

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

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## ORDER R7-2020-0005

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### Order Information

**Dischargers:** Riverside County Department of Waste Resources  
**Facility:** Blythe Sanitary Landfill  
**Address:** 1000 Midland Road, Blythe, California 92225  
**County:** Riverside County  
**WDID:** 7A362022011  
**GeoTracker ID:** L10009874093  
**Prior Order(s):** R7-2002-0005

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I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 14, 2020.

*Original signed by* \_\_\_\_\_

PAULA RASMUSSEN,  
Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

**ORDER R7-2020-0005**

WASTE DISCHARGE REQUIREMENTS  
FOR  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES,  
OWNER/OPERATOR  
BLYTHE SANITARY LANDFILL  
CLASS III LANDFILL, CLASS II SURFACE IMPOUNDMENT  
RIVERSIDE COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) hereby makes the following Findings:

1. Riverside County Waste Management Department (Discharger) owns and operates the Blythe Sanitary Landfill (Facility), located at 1000 Midland Road, Blythe, CA 92225. The Facility consists of two separate waste management units,<sup>1</sup> including an active, Class III municipal solid waste (MSW) landfill and an active, Class II surface impoundment.
2. These Waste Discharge Requirements (WDRs) regulating the Facility are issued pursuant to several different state and federal laws and regulations, including but not limited to: California Code of Regulations, title 27, section 20005 et seq.; 40 Code of Federal Regulations parts 257 and 258 (a.k.a., "Subtitle D"); and State Water Resources Control Board (State Water Board) Resolution 93-62, *Policy for Regulation of Discharges of Municipal Solid Waste*.
3. The Facility was most recently regulated by WDRs Order R7-2002-0005, adopted on January 16, 2002. The Facility is assigned the California Integrated Water Quality System (CIWQS) waste discharge identification (WDID) number 7B330305021 and GeoTracker Global ID number L10009874093.
4. In September 14, 2016, the Discharger submitted a Joint Technical Document (JTD) entitled *Blythe Sanitary Landfill Joint Technical Document, Addendum No. 7 Preliminary Closure Plan and Post-Closure Maintenance Plan, August 2016*.

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<sup>1</sup> Waste management unit" is as defined in California Code of Regulations, title 27, section 20164. Unless otherwise specified, all terms have the meaning specified in California Code of Regulations, title 27, division 2, subdivision 1, chapter 2, article 1.

5. This Order updates the WDRs to incorporate current laws and regulations and to require modifications to and evaluations of the groundwater monitoring systems. This Order supersedes Order R7-2002-0005, except for enforcement purposes.

### Overview of Facility and Waste Management Units

6. The Facility encompasses a total of 365 acres and located on unincorporated land within the County of Riverside approximately six miles north of the City of Blythe, as depicted in **Attachment A**—Vicinity Map.
7. Approximately 255 acres of the Facility is located in the NW ¼, and N ½, SW ¼ of Section 31, T 5 S, R 23 E San Bernardino Base and Meridian, approximately 80 acres in S ½, SE ¼ of Section 25, T 5 S, R 22 E San Bernardino Base and Meridian, and approximately 30 acres in the NE¼ of the NE¼ of Section 36, T 5 S, R 22 E San Bernardino Base and Meridian. The property can also be described as Assessor Parcel Numbers (APNs) 812-341-003, 812-340-002, 812-340-003, 815-171-001, and 815-172-001. The Facility’s location is shown in and **Attachment B**—Site Map.
8. The Facility property itself is zoned by the County of Riverside as N-A (natural assets) and R-1 (One-Family Dwelling). The land use within 1,000 feet radius of the Facility is zoned primarily for natural asset and agricultural use. The primary zoning designation surrounding the property is N-A, with W-2 (Controlled-Development Areas), R-1, and R-R (Rural Residential). There are no structures within 1,000 feet of the site and the nearest structure to the property is a storage facility located approximately 4,000 feet to the southeast of the southern footprint of the landfill and an agricultural building located approximately one mile west of the fee booth.
9. The waste management units at the Facility and authorized by this Order are identified below:

**Table 1. Waste Management Units at the Facility**

Unit	Area or Volume	Liner/LCRS <sup>2</sup> Components	Unit Classification
Landfill (LF-1)	78.1 acres	Unlined and no LCRS. <sup>3</sup>	Class III, active.

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<sup>2</sup> LCRS – Leachate collection and removal system

<sup>3</sup> Waste management unit constructed prior to November 27, 1984.

Unit	Area or Volume	Liner/LCRS <sup>2</sup> Components	Unit Classification
IMP-1 (Closed septage disposal pond)	--	Unlined without LCRS. <sup>3</sup>	Inactive. Closed in 1992.
Surface Impoundment (IMP-2) (Contains two pond cells)	30,000 square feet/ 1,094,352 gallons	Composite liner with LCRS (see Finding 24 for details).	Class II, active.

10. The County of Riverside has operated a landfill at the Facility since 1958. In February 1958, the County of Riverside submitted an application to the United States Department of the Interior, Bureau of Land Management (BLM) for a disposal site. Records regarding the date landfilling activities commenced are unavailable. Based on the application, it is assumed that the landfill opened in 1958 and given the history of other landfills in Riverside County, it is presumed the landfill was operated as a “burn” site until the mid-1970s.
11. At the time the landfill first began operations, the Facility was owned by the BLM and operated by the Riverside County Road Department. On April 8, 1963, the BLM transferred ownership of the property to the County of Riverside via a land patent. The Riverside County Waste Management Department was formed from the Riverside County Road Department in 1986. In 2015, the Riverside County Waste Management Department changed its name to Riverside County Department of Waste Resources.
12. The Facility first became subject to WDRs from the Regional Water Board under Order 71-055, adopted on November 20, 1971. The WDRs have been updated as follows:

**Table 2. Overview of WDRs Orders**

Date	Regional Water Board Order
November 20, 1971	71-055
January 18, 1984	84-006
May 12, 1988	88-067
March 13, 1991	91-005
November 14, 2001	R7-2002-0005

13. The Facility primarily receives solid waste for disposal from the East Riverside County service area (generally including the City of Blythe and the unincorporated communities of Chiriaco Summit, Colorado River Communities, Colorado River Indian Tribe, Desert Center, Eagle Mountain, Lake Tamarisk, Mesa Verde, and Ripley).
14. Currently, the Facility's business hours for receiving waste are 8:00 am to 4:00 pm Monday to Friday, and first Saturday of the month. The permitted operating hours allows the Discharger the flexibility of increasing hours of operation to 6:00 am to 8:00 pm Monday through Sunday to respond to public service needs and operations scheduling, with the stipulation that the site operates only during daylight hours. The operating hours for conducting ancillary activities and maintenance and management are 24 hours per day, seven days per week, as necessary.

#### **Landfill (LF-1)**

15. The Landfill has operated continuously since 1958. The Landfill footprint occupies approximately 78.1 acres of the western half of the property. The total volumetric capacity of the site, including refuse and daily cover material, is approximately 6,229,670 cubic yards.
16. As of June 30, 2016, approximately 1,270,472 cubic yards (755,311 tons) of refuse were in place. This translates to a total volume of 2,395,200 cubic yards of landfill air space occupied thus far by refuse and cover material. The remaining airspace capacity is approximate 3,834,470 cubic yards. The net remaining disposal capacity (refuse only) is approximately 2,735,768 cubic yards (1,664,715 tons), which provides landfill disposal capacity up to the year 2047 based on an assumed annual growth rate of four percent.
17. The Landfill is unlined and has no leachate collection and removal system (LCRS). The formation of leachate at this site is limited by the arid climate, due to low amounts of precipitation producing limited water to percolate through the refuse to create leachate. The Discharger has instituted additional measures to further minimize the potential formation of leachate, including: diversion of off-site drainage around the Landfill, control of on-site flow via surface drainage system, and placement of compacted dirt cover within the Landfill area. These measures are implemented to divert any precipitation that does occur off-site and to prevent any water that is left on-site from percolating into the refuse, which causes leachate to form. The Discharger conducts quarterly visual site inspections for signs of leachate.
18. The area-fill method is used for waste disposal at the Landfill. Solid waste materials are spread and compacted into thin layers within a specified area. At the end of each work day, the compacted refuse layer is covered with a minimum of six inches of compacted soil or alternative daily cover (ADC) material. A compacted layer of at least 12 inches of intermediate cover is placed on all



surfaces of the fill where no additional refuse will be deposited within 180 days. The compacted refuse from one workday, together with soil and ADC cover material, constitutes a waste cell. Waste cells are successively placed in locations to fill up the entire final grading plan. The average depth of cells is approximately 10 feet and the average width of cells is approximately 100 feet. The average daily waste cell is approximately 185 cubic yards in volume, based on the daily average of 81 tons received from July 2013 to June 2016.

19. The Landfill receives the following Class III nonhazardous and inert wastes:
  - a. Residential;
  - b. Mixed Municipal;
  - c. Agricultural;
  - d. Demolition/Construction;
  - e. Tires<sup>4</sup>; and
  - f. Dead animals.
  
20. The Discharger has a load-checking program for identifying and removing hazardous and prohibited wastes from the municipal waste stream coming to the Landfill. Specific components of the program include the following:
  - a. Customer notification by signs, notices and verbal inquiries.
  - b. Surveillance through visual inspection of waste load and questioning of customers by entrance station personnel.
  - c. Waste inspections conducted on randomly selected loads at the working face.
  
21. Some types of household hazardous waste and universal hazardous waste may be accepted from Landfill customers through separately permitted programs such as a household hazardous collection event operating in accordance with California Department of Toxic Substances Control regulations (Cal. Code Regs, tit. 22, § 66270(d)(6)).

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<sup>4</sup> Customer-separated tires and tires commingled with refuse found to be greater than one half of one percent by weight of the load that can be safely removed from the waste stream, are retrieved or redirected to be stockpiled within the designated recycling area. When approximately 500 tires are accumulated, the Discharger or a licensed tire hauler removes them from the Facility for proper disposal or recycling.

