §20380 et seq., and may also approve alternative statistical or non-statistical methods that meet the requirements of Title 27, §20415(e).
17. **Constituents of Concern (COCS)** – The Landfill is not equipped with a liner and a leachate collection and removal system (LCRS) that collects leachate. Therefore, COCs shall be monitored as follows:
- a. **Monitoring Constituents** – The Discharger shall monitor all COCs, Uninvolved Parameters or Appendix II constituents in Table 6 of Attachment D and general minerals in Table 7 of Attachment D every 5 years, pursuant to Title 27, §20420(g). The analytical data shall be analyzed by using the Upper 85th Percentile Non-Statistical Method as provided in Attachment E of this MRP.
  - b. **Background Sampling for New Constituents** – For each newly detected COC that is added to the existing Monitoring Parameter list (Table 4 of Attachment D), the Discharger shall establish a reference background value by analyzing at least one sample quarterly from each background monitoring point for a period of at least 2 years. Once this reference set of background data is collected, the Discharger shall include it as a separate, identified item in the next monitoring report submittal. Existing background data for the newly identified COC may be substituted for additional background sampling with the approval of the Executive Officer.

18. **Tentative Indication of a Release** – A tentative indication of a release shall be considered to have occurred if a Concentration Limit for a constituent is exceeded, unless the constituent is naturally occurring with concentrations exhibiting spatial/temporal variability due to natural geochemical conditions. If a release from the Landfill is tentatively indicated, the Re-Test Procedure described in #21 below shall be carried out.
19. **Tentative Indication of a VOC Release** – A tentative indication of a VOC release shall be considered to have occurred if either of the following occurs:
- a. Results for three or more VOCs exceed their laboratory MDLs in a groundwater sample; or
  - b. Results for one or more VOCs exceed their laboratory PQL or RL in a groundwater sample.
20. **Notification of Tentative Indication of a Release** – If the Discharger determines that a tentative indication of a release has occurred as described in #18 or #19 above, the Discharger shall notify their designated Regional Board staff contact in writing within seven days of such determination, and shall carry out the re-test procedure described in #21 below. The Discharger shall inform the Regional Board in writing of the outcome of the re-test within seven days of completing the re-test.
21. **Re-Test Procedure for a Tentative Indication of a Release (a “Pass 1-of-2” Plan Testing)** – In the event the Discharger concludes that a release is tentatively indicated, the Discharger shall perform the re-test procedure described below.
- a. **Re-Test Sample** – By mid-monitoring period, the Discharger shall collect a re-test sample at each indicating monitoring point that tentatively indicated a release. The re-test sample shall be re-tested for the constituent(s) that exceeded the Concentration Limit. The Discharger shall use a single re-test sampling approach. The re-test sample shall be taken at mid-monitoring period to provide an independent sample for the constituent that was exceeded. If a release is confirmed by the re-test, then the results exhibit a measurably significant indication of a release (i.e. failing the “Pass 1-of-2” Plan); otherwise, the original tentative indication of a release is nullified (i.e. passing the “Pass 1-of-2” Plan).
  - b. Re-tests shall be carried out only for the monitoring point(s) for which a release is tentatively indicated, and only for the constituent(s) which triggered the indication.

- c. If the test results confirm the original indication of a release, the Discharger shall conclude that a release has been discovered and shall carry out the appropriate reporting requirements under Section C.15 of the WDRs.
- d. If the release is confirmed, but is derived from an off-site source, then the Discharger shall submit an Optional Demonstration Report, required under Section C.15.b.iii of the WDRs.

### **C. GENERAL SITE MONITORING**

1. **Liquid Waste Containment Systems** – All liquid waste containment systems, such as landfill gas condensate storage tanks, shall be inspected and evaluated at least monthly for their effectiveness in protecting both surface and groundwater. Any and all deficiencies identified, and the dates and types of corrective action taken, shall be recorded in a permanent log. All deficiencies shall be documented for the record. The volume of liquids collected in the containment structures shall be recorded monthly. Liquid samples, such as gas condensate, shall be collected and analyzed for constituents specified in Table 1A, in accordance with the monitoring schedule in Table 1B.
2. **Monthly Inspections** – The Discharger shall inspect the Landfill monthly to evaluate the effectiveness of each site in achieving compliance with Provisions C.2 and C.3 of the WDRs. All areas of slope failure, differential settlement, fissuring, erosion, ponding, leachate staining, and seepage into or from the Landfill shall be identified, field-marked, and documented. In the event seepage is discovered, the location of each seep shall be mapped, and a mitigation plan submitted for the approval of the Executive Officer. All findings shall be photographed for the record.
3. **Drainage Control Structures** – At a minimum, all run-on and runoff drainage control structures shall be inspected and evaluated monthly for their effectiveness in achieving compliance with Sections C.2 of the WDRs. During dry weather conditions, the effectiveness of the drainage control system shall be evaluated on the basis of its conformance to the as-built drawings, or revised drawings, for the system. All deficiencies shall be identified, recorded, and repaired.
4. **Topographic Survey** – An aerial or ground topographic survey of the Landfill shall be performed in accordance with the monitoring schedule in Table 2.

## D. REPORTING

1. **Compliance Monitoring Reports** – The Discharger shall submit monitoring reports for the monitoring periods and reporting due dates specified in Table 2. The Discharger may propose an alternate schedule and the Executive Officer may approve the proposal or require the Discharger to comply under an alternate monitoring and/or reporting schedules.
2. **Water Quality and General Site Monitoring Reports** – In addition to monitoring period-specific contents information, all monitoring reports shall include the information described below, at a minimum:
  - a. **Transmittal Letter** – A letter identifying the report and providing a brief summary of significant findings and conclusions for the monitoring program shall be provided with the report. This letter shall include a discussion of any violations or noncompliance items found since the last such report was submitted, and shall provide an update of planned and proposed actions taken for correcting those violations or noncompliance items;
  - b. **Water Quality Monitoring Reports** – For groundwater monitoring and COC reports, a compliance evaluation summary shall be included that contains the following at a minimum:
    - i. **Flow Rate/Direction** – For each monitored ground water body, the report shall contain a description and graphical presentation (e.g. arrow on a map) of the velocity and direction of ground water flow under/around the WMU, based upon water level elevations taken during the collection of the water quality samples;
    - ii. **Well Sampling Information** – For each monitoring well, the report shall contain a description of the following:
      1. the method and time of water level measurement, and a description of the method of purging used to remove stagnant water from the well before sampling, pursuant to Title 27, §20415(e)(12)(B);
      2. the type of pump or other device used for sample collection and its vertical placement for sampling;
      3. the sampling procedure, number and description of samples collected, field blanks, travel blanks, and duplicate samples collected;
      4. the type(s) of containers and preservatives used;
      5. the date and time of sampling;