22. The Discharger implements a Waste Recycling Program at the Facility with the goal of maximizing the amount of solid waste diversion. Materials recycled through the Waste Recycling Program may include, but are not limited to: tires for offsite processing and recycling, construction and demolition waste, electronic devices, metallic waste, appliances, small and large motorized equipment, woody waste, usable items and other future waste streams found to be financially feasible with the advancement of technology or otherwise beneficial to obtain present and future diversion requirements.

### **Surface Impoundment (IMP-2)**

23. In the early 1960s, an unlined surface evaporation/percolation pond (LF-1) was constructed at the Facility. Grease trap, septic, and chemical toilet wastes were discharged at this pond. After the liquid waste dried in the pond, the residue was excavated and disposed of in the Landfill. This process continued until 1992. In 1992, the Discharger stopped receiving liquid waste at the unlined pond and closed the pond.
24. In 1993, the Discharger constructed a single, double-lined, Class II Surface Impoundment (IMP-2). The Surface Impoundment is underlain by a single LCRS. The LCRS consists of a drainage layer, six-inch diameter collection piping, and a sump consisting of vertical, 36-inch diameter high-density polyethylene (HDPE) pipe that extends to a total depth of 25.5 feet. The collection pipe exits the secondary liner at a depth of 19 feet and discharges to the sump at a depth of 24 feet. The storage volume of the sump below the elevation of the bottom of the liner is 425 gallons.
25. The Surface Impoundment has 2 pond cell units, the north pond and the south pond. Each pond has a capacity of 547,176 gallons.
26. The Discharger constructed a paved access road/splash pad that drains into the Surface Impoundment to ensure that any liquid waste that is spilled by customers drains directly into the lined pond cells.
27. From 2012 to 2019, the Surface Impoundment received an average of approximately 27,000 gallons-per-month of the following liquid wastes:
- a. Grease trap waste;
  - b. Septic waste;
  - c. Chemical toilet waste; and
  - d. High moisture content and industrial liquid waste.

28. On January 17, 2017, the Discharger noticed approximately 353 gallons of liquid in the LCRS sump. On April 26, 2017, the Discharger transferred approximately 356 gallons of liquid from the sump to the north pond.
29. The sump is designed to collect liquid from a drainage layer that is contained by an upper and lower layer of HDPE liner. Laboratory tests were performed on the liquid collected in the sump with results showing no significant levels of pollutants. Specifically, volatile organic chemicals (VOCs) were tested in the sump on December 13, 2016, and only Tetrachloroethene and Acetone were detected at low concentrations of 0.46 and 13 micrograms per liter, respectively.
30. In August 2017, the Discharger suspended the operation of the north pond and diverted liquid waste received at the site to the south pond. This was performed in an effort to isolate the north pond and potentially identify the source of possible leaks.
31. In April 2018, the Discharger installed a submersible pump in the sump to transfer liquid to the south pond. From April to December 2018, the sump was pumped approximately once every two to three days in order to maintain a free-drainage condition for the pond drainage layer. During this period, the Discharger continued to observe liquid flowing into the sump and reached the determination that the source of the leakage cannot be isolated, and the continuous pumping of the sump was suspended in January 2019.
32. This Order requires regular monitoring and pumping of the sump to keep liquid from backing up into the drainage layer. The Discharger has agreed to monitor the sump at least weekly and remove liquids from the sump, as needed, to prevent fluids from backing up into the liner.

#### **Release-Related Actions**

33. The Discharger submitted a Solid Waste Assessment Test (SWAT) report on February 18, 1988. During the SWAT investigation, the Discharger installed two groundwater monitoring wells; one downgradient well (BG-1) and one upgradient well (BG-2).
34. Analysis of water samples from monitoring wells during the SWAT investigation indicated that the Facility was affecting areal groundwater quality. 1,1-dichloroethane, methylene chloride, tetrachloroethene (PCE), 1,1,1-trichloroethane, trichloroethylene, chloroform, toluene, benzene, and trichlorofluoromethane were detected in the downgradient monitoring well, with PCE and benzene exceeding the California Maximum Contaminant Levels (MCLs).
35. On October 2, 1990, the Regional Water Board's Executive Officer issued Cleanup and Abatement Order (CAO) 90-077 to the Discharger.

36. On September 19, 1995, the Regional Board's Executive Officer issued CAO 95-017 to the Discharger revising CAO 90-077.
37. On July 7, 1997, CAO 95-107 was revised and replaced by CAO 97-102.
38. To comply with CAO 97-102, the Discharger installed a gas collection system and flare/vent station at the Facility in April 1998. The system consists of one vent, one open candlestick flare, nine horizontal wells, one eight-inch diameter header line, and one condensate sump.
39. The landfill gas collection system removes vapor phase VOCs from the Landfill, preventing the VOCs from reaching groundwater. This corrective action has had a positive effect on groundwater quality, as evidenced by the decreasing VOC groundwater concentration trends and/or stable concentration trends.

### **Geologic Conditions**

40. The Facility is located north of Blythe on the Palo Verde Mesa, adjacent to the Palo Verde Valley. The terrain in the vicinity of the site is characterized by gently sloping, relatively flat alluvial surfaces, which extend from the Big Maria Mountains northeast of the site to the edge of Palo Verde Mesa directly south of the site. The land surface within the boundaries of the site is predominantly flat with scattered erosional channels that trend in a southeasterly direction. The elevation at the north of the site is 450 feet above sea level and in the southwest and southeast corners 380 feet above mean sea level.
41. Surficial sediments beneath the Facility area consist of both older and younger alluvium. The alluvium is composed of poorly sorted, unconsolidated sand, gravel, cobbles, silt, and clay. The younger alluvium is present only on the surface near active stream channels and is only a few feet thick. The younger alluvium consists primarily of light brown to brown coarse-grained sand and gravel, with cobbles and boulders deposited in stream channels. The older alluvium consist of light brown sand, gravel and silt with minor amounts of clay. Local variations in depositional environments have concentrated coarser materials, which have been exploited immediately north of the site in a gravel pit. The alluvial deposits are reported to be in excess of 300 feet thick in the region.
42. The alluvium is underlain by the Bouse formation, an indurated deposit of continental and marine rocks of Pliocene age. It is composed of a basal limestone overlain by interbedded clay, silt, sand and a tufa.
43. In general, soils in the area of the landfill are grouped as Carsitas, Myoma, and Carrizo as classified by the Soil Conservation Service.
44. The Carsitas cobbly sand is a moderately sloping (0 to 9 percent) soil that forms on alluvial fans, valley fill, and remnants of dissected alluvial fans. This soil type comprises the majority of the Landfill site. Runoff is rapid and erosion hazard is

moderate. The soil is rapidly permeable with an available water capacity of 2 to 4 inches. The soil is identified as SP-SM per the Unified Soil Classification System.

45. No active faults are known to be on or adjacent to the Facility. The nearest active fault is the San Andreas, located 55 miles to the southwest. The site is not located within an Earthquake Fault Study Zone and is identified as having a low risk of ground shaking per the County of Riverside's General Plan. The Landfill is identified as a low-moderate risk for Liquefaction Susceptibility, as indicated on the Palo Verde Valley Area Plan Seismic Hazards Map. The site is not within a Fault Hazard Zone as identified on the Seismic/Geologic Map in the Riverside County Comprehensive General Plan (RCCGP).
46. Average annual precipitation in the area of the Facility is approximately 3 inches, with an annual surface evaporation of approximately 86 inches.

### **Surface Water and Groundwater Conditions**

47. The Facility site is not within a 100-year flood hazard area as designated by a Federal Emergency Management Agency (FEMA).
48. Surface water drainage from the watershed above the Facility is south to southwest into the Palo Verde Valley. Ultimately, all surface flows drain toward the Colorado River.
49. Surface water nearest the site flows southward in canals constructed by the Palo Verde Irrigation district, providing Colorado River water to farmlands in the Palo Verde Valley. The closest canal is nearly one mile southeast of the site.
50. The 100-year, 24-hour precipitation event for the site is 3.5 inches.
51. The site is designed to route surface drainage away from the Landfill WMU to a "dry wash" natural channel located directly east of the Landfill disposal area. Final grading plan drainage is provided through the use of a berm along the hinge of the top deck, guiding top deck sheet flow into down-drains located on the Landfill slopes. Bench roads also capture run-off from the slopes of the Landfill and guide run-off to down-drain structures. Adequate slope on the top deck and along bench roads promotes proper drainage
52. The "dry wash" natural channel is 20 feet deep and up to 500 feet wide and passes east of the Landfill disposal area. The watershed, to the north of the Facility, encompasses 7,290 acres and drains to the Colorado River.
53. The Facility lies within the Colorado Hydrologic Unit, specifically within the Palo Verde Hydrologic Area. The aquifer underlying the Facility extends into the alluvium and Bouse Formation. The Colorado River is approximately six miles east of the Facility. The groundwater flow direction is generally to the west, but the flow direction and gradient changes periodically because of the influence of

neighboring high-volume agricultural production wells located west of the site. Groundwater is recharged from the Colorado River and to a lesser extent, from precipitation.

54. Hydrologic studies indicate that groundwater occurs at a depth of approximately 162 to 181 feet below ground surface (bgs) at the Facility. Historically, the groundwater generally flows to the northwest at a gradient less than 0.0010 ft/ft.

### **Groundwater Monitoring**

55. As a part of the SWAT Report that was completed in February 1988, two groundwater monitoring wells (BG-1 and BG-2) were installed at the Facility in November 1987. Each groundwater well was constructed with a 4-inch diameter, flush-threaded schedule 80 PVC pipe with a 20-foot section of 0.02-inch slotted screen interval. During 1998, groundwater monitoring well BG-4 was installed to enhance the existing monitoring system.
56. As part of the groundwater characterization field investigation at the site, three additional downgradient groundwater monitoring wells (BG-3, BG-4 and BG-5A) were installed at the site in March 1992. The wells were constructed with a 5-inch diameter (BG-3 and BG-4) and a 4.5-inch diameter (BG-5A), flush-threaded schedule 80 PVC pipe solid casing and an approximate 50-foot section of 0.02-inch slotted well screen. Approximately 60 feet of defective drive casing was lost in boring BG-4, extending from the bottom of the boring (195 feet bgs) to 135 feet bgs, as determined using downhole geophysical techniques. The loss of this casing was not identified until the well installation process was nearly completed. Therefore, the casing could not be recovered. This construction defect prevented use of this well for groundwater quality monitoring or as a pumping well for the aquifer testing. BG-4 was utilized as an observation well for aquifer testing purposes and BG-5A was used in place of BG-4 as a pumping and monitoring well.
57. On March 16, 1994, upgradient groundwater monitoring well BG-6 was installed. Well BG-6 was constructed with a 4-inch diameter flush-threaded schedule 80 PVC solid casing and an approximate 40-foot section of 0.02-inch slotted well screen.
58. The following chart is a summary of existing on-site groundwater monitoring wells (groundwater elevations observed on June 12, 2019):

**Table 3. Groundwater Monitoring Wells**

Well Number	Location	Groundwater Elevation (ft msl)
BG-1	Downgradient	260.64
BG-2	Downgradient	261.12

Well Number	Location	Groundwater Elevation (ft msl)
BG-3	Downgradient	261.61
BG-5A	Downgradient	260.54
BG6	Upgradient	263.17

59. In addition to the groundwater monitoring wells associated with the Facility, three agricultural groundwater supply wells are located within one mile of the property.

### **Soil-Pore and Landfill Gas Monitoring**

60. In 1997, as part of the corrective action plan, the Discharger installed two multi-depth and three single-depth gas probes at the Landfill. These probes are GP-12, GP-13, GP14, GP-15 and GP-16, as shown on **Attachment D**.
61. Gas probes GP-12 through GP-15 are connected to an 8-inch Standard Dimension Ration (SDR) 17 HDPE collection header pipe with a 3-inch SDR 17 HDPE lateral pipe. GP-16 is not connected to the header pipe due to very shallow trash depth at this probe location.
62. In 1998 the Discharger, as part of the corrective action plan, installed nine horizontal gas wells. These gas wells are: HW-1, HW-2, HW-3, HW-4, HW-5, HW-6, HW-7, HW-8 and HW-9, as shown on **Attachment D**. Horizontal wells HW-1 through HW-9 are also connected to the same 8-inch SDR 17 HDPE collection header pipe.
63. The header pipe carries gas collected from vertical probes and horizontal wells, which is then vented into the atmosphere. Activated carbon canisters are used as needed to mitigate odors.
64. Gas condensate formed in the header pipe is diverted to a sump. The sump is 24 inches in diameter and eight feet in height. It is constructed with SDR 13.5 HDPE, and it has a capacity of 137 gallons.
65. Gas condensate collected in the sump is disposed of in the lined Surface Impoundment at the Facility.
66. An annual Landfill gas sample is collected from the main header pipe before the vent. The frequency of sample collection/reporting and a list of target parameters are stated in the Monitoring and Reporting Program.
67. The Discharger has also installed 12 perimeter probes as part of the corrective action plan, as shown on **Attachment D**.

68. The data gathered from these perimeter probes is submitted to the Regional Water Board in accordance with the Monitoring and Reporting Program.

### **Gas Collection and Perimeter Gas Probe Monitoring**

69. The Discharger monitors gas migration and gas collection to verify gas control compliance as required by California Code of Regulations, title 27, chapter 3, subchapter 4, article 6. The most current Gas Monitoring and Control Plan (GMCP) is dated April 2009.
70. To comply with CAO 95-107, a gas collection system and flare/vent station was installed in April 1998. The system consists of the following: one vent, one open candlestick flare, nine horizontal wells, one eight-inch diameter header line, and one condensate sump.
71. The horizontal gas wells are located at approximately 300-foot intervals. Each well has an individual well monitoring assembly. There are currently no vertical gas wells located at the site. A buried HDPE header pipe is used to transport the Landfill gas to the flare/vent enclosure. The header line is placed at a minimum grade of one percent, draining any condensate southward to the condensate sump. The sump is designed with a secondary containment structure to collect any liquid in the event of sump leakage.
72. An open "candlestick" flare was installed at the site in 1998 to flare off any gas generated. The methane gas produced by the Landfill was of insufficient quality to flare and the flare is currently on standby. The flare is designed for up to 150 Standard Cubic Feet per Minute (SCFM). The site currently collects 25 SCFM of 16% methane gas for eight hours per day.
73. The gas collection system operates on a timed schedule. The hours of operation will be varied over time as the production of the Landfill gas changes. In an effort to increase the extraction of Landfill gas, the Discharger installed two multi-depth and three single-depth gas probes in the interior of the Landfill (GP-12 through GP-16). GP-12 through GP-15 were connected to the collection header pipe via laterals in May 1999. As the site has filled from the northern edge with a seven-to ten-foot lift southward, all interior gas probes were abandoned.
74. The gas system is monitored quarterly and the gas condensate is sampled annually. The condensate level is monitored during the quarterly gas monitoring event and is drained and disposed of in the on-site Surface Impoundment, as needed.
75. Seven gas sampling probes (perimeter probes 1-7) were installed on approximately 1,000-foot centers outside the area containing refuse on January 12, 1988. As part of the requirement of the SWAT report.



76. In addition to the seven SWAT report probes, five additional single level probes were installed in the native material surrounding the Landfill perimeter (perimeter probes 8-12) to improve the gas monitoring system. On December 8 and 9, 2009, the Discharger installed five additional probes (perimeter probes 13-17), as approved by CalRecycle, so that the spacing between each probe around the perimeter of the Landfill is less than 1,000 feet. Probe-16 was drilled to replace probe-8. In August 2018, probe 18 was installed to replace probe 7 that failed.

#### **Additions and Changes to the Monitoring Program**

77. This Order requires the Discharger to submit a workplan to evaluate the number and location of new monitoring wells that need to be installed to bring the Facility into compliance with California Code of Regulations, title 27 requirements. At a minimum, the Discharger must install at least one groundwater monitoring well immediately downgradient of the Surface Impoundment.
78. This Order and the accompanying Monitoring and Reporting Program also require a more robust monitoring procedure for the LCRS at IMP-2 than has previously been required.

#### **Basin Plan and Other Regulatory Considerations**

79. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993 and amended on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), WDRs must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
80. The Facility is located in the Colorado Hydrologic Unit. The designated beneficial uses of groundwater in the Colorado Hydrologic Unit are:
- a. Municipal Supply (MUN);
  - b. Industrial Supply (IND);
  - c. Agricultural Supply (AGR).
81. This Order establishes WDRs pursuant to division 7, chapter 41, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).
82. These WDRs implement numeric and narrative water quality objectives for groundwater established by the Basin Plan. The numeric objectives for

groundwater designated for municipal and domestic supply (MUN) include the Maximum Contaminant Levels (MCLs) and bacteriological limits specified in California Code of Regulations, title 22, section 64421 et seq. The Basin Plan states that groundwater for use as domestic or municipal water supply (MUN) must not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

83. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet the California Maximum Contaminant Levels designed to protect human health and ensure that water is safe for domestic use.
84. These WDRs also implement state regulations applicable to the discharge of solid waste to land found in California Code of Regulations, title 27, division 2, subdivision 1, commencing with section 20005 ("Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste"). These regulations contain classification criteria for wastes and for disposal sites, and prescribe minimum standards for the siting, design, construction, monitoring, and closure of waste management units.
85. This Order further implements the applicable federal regulations for discharges of solid waste to land. On October 9, 1991, USEPA promulgated federal municipal solid waste (MSW) regulations under the Resource Conservation and Recovery Act (RCRA), Subtitle D, codified at 40 Code of Federal Regulations parts 257 and 258. State Water Board Resolution 93-62 (as amended on July 21, 2005) requires that the regional water boards implement the applicable provisions of the federal MSW regulations in WDRs, particularly the provisions that are either more stringent than or that do not exist in title 27 of the California Code of Regulations.
86. The Regional Water Board has considered State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16) in adopting this Order. Resolution 68-16 prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters. High quality waters are surface waters or areas of groundwater that have a baseline water quality better than required by water quality control plans and policies.

87. The Order complies with Resolution 68-16 by requiring the Discharger to design, construct, and maintain waste containment systems that prevent discharges of waste and waste constituents to waters of the state. The requirements reflect the Discharger's best efforts to control such wastes, and also constitute BPTC for the prevention of surface water and groundwater degradation. To the extent that there was a release associated with landfill gas migration of VOCs from LF-1, the Discharger is participating in the corrective action program to investigate and remediate contamination consistent with Resolution 68-16.
88. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2020-0005 are necessary to determine compliance with this Order. The State Water Board's electronic database, GeoTracker Information Systems, facilitates the submittal and review of monitoring and reporting documents. The burden, including costs, of the MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.
89. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

### **Stormwater**

90. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. §1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
91. The State Water Board adopted Water Quality Order 2014-0057-DWQ (NPDES No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit), which became effective on July 1, 2015. The Industrial General Permit regulates discharges of stormwater associated with certain industrial activities, excluding construction activities, and requires submittal of a Notice of Intent (NOI) to be covered under the permit.
92. The Discharger is enrolled in the State Water Board's Industrial General Permit, and the Facility is assigned Storm Water Multiple Application and Reporting Tracking System (SMARTS) database ID number 733I000636. On February 23, 2017, the Discharger via SMARTS submitted a Notice of Termination (NOT) with

a Notice of Non-Applicability (NONA) Technical Report allegedly showing the Facility is not connected to waters of the U.S. The Regional Water Board subsequently denied the NONA. The Facility is required to enroll under the Industrial General Permit.