6. the name of the person collecting the samples; and
  7. any other observations made.
- iii. **Laboratory Data** – A copy of the laboratory analytical results shall be included in each report for samples collected and analyzed for the specific monitoring period. The laboratory analytical data in the report shall be summarized and presented in a tabular format. Statistical and non-statistical analyses of the analytical data and graphical plots shall be presented. An evaluation and interpretation of the data analyses shall also be presented;
  - iv. **Monitoring Map** – A site map shall be provided depicting the locations of all monitoring points and groundwater contours, to the greatest degree of accuracy possible; and
  - v. **Non-Conformant Activities** – A discussion of any water sampling and monitoring activities that deviated from the sampling and quality assurance plans.
- c. **General Site Monitoring Reports** – At a minimum, the following information shall be included in monitoring reports:
- i. **Landfill Gas Condensate Collection System** – Monthly field inspection records and a summary of the condition and performance of the system shall be included in the monitoring report. The summary shall include a description of how the gas condensate is managed, the total volume(s), on a monthly basis, of gas condensate collected or managed at the Landfill, and a list of any deficiencies identified and the dates and types of corrective actions taken to achieve compliance with the requirements in this order. If corrective actions for identified deficiencies could not be implemented by the end of the monitoring period, the Discharger shall provide the reason(s) for noncompliance and a time schedule for implementing the corrective actions.
  - ii. **Drainage and Erosion Control Systems** – The following information shall be provided in report:
    1. Field inspection records of the drainage and erosion control system to achieve compliance with Section C.2 and C.3 of the WDRs; and
    2. A summary of the adequacy and effectiveness of the site drainage control system to collect and divert the calculated

volume of precipitation and peak flows resulting from a 100-year, 24-hour frequency storm.

- iii. **Closure Cover** – A description of any cover deficiencies and mitigation activities shall be provided in the report.
    - iv. **Drainage System Map** – A site map shall be provided in the report that shows the new and existing drainage and erosion control measures implemented, including the types and completion dates of maintenance activities performed, and the target completion dates of ongoing site maintenance activities.
3. **Landfill Gas and Gas Condensate Monitoring** – Monitoring reports shall include as appropriate the information described below for landfill gas and gas condensate monitoring.
  - a. **October Gas and Condensate Results** – The Discharger shall report to the Executive Officer, by no later than April 30 of each year, the analytical results of the landfill gas and gas condensate samples taken the previous October;
  - b. **April Retest Results** – If the annual landfill gas and/or gas condensate samples taken in October identify constituents that are not on the Monitoring Parameter List (Table 4 of Attachment D), the Discharger shall collect and analyze retest landfill gas and/or gas condensate samples in April. The retest samples shall be analyzed only for the constituents detected in the October sampling event. If an April retest is carried out, the Discharger shall include the analytical results and provide an evaluation of the results in the monitoring report for the qualifying reporting period.
  - c. **Monitoring Parameter List** – Monitoring reports must identify all Appendix I VOC constituents that must be added to the Landfill's Monitoring Parameter list as a result of having been detected in both the previous calendar year's October gas and condensate samples and confirmed in the April retest samples (as well as Appendix I VOC degradation by-products of confirmed constituents). In addition, monitoring reports shall include an updated Monitoring Parameter list.
4. **Annual Summary Report** – The Discharger shall submit to the Executive Officer an annual summary report, covering the previous monitoring year (April 1 of the previous year through March 31 of the following year). The annual summary report is due on April 30. This report may be combined with the water quality monitoring report for the monitoring period ending March 31, and shall include, at least, the following information:

- a. **Graphical Presentation** – Groundwater analytical data shall be presented in accordance with Title 27, §20415(e)(14). The concentration-versus-time plots (including the concentration limit, plotted as an identified horizontal line) for all release-affected Well/Monitoring Parameter pairs shall be included in the compliance record discussion in Section D.4.c, below.
- b. **Tables** – All monitoring analytical data obtained for the qualified monitoring year shall be presented in tabular form in the annual summary report. The tables shall include the following:
  - i. **Concentration Limit Table** – Each Well/COC pair's concentration limit, together with a declaration of the type (inter-well vs. intra-well) and the name of the well from which the data was drawn. Each datum shall include a date (when it was taken) and, if less than the PQL, include its MDL and PQL. For trace values, include a concentration estimate.
  - ii. **Data Analysis Method Table** – A table indicating those Well/COC pairs that use each listed data analysis method. For statistical methods, indicate the retesting approach (e.g. Pass 1-of-2 Plan) and the parameter settings used. For standardized (assigned) non-statistical methods, merely name the method.
  - iii. **Retesting Table** – A table showing each retest done that monitoring year for COC(s) for which a tentative indication of a release invoked the retesting approach.
- c. **Compliance Record Discussion** – A comprehensive discussion of the compliance record during the monitoring period, and of any corrective actions the Discharger has planned or implemented or is ongoing, which may be needed to bring the Landfill into full compliance with the Landfill's waste discharge requirements. This discussion shall include an evaluation of whether the existing corrective action measures are bringing all release-affected Well/Monitoring Parameter pairs back into compliance with their respective concentration limits, and shall include the concentration-versus-time plots for each such release-affected Well/Monitoring Parameter pair.
- d. **Summary of Changes** – A written summary of monitoring results and monitoring (and control) system(s), indicating any changes made or observed since the previous annual report.



5. **Site Winterization Plan and Topographical Map** – Annually, by October 31, a site winterization plan shall be submitted. The winterization plan shall include, but not be limited to, the following information:
  - a. **Winterization Map** – An 11"x17" site map indicating the locations of new and existing components of the site drainage and erosion control system, including hardscape structures and other permanent and annual/seasonal erosion control systems, sediment control systems and storm water treatment best management practices implemented for the upcoming rainy season; and
  - b. **Topographic Map** – An up-to-date aerial topographical map of the Landfill.
6. **COC Report** – The Discharger shall submit the 5-year COC report in accordance with §20420(g) of Title 27 and the schedule in Table 1B.
7. **Reporting Schedule** – The Discharger shall submit the reports in accordance with the reporting due dates in Table 1B.
8. **Signature** – All reports shall be signed by a responsible officer or a duly authorized representative of the Discharger and shall be submitted under penalty of perjury.
9. **Electronic Submittal of Information** – All reports shall be submitted in an electronic format, with text, tables, figures, laboratory analytical data, graphs, and appendices. In accordance with Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27), all reports, well data, and lab data (in Electronic Deliverable Format (EDF)) must be uploaded to the State Water Resources Control Board (State Water Board) Geotracker database.
10. **Petition to Review** – All reports required in this MRP are required pursuant to California Water Code §13267. Any person affected by this action of the Regional Board may petition the State Water 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 Board within 30 days of the date of the WDRs. Copies of the laws and regulations applicable to filing petitions will be provided upon request.

I, Hope A. Smythe, 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.