### **Financial Assurances**

93. The State Water Board-promulgated provisions of title 27 of the California Code of Regulations require maintenance of appropriate financial assurance mechanisms to cover all expenses related to the following:
  - a. Closure Activities (Cal. Code Regs., tit. 27, § 22207) – in at least the amount of the current closure cost estimate;
  - b. Post-closure Maintenance (Cal. Code Regs., tit. 27, § 22212) – in at least the amount of the current post-closure cost estimate; and
  - c. Corrective Action (Cal. Code Regs., tit. 27, § 22222) – for initiating and completing corrective action for all known or reasonably foreseeable corrective action.
94. The Discharger maintains an enterprise fund pursuant to California Code of Regulations, title 27, section 22241, as financial assurances for closure activities at the Facility. The Discharger established a pledge of revenue agreement pursuant to California Code of Regulations, title 27, section 22245, as financial assurances for post-closure maintenance of the Facility.
95. In accordance with California Code of Regulations, title 27, section 22222, the Discharger established a remediation fund through Resolution No. 2004-388 as the financial assurance for corrective action. A portion of the tipping fee at current active landfills of the Discharger is earmarked for replenishment of the fund, as needed.

### **CEQA and Public Participation**

96. Pursuant to California Code of Regulations, title 14, section 15301, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, § 21000 et seq.).
97. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue waste discharge requirements for this discharge and provided them with an opportunity for a public meeting and to submit comments.

98. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

**IT IS HEREBY ORDERED**, pursuant to section 13263 and 13267 of the California Water Code, that Order 02-005 is rescinded, except for the purposes of enforcement, and in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

**A. Discharge Prohibitions**

1. The discharge of “hazardous” waste, as defined in California Code of Regulations, title 27, section 20164, is prohibited.
2. The discharge of “designated” waste, as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited, except to the Surface Impoundment (IMP-2).
3. The disposal of incompatible wastes or wastes that, when mixed or commingled with other wastes, may create heat, pressure, fire, explosion, toxic by-products, or other chemical reactions that: (1) impair the integrity of the containment structures, or (2) generate products requiring a higher level of containment than provided by the waste management unit into which the wastes are placed, is prohibited.
4. The discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids) to the Landfill (LF-1) is prohibited.
5. The discharge of septic waste or grease trappings containing Total Petroleum Hydrocarbons (TPH) is prohibited.
6. The discharge of sludge to the Landfill is prohibited.
7. The discharge of waste to the unsaturated/vadose zone or to groundwater is prohibited.
8. The discharge of waste to surface water and surface water drainage courses is prohibited.
9. The discharge of waste to land not owned or controlled by the Discharger, or to areas outside waste management units LF-1 or IMP-2, is prohibited.
10. The storage, treatment, or disposal of wastes at the Facility shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

## **B. General Facility Specifications**

1. The Discharger shall comply with all applicable provisions of title 27 (Cal. Code Regs., tit. 27, § 20005 et seq.) and the implementing regulations of RCRA Subtitle D (40 C.F.R. parts 257 and 258), even if not specifically referenced in this Order.
2. Wastes shall be discharged only into waste management units specifically designed for their containment and/or treatment, as described in this Order.
3. The Discharger is responsible for accurate characterization of wastes, including determinations of whether wastes will be compatible with containment features and other wastes at the waste management unit, and whether the wastes are required to be managed as a “hazardous” waste or “designated” waste.
4. The Discharger shall not cause the concentration of any Constituent of Concern (including Monitoring Parameters), as shown in the MRP and incorporated herein by reference, to exceed its representative concentration limit in any monitoring medium (i.e., exceed the Water Quality Protection Standard). The concentration limit for each constituent will be set in accordance with the MRP. Data analysis shall be performed in accordance with the MRP.
5. All waste management units shall be operated to ensure that wastes, including leachate, will be a minimum of 5 feet above the highest anticipated elevation of underlying groundwater, including the capillary fringe.
6. The Discharger shall promptly notify the Regional Water Board of any slope failure occurring at a waste management unit. The Discharger shall promptly correct any failure which threatens the integrity of containment features or the unit in accordance with the method approved by the Regional Water Board’s Executive Officer.
7. Leachate and landfill gas condensate collected from a waste management unit shall be discharged to the unit from which it came, or discharged to an appropriate WMU in accordance with California Code of Regulations, title 27, sections 20200(d) and 20340(g), and in a manner consistent with the waste classification of the liquid.
8. Water used for Facility maintenance shall be limited to the amount reasonably necessary for dust control, compaction, fire control, and the establishment and maintenance of vegetation.
9. The Discharger shall comply with an approved load checking program in compliance with California Code of Regulations, title 27, section 20870 and the Facility’s Solid Waste Facility Permit (SWFP) issued by CalRecycle.

10. The Discharger shall maintain legible records on the volume and type of each waste discharged at each WMU at the Facility. These records shall be available for review by representatives of the Regional Water Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Water Board.
11. The Discharger shall maintain visible monuments identifying the boundary limits of the entire Facility. Public contact with MSW, gas condensate and/or leachate shall be prevented through fences, signs, and other appropriate alternatives.

### **C. Stormwater Specifications**

1. The Facility shall be designed, operated, and maintained to prevent inundation, washout, or erosion of wastes or covering material, which could occur as a result of floods having a predicted frequency of once in 100 years.
2. Surface and subsurface drainage from outside of a waste management unit shall be diverted from the unit.
3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at the Facility.
4. The exterior surfaces of the disposal area, including the intermediate and final landfill covers, shall be graded and maintained to divert precipitation from the WMU, to prevent ponding of surface water over wastes, and to resist erosion as a result of precipitation.
5. Diversion and drainage facilities shall be designed, constructed, and maintained to:
  - a. Accommodate the anticipated volume of precipitation and peak flows from surface runoff and under the precipitation conditions for the waste management unit.
  - b. Effectively divert sheet flow runoff laterally, via the shortest distance, into the drainage and collection facilities.
  - c. Prevent surface erosion through the use of energy dissipators where required to decrease the velocity of runoff, slope protection, and other erosion control measures where needed to prevent erosion.
  - d. Control and intercept run-on, in order to isolate uncontaminated surface waters from water that might have come into contact with waste.
  - e. Take into account:
    - I. For closed waste management units and for closed portions of units, the expected final contours of the closed unit, including its planned drainage pattern.

- II. For operating portions of waste management units other than surface impoundments, the unit's drainage pattern at any given time.
  - III. The possible effects of the waste management units drainage pattern on and by the regional watershed.
  - IV. The design capacity of drainage systems of downstream and adjacent properties by providing for the gradual release of retained water downstream in a manner which does not exceed the expected peak flow rate at the point of discharge if there were no waste management facility.
- f. Preserve the system's function. The Discharger shall periodically remove accumulated sediment from the sedimentation or detention basins as needed to preserve the design capacity of the system.
6. Collection and holding facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm or otherwise managed to maintain the design capacity of the system.

#### **D. Landfill (LF-1) Specifications**

1. Methane, carbon dioxide, and other landfill gases shall be adequately vented, removed from each waste management unit at the Facility, or otherwise controlled to prevent adverse health effects, explosions, underground fires, nuisance conditions, groundwater degradation, or impairment of the beneficial uses of surface or groundwater due to gas migration through the unsaturated/vadose zone.
2. The Discharger shall provide interim cover to the discharged waste as follows:
  - a. Daily cover – a minimum of six (6) inches of compacted soil, or alternative material, placed over the exposed waste at least once in every 24 hours. However, municipal solid waste should be compacted into the working face of the Landfill as soon as practicable.
  - b. Intermediate cover – a minimum of 12 inches of compacted soil, or equivalent, placed over waste areas that are inactive for more than 180 days. Existing daily cover may be used as part of the intermediate cover.
3. The intermediate and daily covers for the waste management unit shall:
  - a. Control disease vectors pursuant to 40 C.F.R. section 258.22;
  - b. Minimize infiltration (i.e., percolation of liquids through the wastes) into the waste management unit;
  - c. Control erosion and convey run-off to the stormwater management system at manageable, non-scouring flow rates; and



- d. Minimize the potential for windblown litter and particulates.
4. Any alternative materials used for daily or intermediate cover that have a different characteristic or thickness than the requirements of Sections D.2 and D.3 of this Order shall be approved by the Regional Water Board's Executive Officer prior to use. The Discharger shall demonstrate that the alternative material and thickness will not present a threat to the environment or water quality.
5. The Discharger shall not perform activities that would damage the landfill cover under existing conditions. For example, vehicles shall not be driven on the cover during muddy conditions, since this may create ruts or other depressions that collect and hold stormwater and violate post-closure maintenance requirements. The Discharger shall post signs visible to the vehicle drivers indicating driving is not allowed on cover for the waste management unit.
6. To further minimize potential pollution to surface waters by windblown litter and particulates from the Facility, the Discharger shall implement a litter collection and disposal program to manage windblown litter discharged on-site and to adjacent off-site areas. This program shall include provisions to inspect and remove litter from site fencing following high wind events. A standard of "zero" escape of litter from the permitted Facility shall be established through the use of control systems, and collection of escaped litter from the working face.
7. Leachate and landfill gas condensate collected from the Landfill (LF-1) shall be discharged to the Surface Impoundment (IMP-2) or to an appropriate off-site disposal facility.

#### **E. Surface Impoundment (IMP-2) Specifications**

1. The Discharger shall maintain sufficient freeboard in the Surface Impoundment to accommodate seasonal precipitation and to contain a 1,000 year 24-hour storm event, but in no case no less than two (2) feet of freeboard (measured vertically).
2. Discharge to the Surface Impoundment shall be limited to the following wastes: chemical toilet waste, septic tank waste, liquids removed from an impoundment LCRS or landfill gas condensate, high moisture content waste, industrial liquid waste and groundwater obtained from the onsite wells.
3. An operation plan shall be submitted to the Regional Water Board that describes operational wastewater levels and waste input quantities permitted each month based on anticipated precipitation and on past precipitation conditions for the year.
4. Any direct-line discharge to the Surface Impoundment shall have fail-safe equipment or operating procedures to prevent overfilling. Discharges shall be

stopped in the event of any containment system failure which causes a threat to water quality.

5. All visible portions of synthetic liners shall be inspected weekly until all free liquid is removed from the Surface Impoundment as part of closure. If during the active life of the impoundment, the wastes are removed and the bottom of the impoundment is cleaned down to the liner, an inspection shall be made of the bottom of the liner prior to refilling of the impoundment.
6. LCRS maintenance and repair plans shall be submitted to the Regional Water Board in advance of any work. Surface Impoundment repair plans and liner Construction Quality Assurance (CQA) Plans shall be developed and stamped by a licensed professional experienced in this type of work.
7. The LCRS shall be designed, constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the waste management unit.
8. The LCRS shall be operated to function without clogging through the scheduled closure of the applicable WMU and during the post-closure maintenance period. The LCRS shall be tested at least annually to demonstrate proper operation. The results of the tests shall be compared with earlier tests made under comparable conditions.
9. The liquid generated from the Surface Impoundment shall be contained in the LCRS sump and shall not accumulate to reach bottom of the liner. The Discharger shall remove fluids from the LCRS sump as often as needed to prevent the liquid in the LCRS from backing up into the lined portion of the LCRS.

#### **F. Monitoring Specifications**

1. The Discharger shall implement MRP R7-2020-0005 and any revisions thereto to detect at the earliest opportunity unauthorized discharges of waste constituents from the Facility, or any impairment of beneficial uses that result from discharges of waste to the Facility. The Discharger shall report the results of all onsite monitoring in accordance with MRP R7-2020-0005 and revisions thereto.
2. The Discharger shall conduct a water quality monitoring and response program in accordance with MRP R7-2020-0005 and any future amendments thereto, including:
  - a. Detection Monitoring. The Discharger shall institute a detection monitoring program pursuant to California Code of Regulations, title 27, section 20420.

- b. Evaluation Monitoring. The Discharger shall institute an evaluation monitoring program under California Code of Regulations, title 27, section 20425:
    - I. Whenever there is “measurably significant” (as defined in section 20164) evidence of a release from waste management unit under the detection monitoring program; or
    - II. Whenever there is significant physical evidence of a release from the waste management unit. Significant physical evidence of a release includes unexplained volumetric changes in surface impoundments, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, and unexplained water table mounding beneath or adjacent to the unit and any other change to the environment that could reasonably be expected to be the result of a release from the unit.
  - c. Corrective Action Monitoring. The Discharger shall institute a corrective action program under California Code of Regulations, title 27, 20430 when the Regional Water Board determines that the assessment of the nature and extent of the release and the design of a corrective action program have been satisfactorily completed.
3. **Sample Collection and Analysis Plan**. Within **90 days** of the adoption of these WDRs, the Discharger shall submit, for review and approval by the Regional Water Board’s Executive Officer, a comprehensive Sample Collection and Analysis Plan (SCAP) that shall describe in detail the methods to be used to perform all monitoring activities for all onsite features, including:
- a. Sample collection procedures describing purging techniques, sampling equipment, and decontamination of sampling equipment;
  - b. Sample preservation information and shipment procedures;
  - c. Sample analytical methods and procedures;
  - d. Sample quality assurance/quality control (QA/QC) procedures;
  - e. Chain of custody control; and
  - f. Sample analysis information including sample preparation techniques to avoid matrix interferences, method detection limits (MDLs), practical quantitation limits (PQLs) and reporting limits (RLs), and procedures for reporting trace results between the MDL and PQL.

Once the SCAP is approved, the Discharger may request changes to the approved SCAP, as needed, but shall use the procedures described in the approved SCAP until such changes are authorized by the Regional Water Board’s Executive Officer.

4. **Groundwater Monitoring Wells Workplan.** Within **120 days** of the adoption of this Order, the Discharger shall submit to the Regional Water Board for review and approval a workplan that describes how many new wells are needed to properly monitor groundwater at the Facility in compliance with California Code of Regulations, title 27, section 20415, and propose a time schedule, location(s), and methods of installation for the new monitoring well(s). At least one of these wells shall be located to provide the earliest possible detection of a release from the Surface Impoundment.

#### **G. Corrective Action Specifications**

1. For all waste management units in a corrective action program to address a release from the unit, the Discharger shall implement all corrective measures necessary to remediate the release and to ensure that the Discharger achieves compliance with the Water Quality Protection Standard (as defined in the MRP) adopted for that unit. To show cleanup of all water-bearing media affected by the release, the Discharger shall complete the demonstration required under California Code of Regulations, title 27, section 20430(g).
2. The cessation of any corrective action measure (e.g. landfill gas, leachate, and groundwater extraction) is prohibited without written approval from the Regional Water Board's Executive Officer. If routine maintenance or a breakdown results in cessation of corrective action for greater than **24 hours**, the Discharger shall notify Regional Water Board staff.
3. Following an earthquake that generates significant ground shaking (Modified Mercalli Intensity Scale V or greater) at or near the Facility, the Discharger shall submit a detailed post-earthquake inspection and corrective action plan. The plan shall address damage to and corrective measures for: containment structures; leachate control and stormwater management systems; wells and equipment to monitor groundwater and landfill gas; and any other system/structure potentially impacted by static and seismic deformations of the waste management unit. The Discharger shall notify the Regional Water Board Executive Officer immediately, but no later than **24 hours**, of damage to the Facility due to an earthquake, and provide a post-earthquake inspection report within **15 business days**.

#### **H. Financial Assurances Specifications**

1. The Discharger shall obtain and maintain adequate assurances of financial responsibility for closure, post-closure maintenance, and corrective action for all known and reasonably foreseeable releases from a waste management unit at the Facility in accordance with California Code of Regulations, title 27, sections 20380(b) and 20950 and subchapter 2 ("Financial Assurance Requirements") of division 2, subdivision 1, chapter 6 of title 27.

2. The Discharger shall demonstrate to CalRecycle and report to the Regional Water Board that it has established acceptable financial assurance mechanisms described in subchapter 3 (“Allowable Mechanisms”) of California Code of Regulations, title 27, division 2, subdivision 1, chapter 6 in at least the amount of the cost estimates for closure, post-closure maintenance, and corrective action approved by the Regional Water Board’s Executive Officer.
3. **Yearly Financial Assurances Report.** The Discharger shall submit, by June 1 of each year, a report calculating the increase in the cost estimates for closure, post-closure maintenance, and corrective action due to the inflation factor (specified in Cal. Code Regs., tit. 27, § 22236) for the previous calendar year.
4. Documents supporting the amount and active status of the required financial assurance mechanisms shall be included in the Facility’s JTD and revisions. Annual cost estimates and inflation factors shall be submitted to the Regional Water Board as an addendum to the JTD.

#### **I. Closure and Post-Closure Specifications**

1. The Discharger shall notify the Regional Water Board in writing of the final closure or partial final closure of a waste management unit as follows:
  - a. Landfill Units. For landfill waste management units, notice shall be given either: (1) at the same time that CalRecycle is notified under California Code of Regulations, title 27, section 21110, or (2) **180 days** prior to beginning any final closure activities, whichever is sooner.
  - b. Non-Landfill Units. For non-landfill waste management units (including Class II surface impoundments), notice shall be given at least **180 days** prior to beginning any final closure activities.
  - c. Affirmation. The notice shall include a statement that all closure activities will conform to the most recently-approved final or partial final closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations.
2. The Discharger shall carry out closure of a waste management unit or a portion of a unit only in accordance with a closure and post-closure maintenance plan approved by the Regional Water Board (Cal. Code Regs., tit. 27, §§ 20950(a)(1), 21769(d)) through the issuance of closure WDRs.

#### **J. Standard Provisions**

1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and MRP R7-2020-0005. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2)

termination, revocation and reissuance, or modification of these WDRs; or (3) denial of an Order renewal application.

2. **Enforcement.** The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
3. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.
4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board office and the Office of Emergency Services within 24 hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled Self-Monitoring Reports (SMRs), or earlier if requested by the Regional Water Board's Executive Officer.
5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
6. **Material Changes.** Before initiating a new discharge or making a material change in the character, location, or volume of an existing discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and if required by the Regional Water Board, obtain revised

requirements before any modifications are implemented. A material change includes, but is not limited to, the following:

- a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements;
  - b. A significant change in disposal method, location, or volume (e.g., change from land disposal to land treatment);
  - c. A change in the type of waste being accepted for disposal; or
  - d. A change to previously-approved liner systems or final cover systems that would eliminate components or reduce the engineering properties of components.
7. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and shall maintain a copy of this Order at the site.
8. **Inspection and Entry.** The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
- a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
9. **Change in Ownership.** This Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.

10. **Monitoring Wells.** The Discharger shall comply with all notice and reporting requirements of the California Department of Water Resources and with any well permitting requirements imposed by a local agency regarding the construction, alteration, destruction, maintenance, or abandonment of any monitoring wells used for compliance with this Order and the accompanying MRP, as required under Water Code sections 13750 and 13755 and local agency requirements.
11. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with California Code of Regulations, title 23, division 3, chapter 30, as groundwater raw data uploads electronically over the internet into the State Water Board's [GeoTracker](#) database. Documents that were formerly mailed by the Discharger to the Regional Water Board, such as regulatory documents, narrative monitoring reports or materials, and correspondence, shall be uploaded into GeoTracker in the appropriate Microsoft Office software application format, such as Word or Excel files, or as a Portable Document Format (PDF) file. Large documents must be split into appropriately-labelled, manageable file sizes and uploaded into GeoTracker.
12. **Qualified Professionals.** In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, describe the conduct of investigations and studies, or contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.
13. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.



14. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
15. **Property Rights.** This Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights.
16. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Regional Water Board (including revisions to the Basin Plan), or federal government.
17. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30<sup>th</sup> day after the date of this Order; if the 30<sup>th</sup> day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the statutes and regulations applicable to filing petitions are available on the State Water Board's website and can be provided upon request.