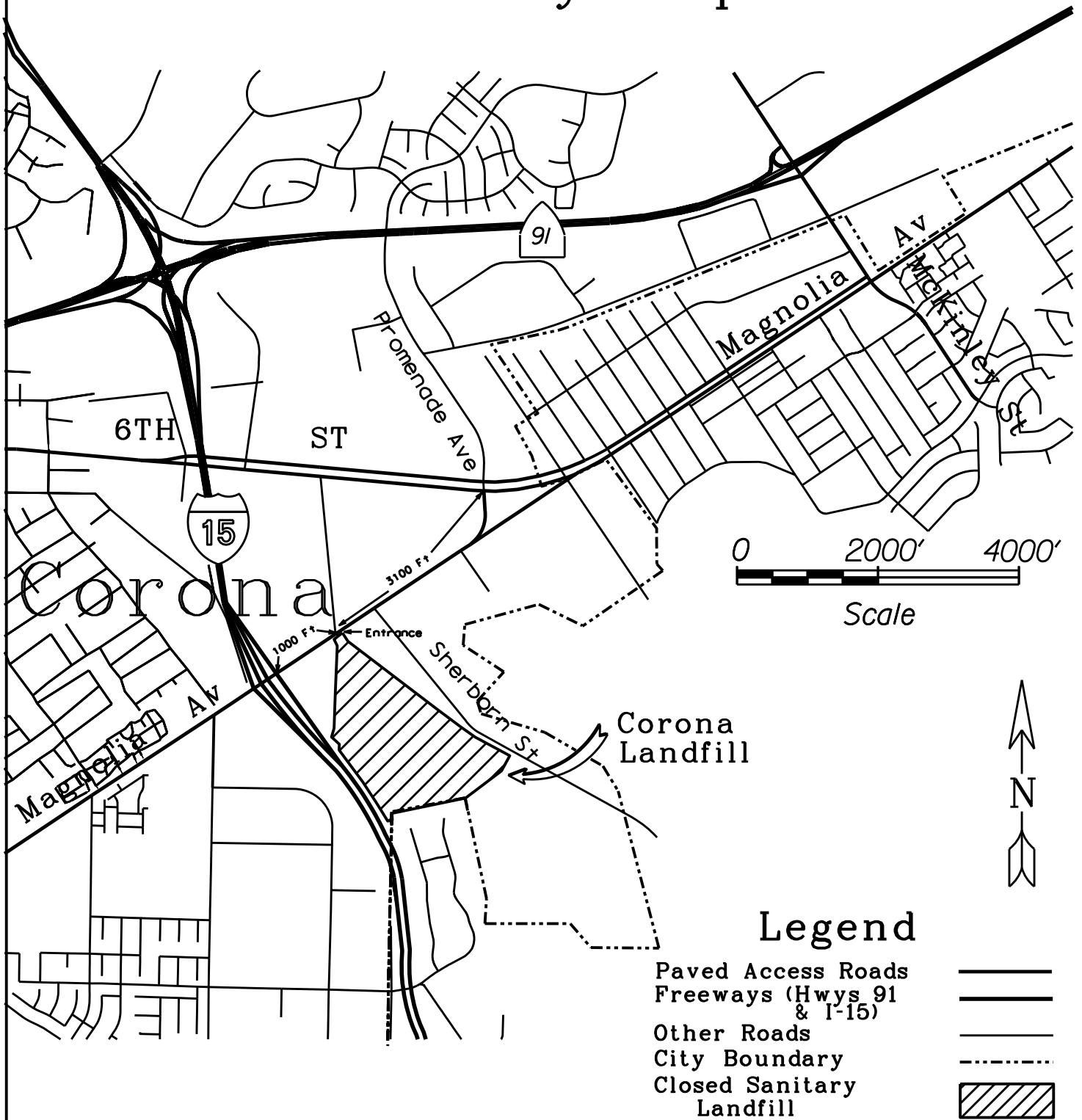
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Hope A. Smythe  
Executive Officer

February 5, 2020

**ATTACHMENT A – VICINITY MAP**

# Corona Closed Landfill Vicinity Map



**Riverside County**  
**Waste Management Department**

Corona Sanitary Landfill  
Final Post-Closure Maintenance Plan  
Vicinity Map

Figure 1

File Directory: \waste-riv-8\sites\corona\postclosure\fig1vic.dgn

Date: August 1, 2009

Pen Table:

Photo Date :

Scale : 1"=2000'

## ATTACHMENT B – DEFINITIONS

**"40 CFR §258"** means the regulations under Part 258 of Title 40 of the Code of Federal Regulations that apply to municipal solid waste landfills.

**"Affected Medium"** means any natural medium that consists of or contains waters of the state (e.g., ground water, surface water, or the unsaturated zone) that has been affected by a release from a waste management unit.

**"Affected Persons"** means all people who own, or reside upon, land outside the facility boundary that is underlain by any portion of the release from the Landfill. Under Title 40 of the Code of Federal Regulations section 258.55(g)(l)(iii), the discharger must keep an up-to-date list of all such people and must assure that they are invited to the discussion of proposed corrective action measures, pursuant to Title 40 of the code of Federal Regulations section 258.56(d).

**"Appendix I Constituents"** means the suite of 47 volatile organic constituents and 17 metals used as the default monitoring parameter list in 40 CFR §258.

**"Appendix II Constituents"** means the suite of 213 hazardous constituents used as the default constituent of concern list in 40 CFR §258.

**"Background"** means the concentrations or measures of constituents or indicator parameters in water or soil that has not been affected by waste constituents or leachate from the waste management unit being monitored.

**"Background Monitoring Point"** means a well, device, or location specified in the waste discharge requirements at which monitoring for background water quality or background soil quality is conducted.

**"Composite Retest"** means a particular means of validating a preliminary indication of a release, for a given compliance Well/MPar pair, whereby the discharger applies an approved data analysis method to two new samples for that Well/MPar pair. The retest validates the preliminary indication if either or both of the retest samples triggers a measurably significant increase indication. The scope of the retest, at any given compliance well, is limited to only those Monitoring Parameters that gave a preliminary indication at that monitoring point. However, all the data obtained from the initial sampling event is considered as part of the comprehensive statistical analysis for subject monitoring period.

**"Title 27"** means the State Water Resources Control Board's regulations, in Division 2 of Title 27 of the California Code of Regulations, applicable to the discharge to land of waste that is not hazardous waste.

**"Concentration Limit"** is a part of the Landfill's Water Standard and means the reference background data set, or reference concentration value, for a given constituent against which one compares current compliance well data to identify, in detection mode, the arrival of the release at a given well and to identify, in tracking mode, if the corrective action measures are bringing the Landfill back into compliance with the Water Standard.

**"Constituents of Concern (COCs)"** is a part of the Landfill's Water Quality Protection Standard and means the list of constituents that could be released from the Landfill, including the foreseeable breakdown products of all such constituents. For the ground water medium at a municipal solid waste landfill, this list must include all Appendix II constituents (or Uninvolved Parameters) and general minerals. A constituent on this list becomes a Monitoring Parameter only after being detected (at trace level or above) and then verified by a well specific retest in a periodic scan of compliance wells affected by the release.

**"CAP"** means a Corrective Action Program that implements the requirements under Title 27 of the California Code of Regulations §20430.