#### **Order Attachments**

Attachment A—Vicinity Map

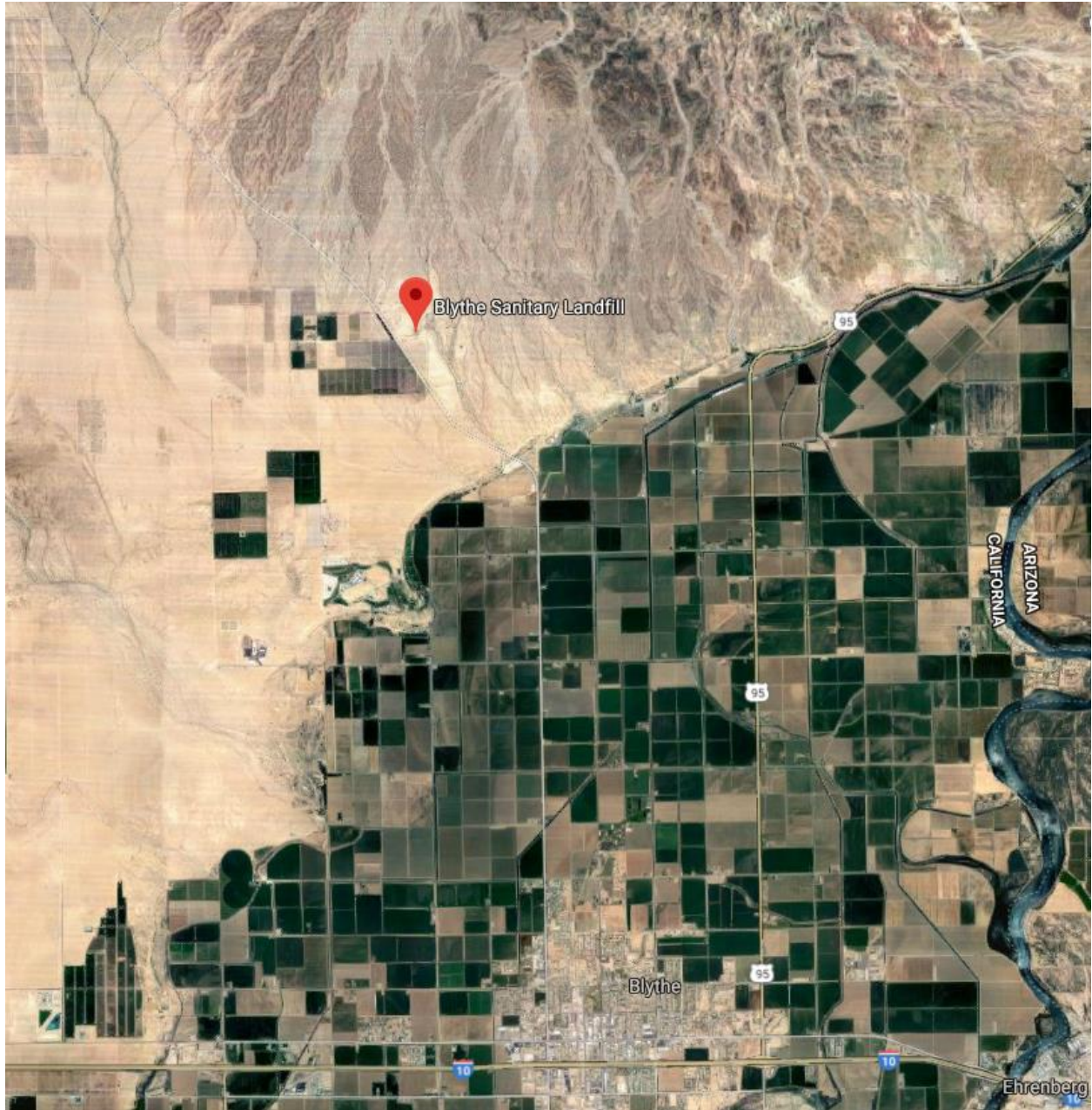
Attachment B—Site Map

Attachment C—Groundwater Monitoring Wells Locations

Attachment D—Gas Probes Locations

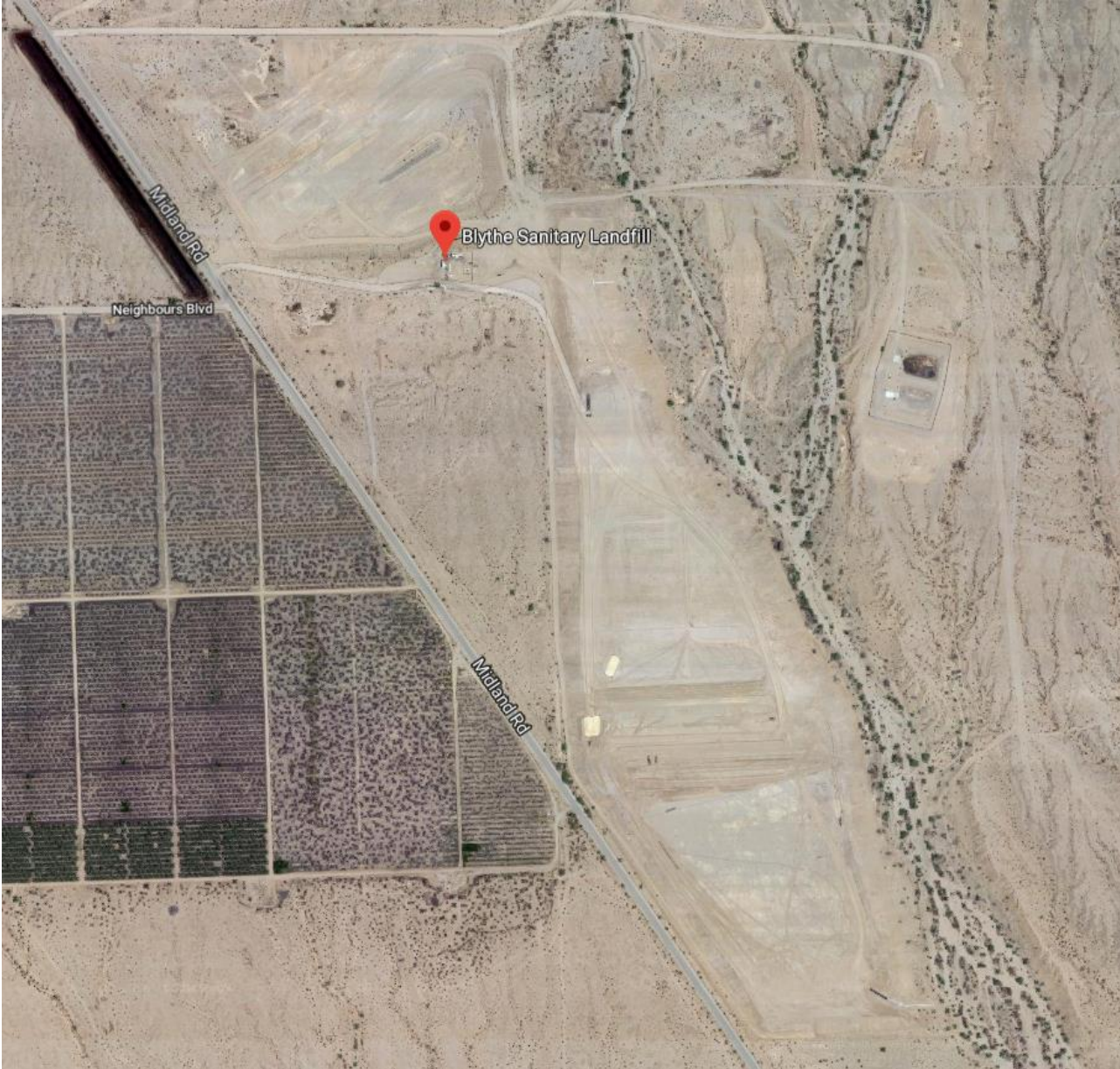
Monitoring and Reporting Program R7-2020-0005

**ATTACHMENT A—VICINITY MAP**

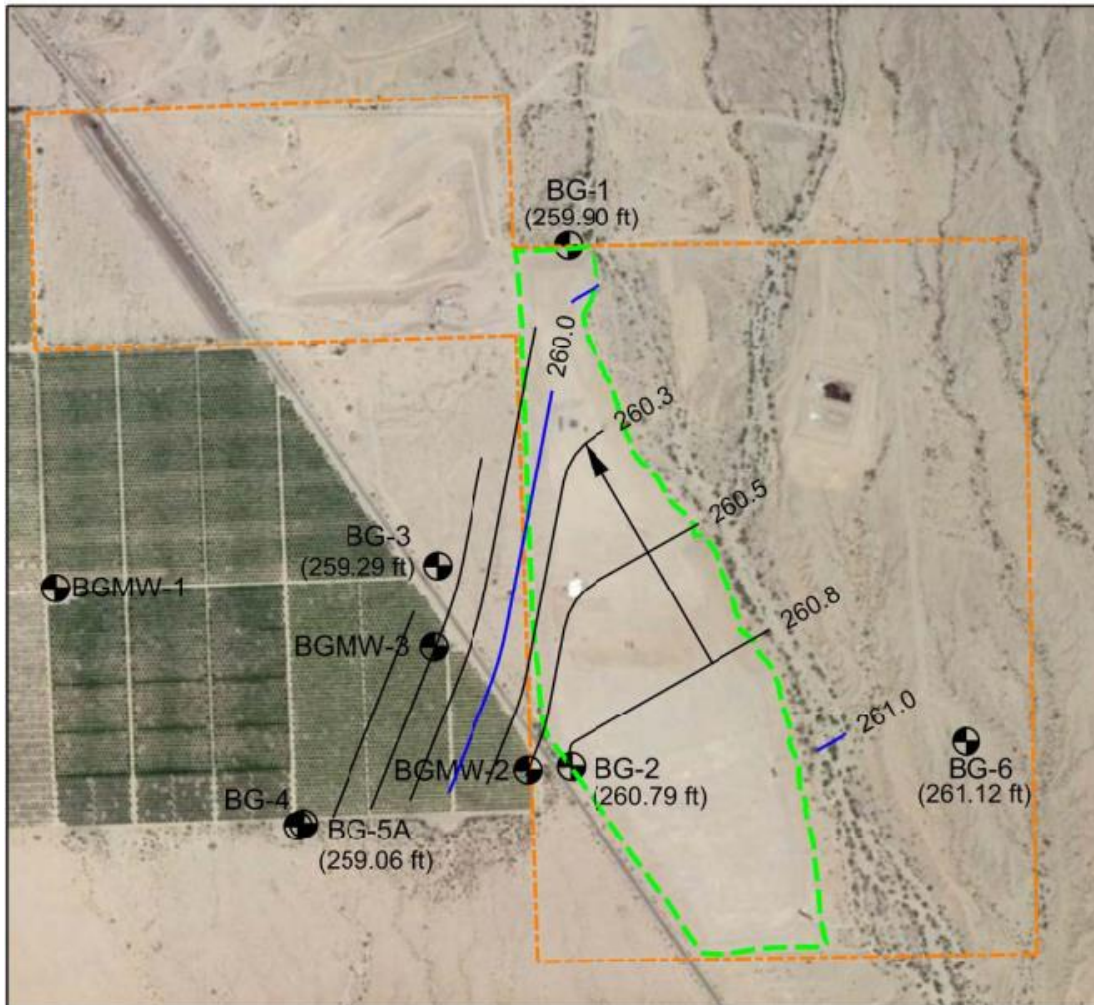




**ATTACHMENT B—SITE MAP**

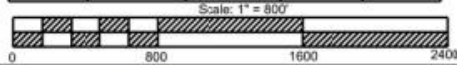


**ATTACHMENT C—GROUNDWATER MONITORING WELL LOCATIONS**



Note: Approximate location for BGMW-1, BGMW-2 and BGMW-3. These wells were not utilized to create the groundwater contours.