**"Detect"** when applied to a scan of leachate or ground water, means that the constituent for which the scan is conducted shows up at trace level or higher. For Constituents of Concern and Monitoring Parameters that are rarely detected in background, the term means analyses done using a laboratory analytical method that complies with Title 27 of the California Code of Regulations section 20415(e)(7).

**"Detection Mode"** for a given compliance well/Monitoring (well/MPar) pair, means a state in which one tests for a measurably significant increase, for that Monitoring Parameter at that well, using an appropriate statistical or non-statistical data analysis method. Once that well/MPar pair exhibits a measurably significant increase (including an initial indication verified by a discrete retest), it is monitored, thereafter, in "tracking mode" until the completion of the proof period, following successful completion of corrective action.

**"Double Quantification (DQ)"** rule is a quasi-statistical rule, defined in the 2009 USEPA Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, to address infrequently detected constituents (i.e. constituents detected above the reporting limit in 10% or less of the background data), whereby a confirmed exceedance is registered if a Well/MPar pair in the infrequently detected constituent group exhibits quantified measurements (i.e. at or above the reporting limit)

in two consecutive sample events (i.e. the initial sample event and the subsequent resample event).

**"DMP"** means a Detection Monitoring Program that implements the State Water Resources Control Board's requirements, under Title 27 of the California Code of Regulations §20420.

**"EMP"** means an Evaluation Monitoring Program that implements the requirements under Title 27 of the California Code of Regulations §20425. This state program constitutes a stepping stone to a Corrective Action Program, in response to the Landfill's having exhibited a measurably significant increase of a release or to its having exhibited physical evidence of a release [see Title 27, §20385(a)(2 and 3)].

**"Indicator Parameters"** in this Order means a suite of parameters that are considered capable of providing reliable indication of a release from a landfill.

**"Inter-Well Comparison"** means a type of statistical or non-statistical data analysis, applied to a given detection mode compliance Well/MPar pair, in which one compares current concentration data, for that Monitoring Parameter and well, with a suite of background data from the appropriate upgradient well(s) to determine if that Monitoring Parameter has produced a measurably significant increase at that well. Generally speaking, the use of upgradient background data tends to produce higher false-positive and false-negative rates than the intra-well comparison approach, but is appropriate in those cases where it is not feasible to validate that a compliance well's own historical data reflects water quality in the absence of a release.

**"Intra-Well Comparison"** means a type of statistical or non-statistical data analysis, applied to a given detection mode compliance Well/MPar pair, in which one compares current concentration data, for that Monitoring Parameter, with a suite of background data consisting of selected historical data from that same well to determine if that Monitoring Parameter has produced a measurably significant increase at that well. Typically, the use of a compliance well's own historical data, for a Monitoring Parameter, provides better statistical power (to identify a real release and to avoid producing false- positive indications) than does the inter-well comparison approach, but only in a case where it is reasonable to assume that the compliance well's own historical data does not reflect the presence of a release for that Monitoring Parameter.

**"LFG"** means landfill gas, including any Volatile Organic Compounds.

**"MRP"** means the Monitoring and Reporting Program that is an attachment to the Waste Discharge Requirements (or other order) and that is incorporated by reference by the Waste Discharge Requirements.

**"Matrix Effect"** means any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample of water or soil-pore gas being analyzed.

**"Measurably Significant Increase"** means a condition in which an appropriate data analysis method shows an initial indication of a release, for a given detection mode compliance well/MPar pair, that is verified by a discrete retest (for that well and Monitoring Parameter).

**"Method Detection Limit (MDL)"** means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte's concentration is greater than zero, as defined in Title 40 of the Code of Federal Regulations Part 136, Appendix B.

**"Monitored Media"** means those water and/or gas-bearing media (if applicable) that are monitored pursuant to a monitoring and reporting program. The monitored media may include: groundwater in the uppermost aquifer or in any other portion of the zone of saturation [section 20164 of Title 27 of the California Code of Regulations], in which it would be reasonable to anticipate that waste constituents migrating from the Landfill could be detected, and in any perched zones underlying the Landfill, any bodies of surface water that could be measurably affected by a release, soil-pore liquid beneath and/or adjacent to the Landfill, and oil-pore gas beneath and/or adjacent to the Landfill.

**"Monitored Natural Attenuation"** means a remedial measure that relies on natural processes to decrease or "attenuate" concentrations of contaminants in soil and groundwater. Monitoring typically involves collecting soil and groundwater samples to analyze them for the presence of contaminants and other site characteristics. The entire process is called "monitored natural attenuation" or "MNA." Regular monitoring is necessary to ensure that MNA continues to work.

**"Monitoring Parameter (MPar)"** is a part of the Landfill's Water Quality Protection Standard and means a list consisting of those constituents that are likely to be present or present at a detectable level in ground or surface water. This is the subset of the Constituents of Concern that is subject to testing for a measurably significant increase, in detection mode, at all compliance wells. For ground water, at a landfill with a functioning Leachate Collection and Removal System, this suite includes all Appendix II constituents that have been detected (at trace level or above) and verified in leachate and, subsequently, have been detected (at trace level or above) and verified in a Constituents of Concern scan of ground water at compliance wells affected by the release. For ground water, at a landfill without a functioning Leachate Collection and Removal System, this suite includes all Appendix II constituents and general minerals that have been detected and verified in a Constituents of Concern scan of ground water at any compliance well affected by the release.



**"Monitoring Point or Well"** for any given monitored medium (surface water, ground water, or the unsaturated zone), means a location, including any installed access device (e.g., well or lysimeter), that is named in the Monitoring and Reporting Program as a place where the discharger monitors that medium: 1) to detect the arrival of the release front for each Monitoring Parameter that is in detection mode at that location; 2) to detect changes in the concentration of each Monitoring Parameter that is in tracking mode at that location; and 3) in case where the location that is in tracking mode for most Monitoring Parameters that are involved in the release, to detect the presence, at trace level or above, of any Constituents of Concern that have not previously been detected in that medium (Constituents of Concern newly detected and verified in that medium become Monitoring Parameters for that medium).

**"MSW Landfill"** means any landfill that is subject to any portion of the federal regulations under Title 40 of the Code of Federal Regulations Part 258 by virtue of having received municipal solid waste (household waste) at any time and having received any waste after October 9, 1991.

**"Point of Compliance (POC)"** is, for the ground water medium, a part of the Landfill's Water Quality Protection Standard and means a conceptual vertical surface that is located, in map view, along the hydraulically downgradient limit of waste placement at the Landfill and that extends downward through the uppermost aquifer underlying the Unit. The federal municipal solid waste regulations require one or more ground water monitoring points along this vertical surface to monitor the quality of ground water passing it (see Title 40 of the Code of Federal Regulations section 258.51), whereas the Regional Water Quality Control Board will name other ground water monitoring points (not along this vertical surface) as needed to provide the earliest possible detection and measurement of a release [see Title 27 of the California Code of Regulations section 20415(b)(1)].