Well I.D.	Coordinates		Wellhead Elevation	Ground Elevation
	Northing	Easting		
BG-1	2204284.371	7056088.156	441.50	436.95
BG-2	2201397.570	7056100.817	423.28	419.27
BG-3	2202508.135	7055364.261	432.30	432.45
BG-4	2201068.580	7054592.477	418.32	415.93
BG-5A	2201080.319	7054621.768	418.32	415.84
BG-6	2201533.571	7058288.536	416.75	414.51



Legend	
	Groundwater Monitoring Well
	Landfill Footprint
	Property Line
	Groundwater Contours
	Groundwater Flow
	Groundwater Elevation Measurement in Parenthesis (257.61 ft)

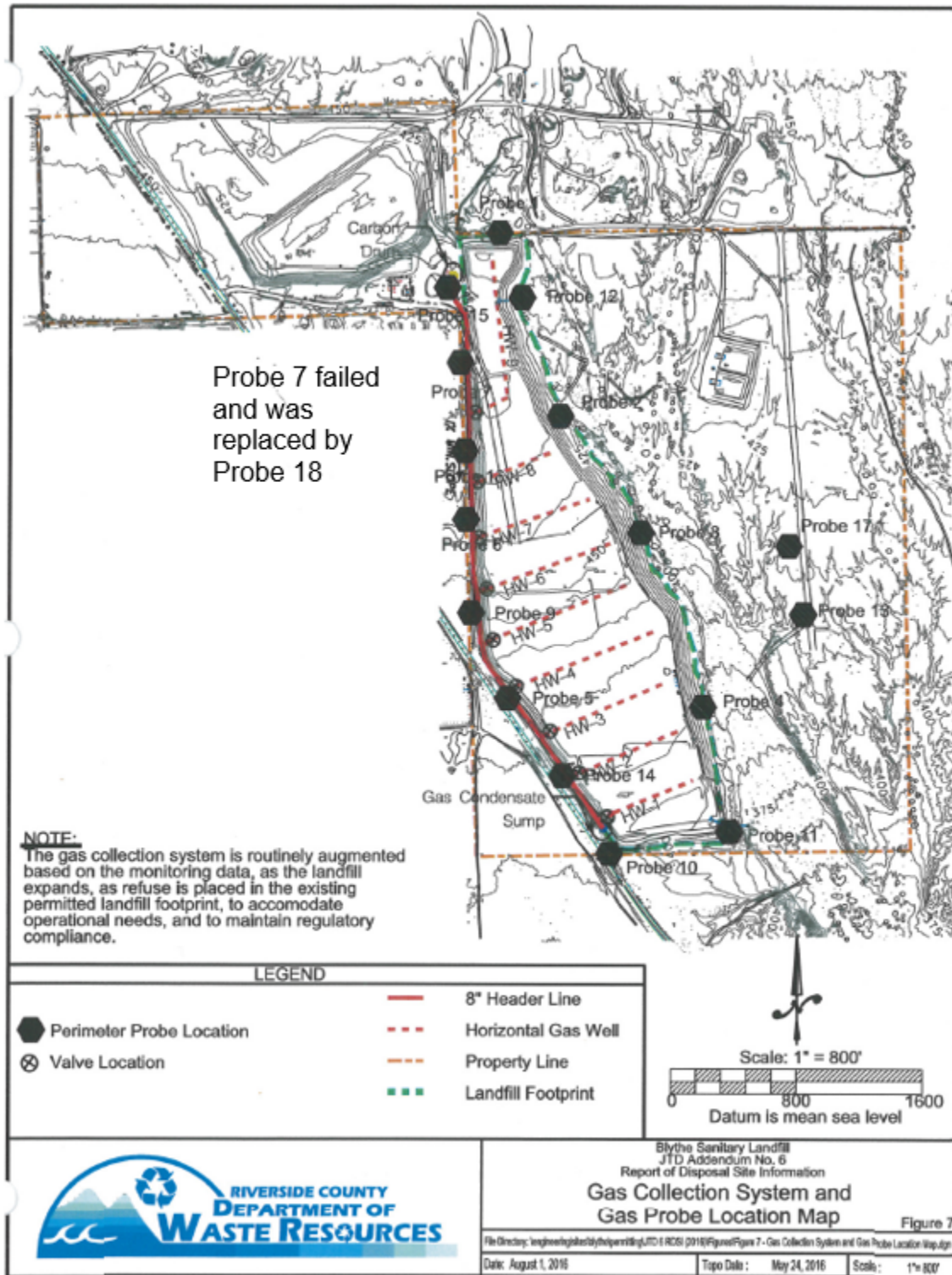


Blythe Sanitary Landfill - Fourth Quarter 2018  
 Groundwater Monitoring Well Locations and  
 Groundwater Contour Map

File Directory: \\waste\_1\enviro\sites\blythe\water\wrpts\bf1812 wrpt.dgn Date: January 15, 2019  
 Groundwater Elevations: December 2018 Photo Date: April 2011 Scale: Bar Scale



**ATTACHMENT D—GAS PROBE LOCATIONS**



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

**MONITORING AND REPORTING PROGRAM R7-2020-0005**  
FOR  
RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES  
BLYTHE WASTE MANAGEMENT FACILITY  
CLASS III MUNICIPAL LANDFILL  
CLASS II SURFACE IMPOUNDMENT  
RIVERSIDE COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and incorporates requirements for groundwater, surface water, and unsaturated zone detection monitoring, special monitoring provisions relating to individual waste management units (WMUs). Monitoring requirements in this MRP are necessary to determine if the Blythe Sanitary Landfill (Facility) is in compliance with Waste Discharge Requirements (WDRs) Order R7-2020-0005 (Order) and to ensure early detection of any releases of waste constituents from the Facility. The Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) or its Executive Officer.

**PART I: SAMPLING AND ANALYSIS GENERAL REQUIREMENTS**

**A. Sampling and Analysis General Requirements**

1. As provided in Monitoring Specification F.3 of the Order, the Discharger shall submit a Sample Collection and Analysis Plan (SCAP) that incorporates the standard monitoring provisions below and describes the sampling and analysis protocols to be used for all monitoring activities, including for the groundwater and vadose zone detection programs at the Facility. The SCAP must be received by the Regional Water Board within 90 days of adoption of the Order and this MRP.
2. Once the SCAP is approved, the Discharger may request changes to the approved SCAP, as needed, but shall use the procedures described in the approved SCAP until such changes are authorized by the Regional Water Board's Executive Officer.

**B. Standard Monitoring Provisions**

1. **Analytical Methods.** Specific methods of analysis for monitored waste constituents shall be identified in the SCAP. If the Discharger proposes to use methods other than those in the latest edition of the U.S. Environmental Protection Agency's (USEPA) *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium (SW-846)* or *Guidelines Establishing*

*Test Procedures for Analysis of Pollutants*, 40 Code of Federal Regulations part 136, the SCAP must explain the rationale for the change. The change must be approved by the Regional Water Board's Executive Officer prior to use.

2. **Monitoring Test Procedures.** The collection, preservation, and holding times of all samples shall be in accordance with protocols included in USEPA's SW-846 or 40 Code of Federal Regulations part 136, or as otherwise approved by the Regional Water Board. The Regional Water Board may, in its discretion, require methods more sensitive than those specified by USEPA.
3. **30-Day Sample Procurement Limitation.** For any given monitored medium, the samples collected from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be collected within a span not to exceed 30 days, unless a longer time period is approved by the Regional Water Board's Executive Officer, and shall be collected in a manner that ensures sample independence to the greatest extent feasible. The 30-day limit does not apply to media that (1) are resampled to confirm the results of the initial round of samples, or (2) are resampled due to errors in the original sampling and analysis, but the Discharger shall conduct the resampling as expeditiously as practical.
4. **Laboratory Certification.** Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Resources Control Board (State Water Board), Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP).
5. **Reporting Levels.** All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or limits of quantitation (LOQs) according to 40 Code of Federal Regulations part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the practical quantitation limit (PQL).
6. **QA/QC Data.** All quality control / quality assurance (QA/QC) data shall be reported, along with the sample results to which they apply, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of any recovery rate that is less than 80%, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analyses, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged, but the analytical results shall not be adjusted.
7. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated, as necessary, to ensure their continued accuracy. If

continuous monitoring equipment is out of service for a period greater than 24 hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

8. **Field Test Instruments.** Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
  - a. The user is trained in proper use and maintenance of the instruments;
  - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
  - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
  - d. Field calibration reports are submitted.
9. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a minimum of five years from the date of the sampling or measurement. This period may be extended by request of the Regional Water Board's Executive Officer at any time. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurement(s);
  - b. The individual(s) who performed the sampling or measurement(s);
  - c. The methods used for groundwater purging/sampling;
  - d. The date(s) analyses were performed;
  - e. The individual(s) who performed the analyses;
  - f. The analytical techniques or method used; and
  - g. All sampling and analytical results, including:
    - I. units of measurement used;
    - II. minimum reporting limit for the analyses;
    - III. results less than the reporting limit but above the method detection limit (MDL);
    - IV. data qualifiers and a description of the qualifiers;
    - V. quality control test results (and a written copy of the laboratory quality assurance plan);



- VI. dilution factors, if used; and
- VII. sample matrix type.