**"Practical Quantitation Limit (PQL)"** means the value established as a target value by the United States Environmental Protection Agency that is the lowest concentration of a substance that can be consistently determined within +/- 20% of the true concentration by 75% of the laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the Practical Quantitation Limit for carcinogens is the Method Detection Limit multiplied by 5, and for non-carcinogens is the Method Detection Limit multiplied by 10. These estimated PQLs are listed in Appendix II to Title 40 of the Code of Federal Regulations Part 258. Generally, these are target values that may not reflect the constraints of matrix effects; therefore, the Regional Water Quality Control Board requires the discharger to keep an up-to-date listing of the applicable laboratory-specific PQL and MDL estimates for each analyte on the Constituent of Concern list.

**"Release"** means the three-dimensional portion of the monitored medium (groundwater, surface water, or the unsaturated zone) comprised of all locations therein that are affected by one or more Monitoring Parameters that have migrated from the Landfill to such an extent that a properly constructed monitoring point, at that location, would trigger a measurably significant increase over the applicable concentration limit, using an appropriate data analysis method meeting the requirements of Title 27 of the California Code of Regulations section 20415(e)(9) and a background data set sample size of 16 or more data points.

**"Reporting Period"** means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal.

**"Retest"** when applied to a scan to detect the presence of an appropriate list of analytes in leachate, landfill gas, or ground water (at an affected monitoring point), means taking a single additional sample from the indicating medium (or, for ground water, the indicating monitoring point) to determine whether the initial detection, for that analyte, is valid. When applied to the six-monthly monitoring effort for a given compliance Well/MPar pair in detection mode, see "*composite retest*."

**"Sample Size"** for a given compliance Well/MPar pair in detection mode, means the number of data points used to represent the variability of the background population or to represent the present compliance status of the Monitoring Parameter at that well, when applying an appropriate data analysis method.

**"Scan"** means a determination as to whether any of a given list of constituents are detectable (at the trace level or above) in the monitored medium (typically leachate, ground water, and landfill gas condensate). The term includes both the initial measurement and, for a newly detected constituent, the results of the single retest sample. To identify a newly detected constituent, the constituent must be detected (at trace level or above) and then verified by being detected in the single sample retest.

**ATTACHMENT C**  
**CORONA LANDFILL FACILITY MAP**  
**WITH GROUNDWATER MONITORING NETWORK**

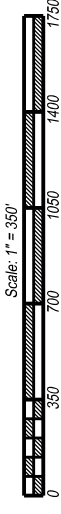


Corona Sanitary Landfill

### Site Map



Hans Kernkamp - General Manager/Chief Engineer



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Figure 1

**ATTACHMENT D**  
**[TABLES 1-8]**

**TABLE 1: MONITORING PROGRAM**

<b>Task Description</b>	<b>Constituents</b>	<b>Monitoring Frequency</b>
Corrective Action Monitoring Program	Monitoring Parameters	Semi-annually
COC Analysis	Appendix II constituents and General Minerals	Once every 5 years
Landfill Gas Condensate Monitoring	Appendix II Constituents	Annually
Vadose Zone Monitoring (Perimeter Gas Probes)	Methane (field), total gaseous non-methane organic hydrocarbons (TGNMO), and the VOCs specified by SCAQMD Rule 1150.1	Monthly in the field and quarterly in the laboratory (per SCAQMD Rule 1150.1)
Landfill Gas Condensate Collection System Inspection	NA	Monthly
Drainage Control System Inspection	NA	Monthly
Post-Storm Inspection	NA	After each qualifying storm event that produces 0.5 inches or more of rain within a 24-hour period
Aerial Ground Survey	NA	Once every 5 years

**TABLE 2: MONITORING AND REPORTING SCHEDULE**

<b>Task Description</b>	<b>Monitoring Period</b>	<b>Report Due Date</b>
Post-storm inspection	After each qualifying storm event that produces 0.5 inches or more of rain within a 24-hour period	Within 2 business days after inspection
Quarterly groundwater level measurement: first quarter	October 1 – December 31	April 30 of each year
Quarterly groundwater level measurement: second quarter	January 1 – March 31	April 30 of each year
Quarterly groundwater level measurement: third quarter	April 1 – June 30	October 31 of each year
Quarterly groundwater level measurement: fourth quarter	July 1 – September 30	October 31 of each year
Semi-annual water quality and general site monitoring: first half of year	October 1 – March 31 the following year	April 30 of each year
Semi-annual water quality and general site monitoring: second half of year	April 1 – September 30	April 30 of each year
Annual October landfill gas and gas condensate analysis	October 1 – October 31	April 30 of the following year
April landfill gas and gas condensate retesting	April 1 – April 30	October 31 of each year
Drainage and erosion control system inspection and maintenance	By October 1 of each year	October 31 of each year
Landfill Winterization Plan	By October 1 of each year	October 31 of each year
Landfill survey/topographic map	By October 1 every 5 year	October 31, 2022 and every 5th year thereafter
Annual summary	April 1 of previous year – March 31	April 30 of each year
5-year COC analysis	July 1 – September 30, 2021	October 31, 2025 and every fifth year thereafter, alternately in Spring (April 30) and Fall (October 31)
5-year COC analysis	January 1 – March 31	April 30, 2030

**TABLE 3: WATER QUALITY MONITORING POINTS**

<b>Media Monitored</b>	<b>Monitoring Point</b>
Groundwater: Background Wells	CG-4 and CG-5
Groundwater: Point of Compliance Wells	CG-1, CG-2, CG-3, CG-6a, CG-7, and CG-8
Groundwater: Corrective Action Monitoring Wells	CG-1, CG-2, CG-3, CG-6a, CG-7, and CG-8
Landfill Gas Condensate	Condensate Tank (at the Flare Station)
Unsaturated Zone	Landfill Gas Perimeter Monitoring Probes

**TABLE 4: MONITORING PARAMETERS**

<b>Inorganic Parameters</b>	
Calcium	Carbonate
Chloride	Magnesium
Nitrate (as N)	Potassium
Sodium	Sulfate
Total Dissolved Solids	
<b>Organic Parameters</b>	
Appendix I Organic Constituents	Appendix II Constituents:
	Dibromochloropropane (DBCP)
	Ethylene dibromide (EDB)

**TABLE 5: APPENDIX I CONSTITUENTS**

<b>Inorganic Constituents</b>	
Antimony	Lead
Arsenic	Nickel
Barium	Selenium
Beryllium	Silver
Cadmium	Thallium
Chromium	Vanadium
Cobalt	Zinc
Copper	
<b>Organic Constituents</b>	
Acetone	trans-1,2-Dichloropropene
Acrylonitrile	Ethylbenzene
Benzene	2-Hexanone; Methyl butyl ketone
Bromochloromethane	Methyl bromide; Bromomethane
Bromodichloromethane	Methyl chloride; Chloromethane
Bromoform; Tribromomethane	Methylene bromide; Dibromomethane
Carbon disulfide	Methylene chloride; Dichloromethane
Carbon tetrachloride	Methyl ethyl ketone; MEK; 2-Butanone
Chlorobenzene	Methyl iodide; Iodomethane
Chloroethane; Ethyl chloride	4-Methyl-2-pentanone; Methyl isobutyl ketone
Chloroform; Trichloromethane	Styrene
Dibromochloromethane; Chlorodibromomethane	1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane; DBCP	1,1,2,2-Tetrachloroethane
1,2-Dibromoethane; Ethylene dibromide; EDB	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene
o-Dichlorobenzene; 1,2-Dichlorobenzene	Toluene
p-Dichlorobenzene; 1,4-Dichlorobenzene	1,1,1-Trichloroethane; Methylchloroform
trans-1,4-Dichloro-2-butene	1,1,2-Trichloroethane
1,1-Dichloroethane; Ethylidene dichloride	Trichloroethylene; Trichloroethene
1,2-Dichloroethane; Ethylene dichloride	Trichlorofluoromethane; CFC-11
1,1-Dichloroethylene; 1,1-Dichloroethane; Vinylidene chloride	1,2,3-Trichloropropane
cis-1,2-Dichloroethylene; cis-1,2- Dichloroethene	Vinyl acetate
trans-1,2-Dichloroethylene; trans-1,2- Dichloroethene	Vinyl chloride
1,2-Dichloropropane; Propylene dichloride	Xylenes
cis-1,3-Dichloro propene	



**TABLE 6: APPENDIX II CONSTITUENTS**

Acenaphthene	Carbon tetrachloride
Acenaphthylene	Chlordane
Acetone	p-Chloroaniline
Acetonitrile; Methyl cyanide	Chlorobenzene
Acetophenone	Chlorobenzilate
2-Acetylaminofluorene; 2-AAF	p-Chloro-m-cresol; 4-Chloro-3-methylphenol
Acrolein	Chloroethane; Ethyl chloride
Acrylonitrile	Chloroform; Trichloromethane
Aldrin	2-Chloronaphthalene
Allyl chloride	2-Chlorophenol
4-Aminobiphenyl	4-Chlorophenyl phenyl ether
Anthracene	Chloroprene
Antimony (total)	Chromium (total)
Arsenic (total)	Chrysene
Barium (total)	Cobalt (total)
Benzene	Copper (total)
Benzo[a] anthracene; Benzanthracene	m-Cresol; 3-methylphenol
Benzo[b] fluoranthene	o-Cresol; 2-methylphenol
Benzo[k] fluoranthene	p-Cresol; 4-methylphenol
Benzo[ghi] perylene	Cyanide
Benzo[a] pyrene	2,4-D; 2,4-Dichlorophenoxyacetic acid
Benzyl alcohol	4,4-DDD
Beryllium (total)	4,4-DDE
alpha-BHC	4,4-DDT
beta-BHC	Diallate
delta-BHC	Dibenz [a,h] anthracene
gamma-BHC; Lindane	Dibenzofuran
Bis(2-chloroethoxy) methane	Dibromochloromethane; Chlorodibromomethane
Bis(2-chloroethyl) ether; Dichloroethyl ether	1,2-Dibromo-3-chloropropane; DBCP
Bis(2-chloro-1-methylethyl) ether; 2,2-Dichlorodiisopropyl ether; DCIP	1,2-Dibromoethane; Ethylene dibromide; EDB Di-n-butyl phthalate
Bis(2-ethylhexyl) phthalate	o-Dichlorobenzene; 1,2-Dichlorobenzene
Bromochloromethane; Chlorobromomethane Bromodichloromethane; Dibromochloromethane	m-Dichlorobenzene; 1,3-Dichlorobenzene p-Dichlorobenzene; 1,4-Dichlorobenzene
Bromoform; Tribromomethane	3,3-Dichlorobenzidine
4-Bromophenyl phenyl ether	trans-1,4-Dichloro-2-butene
Butyl benzyl phthalate; Benzyl butyl phthalate	Dichlorodifluoromethane; CFC-12
Cadmium (total)	1,1-Dichloroethane; Ethylidene chloride
Carbon disulfide	cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene

**TABLE 6: APPENDIX II CONSTITUENTS  
 (continued)**

1,2-Dichloroethane; Ethylene dichloride	Fluorene
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	Heptachlor
trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	Heptachlor epoxide
2,4-Dichlorophenol	Hexachlorobenzene
2,6-Dichlorophenol	Hexachlorobutadiene
1,2-Dichloropropane; Propylene dichloride	Hexachlorocyclopentadiene
1,3-Dichloropropane; Trimethylene dichloride	Hexachloroethane
2,2-Dichloropropane; Isopropylidene chloride	Hexachloropropene
1,1-Dichloropropene	2-Hexanone; Methyl butyl ketone
cis-1,3-Dichloropropene	Indeno (1,2,3-cd) pyrene
trans-1,3-Dichloropropene	Isobutyl alcohol
Dieldrin	Isodrin
Diethyl phthalate	Isophorone
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin Dimethoate	Isosafrole
p-(Dimethylamino)azobenzene	Kepone
7,12-Dimethylbenz(a)anthracene	Lead (total)
3,3-Dimethylbenzidine	Mercury (total)
2,4-Dimethylphenol; m-Xylenol	Methacrylonitrile
Dimethyl phthalate	Methapyrilene
m-Dinitrobenzene	Methoxychlor
4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol	Methyl bromide; Bromomethane
2,4-Dinitrophenol	Methyl chloride; Chloromethane
2,4-Dinitrotoluene	3-Methylcholanthrene
2,6-Dinitrotoluene	Methyl ethyl ketone; MEK; 2-Butanone
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	Methyl iodide; Iodomethane
Di-n-octyl phthalate	Methyl methacrylate
Diphenylamine	Methyl methanesulfonate
Disulfoton	2-Methylnaphthalene
Endosulfan I	Methyl parathion; Parathion methyl
Endosulfan II	4-Methyl-2-pentanone; Methyl isobutyl ketone
Endosulfan sulfate	Methylene bromide; Dibromomethane
Endrin	Methylene chloride; Dichloromethane
Endrin aldehyde	Naphthalene
Ethylbenzene	1,4-Naphthoquinone
Ethyl methacrylate	1-Naphthylamine
Ethyl methanesulfonate	2-Naphthylamine
Famphur	Nickel (total)
Fluoranthene	o-Nitroaniline; 2-Nitroaniline

**TABLE 6: APPENDIX II CONSTITUENTS  
 (continued)**

m-Nitroaniline; 3-Nitroaniline	Silver (total) Silvex; 2,4,5-TP
p-Nitroaniline; 4-Nitroaniline	Styrene
Nitrobenzene	Sulfide
o-Nitrophenol; 2-Nitrophenol	2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid
p-Nitrophenol; 4-Nitrophenol	1,2,4,5-Tetrachlorobenzene
N-Nitrosodi-n-butylamine	1,1,1,2-Tetrachloroethane
N-Nitrosodiethylamine	1,1,2,2-Tetrachloroethane
N-Nitrosodimethylamine	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene 2,3,4,6-Tetrachlorophenol
N-Nitrosodipethylamine	Thallium (total)
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine	Tin (total)
N-Nitrosomethylethylamine	Toluene
N-Nitrosopiperidine	o-Toluidine
N-Nitrosopyrrolidine	Toxaphene
5-Nitro-o-toluidine	1,2,4-Trichlorobenzene
Parathion	1,1,1-Trichloroethane; Methylchloroform
Pentachlorobenzene	1,1,2-Trichloroethane
Pentachloronitrobenzene	Trichloroethylene; Trichloroethene
Pentachlorophenol	Trichlorofluoromethane; CFC-11
Phenacetin	2,4,5-Trichlorophenol
Phenanthrene	2,4,6-Trichlorophenol
Phenol	1,2,3-Trichloropropane
p-Phenylenediamine	0,0,0-Triethyl phosphorothioate
Phorate	sym-Trinitrobenzene
Polychlorinated biphenyls; PCBs; Aroclors	Vanadium (total)
Pronamide	Vinyl acetate
Propionitrile; Ethyl cyanide	Vinyl chloride; Chloroethene
Pyrene	Xylenes (total)
Safrole	Zinc (total)
Selenium (total)	

**TABLE 7: GENERAL MINERALS**

Total Hardness	Specific Conductance (Electrical Conductivity - EC)
Bicarbonate (HCO <sub>3</sub> )	pH
Carbonate (CaCO <sub>3</sub> )	Total Dissolved Solids
Total Alkalinity	Chemical Oxygen Demand
Total Cations	Phenols
Total Anions	Total Organic Carbon
Hydroxide (OH)	Total Organic Halogens
Chloride (Cl)	Calcium (Ca)
Fluoride (F)	Magnesium (Mg)
Nitrate (NO <sub>3</sub> )	Manganese (Mn)
Sulfate (SO <sub>4</sub> )	Potassium (K)
Phosphate (PO <sub>4</sub> )	Sodium (Na)
Total Phosphorus	Iron (Fe)
Boron (B)	Zinc (Zn)

**TABLE 8: CONCENTRATION LIMITS**

Constituent	California Drinking Water Maximum Contaminant Level (MCL)	California Drinking Water Notificaion Level (NL)	Laboratory Practical Quantitation Limit <sup>(1)</sup> (PQL)	Concentration Limit Greater Than Background
1,4-Dioxane			1 µg/L	1 µg/L
2-Butanone (methyl ethyl ketone)			10 µg/L	10 µg/L
2-Hexanone			10 µg/L	10 µg/L
4,4'-DDD			0.0050 µg/L	0.0050 µg/L
Acetone			10 µg/L	10 µg/L
Acetonitrile			10 µg/L	10 µg/L
Acetophenone			10 µg/L	10 µg/L
Alkalinity, Total			4.1 mg/l	4.1 mg/l
Anions, Total			0.10 mg/l	0.10 mg/l
Antimony, total	0.006 mg/L		0.004 mg/L	0.006 mg/L
Arsenic, total	0.05 mg/L		0.004 mg/L	0.05 mg/L
Barium, total	1.0 mg/L		0.0020 mg/L	1.0 mg/L
Benzene	1.0 µg/L		0.50 µg/L	1.0 µg/L
Benzyl alcohol			2.0 µg/L	2.0 µg/L
Bicarbonate			10 mg/l	10 mg/l
Bis (2-ethylhexyl) phthalate	4.0 µg/L		4.0 µg/L	4.0 µg/L
Boron		1 mg/l	0.1 mg/l	1 mg/l
Cadmium, total	0.005 mg/L		0.002 mg/L	0.005 mg/L
Calcium			0.1 mg/l	0.1 mg/l
Cations, Total			0.01 mg/l	0.01 mg/l
Chemical Oxygen Demand			25 mg O <sub>2</sub> /L	25 mg O <sub>2</sub> /L
Chloride	0.5 mg/l		0.5 mg/l	BPL
Chlorobenzene	30 µg/L		0.50 µg/L	30 µg/L
Chloroethane <sup>a</sup>			0.50 µg/L	Non-Detect
Chloroform			0.50 µg/L	0.50 µg/L
Chromium, total	0.05 mg/L		0.006 mg/L	0.05 mg/L
Cobalt, total			0.002 mg/L	0.002 mg/L
Copper, total			0.004 mg/L	0.004 mg/L
Dichlorobenzene,1,2-	600 µg/L	130 µg/L	0.50 µg/L	600 µg/L
Dichlorobenzene,1,3-		130 µg/L	0.50 µg/L	130 µg/L
Dichlorobenzene,1,4-	5.0 µg/L		0.50 µg/L	5.0 µg/L
Dichloroethane,1,1-	5.0 µg/L		0.50 µg/L	5.0 µg/L
Dichloroethane,1,2-	0.50 µg/L		0.50 µg/L	0.50 µg/L
Dichloroethene, trans-1,2 <sup>b</sup>	10 µg/L		0.50 µg/L	Non-Detect
Dichloroethene,1,1-	6.0 µg/L		0.50 µg/L	6.0 µg/L
Dichloroethene,cis-1,2-	6.0 µg/L		0.50 µg/L	6.0 µg/L
Diethyl phthalate			2.0 µg/L	2.0 µg/L
Ethylbenzene	300 µg/L		0.50 µg/L	300 µg/L
Fluoride	2 mg/l		0.25 mg/l	2 mg/l
Hardness, Total			0.50 mg/l	0.50 mg/l
Hexavalent Chromium	0.01 mg/l		0.0002 mg/l	0.01 mg/l
Iron (II)			100 mg/l	BPL
Isobutyl alcohol (Isobutanol)			0.002 mg/L	0.002 mg/L
Lead, Total	0.015 mg/l		0.0020 mg/l	0.015 mg/l
m + p Cresol (3-&4-Methylphenol)			2.0 µg/L	2.0 µg/L
m,p-Xylenes	1,750 µg/L		0.50 µg/L	1,750 µg/L
Magnesium			0.05 mg/L	0.05 mg/L
Manganese, Total		0.5 mg/l	0.002 mg/l	0.5 mg/l
Mercury, total	0.002 mg/L		0.0002 mg/L	0.002 mg/L
Methyl isobutyl ketone (MIBK)		120 µg/L	10 µg/L	120 µg/L
Methylene chloride	5.0 µg/L		1.0 µg/L	5.0 µg/L
Naphthalene		17 µg/L	0.50 µg/L	17 µg/L
Nickel, total			0.004 mg/L	0.004 mg/L
Nitrate (NO <sub>3</sub> -N)	45 mg/l		0.1 mg/l	BPL
O-Cresol (2-Methylphenol)			0.20 µg/L	0.20 µg/L
o-Xylene			0.50 µg/L	0.50 µg/L
Phenol			2.0 µg/L	2.0 µg/L
Phenols (Total Phenolics)			0.05 mg/L	0.05 mg/L
Phosphate			0.05 mg/l	0.05 mg/l
Phosphorus, Total			0.05 mg/L	0.05 mg/L
Potassium (K)			1 mg/l	1 mg/l
Selenium, total	0.05 mg/L		0.004 mg/L	0.05 mg/L

**TABLE 8: CONCENTRATION LIMITS  
 (continued)**

Constituent	California Drinking Water Maximum Contaminant Level (MCL)	California Drinking Water Notificaion Level (NL)	Laboratory Practical Quantitation Limit <sup>(1)</sup> (PQL)	Concentration Limit Greater Than Background
Sodium			1 mg/L	1 mg/L
Styrene	100 µg/L		0.50 µg/L	100 µg/L
Sulfate			1 mg/L	BPL
Tetrachloroethene	5.0 µg/L		0.50 µg/L	5.0 µg/L
Tin, total			0.002 mg/L	0.002 mg/L
Toluene	150 µg/L		0.50 µg/L	150 µg/L
Total Dissolved Solids	500 mg/l		50 mg/l	BPL
Total Organic Carbon			1 mg/l	1 mg/l
Total Organic Halogens			0.02 mg/l	0.02 mg/l
Total Sulfide			0.1 mg/l	BPL
Trichloroethene	5.0 µg/L		0.50 µg/L	5.0 µg/L
Trichlorofluoromethane	150 µg/L		0.50 µg/L	150 µg/L
Vanadium, total		50 mg/L	0.006 mg/L	50 mg/L
Vinyl chloride	0.5 µg/L		0.50 µg/L	0.5 µg/L
Xylenes, total	1,750 µg/L		1.0 µg/L	1,750 µg/L
Zinc, total			0.02 mg/L	0.02 mg/L
Ethene			0.002 mg/L	0.002 mg/L
Methane			0.001 mg/l	0.001 mg/l

Notes:

(1) Laboratory PQLs as provided from BC Laboratories in January 2020.

A-Unconfirmed daughter product of Dichloroethane, 1,1-

B-Unconfirmed daughter product of Dichloroethene, cis-1,2-

BPL: Background Prediction Limit

## ATTACHMENT E

### CALIFORNIA NON-STATISTICAL DATA ANALYSIS METHOD (CNSDAM)

#### A. **Non-Statistical Method for Standard Status COCs Seldom Found In Background**

For any given groundwater Monitoring Point (Well) subject to compliance testing each Reporting Period, regardless of the monitoring program (DMP, AMP, or CAP), the Discharger shall use this data analysis method, jointly, for all Standard Status Monitoring Parameters (MPars) on that compliance well's "scope list" (see paragraph A.1 below for the initial test scope list and paragraph B.1 below for the modified scope list use during the single retest).

1. **Scope List** — Create a current "scope list" for that compliance well that includes each Standard Status MPar, at that well, that exceeds its respective MDL in less than 10% of its background data set in the initial sample taken for that well at the start of the reporting period.
2. **Two Indications of Release** — From the scope list made under paragraph A.1, above, for an initial test [or, for a retest, using the modified scope list created under paragraph B.2, below], identify each COC in the current sample from that well that exceeds either its respective MDL or its respective PQL. The Discharger shall conclude that these exceeding COCs provide a preliminary indication [or, for a retest, provide a measurably significant indication] of a release indication, at that compliance well, if either:
  - a. three or more of the Standard Status MPars on the well's scope list exceed their respective MDL; or
  - b. at least one of the Standard Status MPars on the well's scope list equals or exceeds its respective PQL.

#### B. **Single Discrete Retest (A "Pass-1-of-2" Plan)**

1. **Notification and Retest Sample Acquisition** — In the event that the Discharger concludes (pursuant to paragraph A.2., above) that the initial sample, taken at the very start of the reporting period, indicates that there is a preliminary indication of a release for one-or-more MPars on the scope list for that compliance well, then the Discharger shall immediately notify regulatory agency staff by phone or e-mail and shall, at mid-reporting-period, collect a new independent retest sample from the indicating well.

2. **Apply Test To Modified Scope List** — For the well’s retest sample, the Discharger shall include, from the laboratory retest analytical results, only the determinations for those constituents indicated in that well’s original test, under paragraph A.2, and these indicated constituents shall comprise the compliance well’s “modified scope list,” for use in the retest. As soon as the retest data are available, the Discharger shall apply the same test [under paragraph A.2, above, but using this modified scope list] to analyze the retest sample’s data at that compliance well.
3. **Failure to Verify a Release** — If the retest sample fails to verify either one of the indications of a release under paragraph A.2, then the Discharger shall conclude that the original indication was in error and shall report this to regulatory agency staff by phone or e-mail and include it in the Monitoring Report for that Reporting Period. In this case, the “scope list” for that well remains unchanged.
4. **Verification of Release** – If, instead, the retest sample verifies either (or both) of the indications of a release under paragraph A.2, then the Discharger shall conclude that there is a measurably significant increase at that well for the constituent(s) indicated in the verifying retest sample, shall report this to regulatory agency staff immediately (by phone or e-mail), shall include this information in the Monitoring Report for that reporting period, and shall show the indicated constituents, at that Monitoring Point (Well), as being in Tracking Status in the compliance spreadsheet for that reporting period. Furthermore, the Discharger shall no longer include any such (now Tracking Status) MPar in the scope list created (under paragraph A.1) for that well, for use in future applications of this test method. Such a new Tracking Status Well/MPar pair shall begin being evaluated by the Concentration-Versus-Time Plotting data analysis method beginning the next reporting period after the change occurs. For each Well/COC pair that has a verified release indication, the Discharger shall create and maintain a Concentration-Versus-Time Plot with the pair's Concentration Limit shown as a horizontal line on the plot. This Concentration Limit line indicates the pair's remediation goal. The Discharger shall include these plots in the Landfill's Annual Summary Monitoring Report. This report shall also describe the behavior of release-affected Well/COC pairs in response to existing corrective action measures (i.e. they are trending down toward, or have reached their respective concentration limit) and shall identify all other release-affected Well/COC pairs as indicating a need to augment existing corrective action measures or propose additional corrective measure(s).

**C. UPPER 85th PERCENTILE NONSTATISTICAL METHOD FOR UNPAR TESTING**

1. **Concentration Limit (retest-triggering concentration)** – UnPar Constituents of Concern (COCs), are those COCs that are not MPar. Under this Order, they are tested every five years. For any given UnPar at a given Monitoring Point (i.e., for



any given Monitoring Point/UnPar pair), its retest-triggering concentration shall be the upper 85th percentile value of its background data set. Nevertheless, for a constituent whose upper 85th percentile value lies below its then current Practical Quantitation Limit (PQL), its retest-triggering concentration is the highest PQL associated with that pair's background data set.

2. **Test & Pass-1-of-2 Retest** – If, during the five-yearly UnPar testing, an UnPar exceeds its respective retest-triggering concentration in its initial sample (taken at the start of the reporting period), the Discharger shall take one retest sample (for the indicating Well/UnPar pair) at mid-period (approximately 90 days later).