**PART II: SITE-SPECIFIC MONITORING REQUIREMENTS**

This part describes the site-specific monitoring program requirements to be implemented for the Facility and is organized by the type of monitoring to be performed. The methods used shall be as described in the approved SCAP.

The site-specific monitoring program of this MRP includes:

**Table 1. Summary of Site-Specific Monitoring**

Section	Monitoring Program
A	Groundwater Monitoring
B	Unsaturated Zone Monitoring
C	Surface Water Monitoring
D	Special WMU Monitoring – LF-1
E	Special WMU Monitoring – IMP-2
F	Evaluation Monitoring
G	Corrective Action Monitoring

**A. Groundwater Monitoring**

The Discharger shall operate and maintain a groundwater monitoring system that complies with the applicable provisions of California Code of Regulations, title 27, sections 20415 and 20420. Monitoring shall be performed in accordance with the locations, frequencies, and parameters described below:

**1. Monitoring Well Locations**

Upgradient wells are considered background monitoring points. Downgradient wells where no releases have been detected are used for detection monitoring. Downgradient wells where releases have been detected are part of corrective action (Corr. Action) monitoring. The groundwater monitoring network shall consist of the following monitoring wells and any new monitoring wells added at the Facility (as approved by the Regional Water Board’s Executive Officer):

**Table 2. Monitoring Wells Summary**

Well	WMU	Monitored Status	Frequency
BG-1	LF-1	Detection	Semi-Annually

Well	WMU	Monitored Status	Frequency
BG-2	LF-1	Corr.Action	Semi-Annually
BG-3	LF-1	Detection	Semi-Annually
BG-5A	LF-1	Detection	Semi-Annually
BG-6	Background	Detection	Semi-Annually

BGMW-01 through -03 are offsite irrigation wells that are also used to monitor groundwater quality.

**Groundwater Monitoring Wells Workplan.** As provided in Monitoring Specification F.4 of the Order, the Discharger is required to submit a workplan for the installation of additional groundwater monitoring wells within **120 days** of adoption of the Order.

## 2. **Parameters/Constituents Monitored**

Groundwater samples shall be collected from the detection monitoring wells and corrective action monitoring wells, and any additional wells added as part of the approved groundwater monitoring system. The collected samples shall be analyzed for the Monitoring Parameters and Constituents of Concern specified below in accordance with the specified methods and frequencies.

“Monitoring Parameters” and “Constituents of Concern” shall have the meaning specified in California Code of Regulations, title 27, section 20164. “Monitoring Parameters” means the group of constituents specified below and includes physical parameters, waste constituents, reaction products, and hazardous constituents that provide a reliable indication of a release from a waste management unit. “Constituents of Concern” (COCs) include a larger group of waste constituents and mean any waste constituents, reaction products, and hazardous constituents reasonably expected to be in or derived from waste contained in a waste management unit.

Various Constituents of Concern are included as Monitoring Parameters, although the full list of Constituents of Concern are not included as Monitoring Parameters and need only be sampled for once every 5 years, as specified below.

a. **Monitoring Parameters**

“Monitoring Parameters” shall consist of the (1) Field Monitoring Parameters and (2) Laboratory Monitoring Parameters specified below:

- I. Field Monitoring Parameters – During each groundwater monitoring event,<sup>5</sup> the following field parameters shall be measured:

**Table 3. Field Parameters Monitoring**

Parameter	Unit
pH	pH units
Groundwater elevation <sup>6</sup>	Feet above sea level (USGS Datum)
Specific conductance	Micromhos/cm
Temperature	Degrees F
Turbidity	Nephelometric Turbidity Units (NTU)
Dissolved oxygen	Milligrams per liter (mg/L) and percent saturation
Oxidation-Reduction Potential (ORP)	Millivolts (mV)

- II. Laboratory Monitoring Parameters – Twice per year (semi-annually), groundwater samples shall be analyzed at a laboratory for the following constituents (at a minimum):

**Table 4. Laboratory Monitoring Parameters Monitoring**

Constituents	Units	Sample Type	Reporting Freq.
Total Dissolved Solids	mg/L	Grab	Semi-Annually
Bicarbonate (HCO <sub>3</sub> )	mg/L	Grab	Semi-Annually
Chloride	mg/L	Grab	Semi-Annually
Nitrate (as N)	mg/L	Grab	Semi-Annually
Nitrite (as N)	mg/L	Grab	Semi-Annually
Chemical Oxygen Demand (COD)	mg/L	Grab	Semi-Annually

<sup>5</sup> Pursuant to Cal. Code Regs., tit. 27, § 20415(e)(13).

<sup>6</sup> Semi-annual measurement of groundwater elevations is approved pursuant to title 27, section 20380(e), allowing engineered alternatives provided they achieve the goals of the monitoring program.

Constituents	Units	Sample Type	Reporting Freq.
Biological Oxygen Demand (BOD)	mg/L	Grab	Semi-Annually
Volatile Organic Compounds (VOCs)	mg/L	Grab	Semi-Annually

**b. Additional Constituents of Concern, Required Every Five Years (5-Year COCs)**

In addition to the Monitoring Parameters listed above, the groundwater shall be analyzed at a laboratory every five years, with the next monitoring event to be performed in the first half of 2022, and alternating between the two monitoring episodes for each five-year reporting period thereafter, for the following 5-Year COCs (and any additional COCs required by the Regional Water Board’s Executive Officer):

**Table 5. List of 5-Year COCs**

Constituent
1. Total Dissolved Solids
2. Total Alkalinity
3. Dissolved Oxygen
4. Total Phosphate
5. Total Hardness
6. Magnesium
7. Iron
8. Antimony, Total
9. Beryllium, Total
10. Cobalt, Total
11. Nickel
12. Thallium, Total
13. Zinc, Total
14. Appendix II Pesticides
15. Appendix II Semi-volatiles
16. pH
17. Nitrate (as N)
18. Cyanide
19. Bicarbonate (HCO <sub>3</sub> )
20. Hydroxide
21. Phosphate
22. Total Cations
23. Boron
24. Potassium
25. Manganese
26. Arsenic, Total
27. Cadmium, Total
28. Lead, Total
29. Selenium, Total

Constituent
30. Tin, Total
31. Chromium Hexavalent
32. Appendix II Herbicides
33. Total Organic Halogens
34. Specific Conductance
35. Total Organic Carbon
36. Carbonate (CaCO <sub>3</sub> )
37. Fluoride
38. Chemical Oxygen Demand
39. Total Anions
40. Calcium
41. Sodium
42. Zinc
43. Barium, Total
44. Chromium, Total
45. Mercury, Total
46. Silver, Total
47. Vanadium, Total
48. DBCP and EDB
49. Volatiles (EPA Method 8260)
50. Sulfide
51. Chloride
52. Phenols (EPA Method 8270)

The results of the 5-Year COC sampling shall be reported in the Annual Monitoring Report for the year in which the samples were collected.

Note that the broader term “COCs” includes both the Monitoring Parameters and 5-Year COCs.

**B. Unsaturated Zone Monitoring**

The Discharger shall operate and maintain an unsaturated/vadose zone detection monitoring system that complies with the applicable provisions of California Code of Regulations, title 27, sections 20415 and 20420.

Unsaturated zone monitoring at the Facility includes soil pore gas (soil-gas) monitoring around the Landfill (LF-1) area through two multi-level gas probes located spaced less than 1,000 feet around the perimeter of the Landfill. No soil pore liquid or soil moisture monitoring is required at this time.

**1. Soil Gas Monitoring**

- a. The gas probes at the Landfill (L-1) shall be monitored quarterly for:

**Table 6. Soil-Gas Monitoring**

Parameter
CH <sub>4</sub>

Parameter
CO <sub>2</sub>
O <sub>2</sub>
Balance Gases
Static Pressure

- b. The Discharger shall use a field screening protocol for soil-gas monitoring. The results of this monitoring shall be included in the Semi-Annual Report for that reporting period.

### C. Surface Water Monitoring

Perennial streams are not located at the Facility and the occurrence of surface water should be limited to (1) immediately after significant storm events, and (2) if seeps develop along the perimeter of a waste management unit.

1. **Observed Surface Water Monitoring.** If surface water is observed at the Facility, the source of the surface water shall be identified, and observations of the following shall be included in the next Semi-Annual Monitoring Report:
  - a. Flow rate and source of water;
  - b. Floating and suspended materials of waste origin: Presence or absence, source, and size of affected area;
  - c. Discoloration and turbidity: Description of color, source, and size of affected area;
  - d. Evidence of odors: Presence or absence, characterization, source, and distance of travel from source; and
  - e. Weather conditions: Wind direction and estimated velocity, total precipitation during the previous five (5) days and on the day of observation.
2. **Stormwater Monitoring.** After each significant storm event, the remaining freeboard (in vertical feet) and storage capacity (in gallons and/or acre-feet) of each stormwater retention basin shall be identified. If the remaining storage capacity of a stormwater retention basin drops below the volume needed to retain a 100-year storm event, the Discharger shall take steps to remove water from the stormwater basin until the remaining capacity is at least enough to hold a 100-year storm event. Any stormwater-related actions shall be reported in the next Semi-Annual Monitoring Report.
3. **Seep Monitoring.** If a seep is identified in proximity to any of the waste management units:

- a. The location, flow rate, and other characteristics (such as color and odor) shall be orally reported to the Regional Water Board within **48 hours**, and a written report concerning the seep shall be submitted to the Regional Water Board **within seven (7) days**.
- b. Flow from the seep shall be contained to preclude the seep from adversely affecting surface waters.
- c. A sample of the seepage shall be collected and tested for the Field Monitoring Parameters described in Part II.A.2.a.i.
- d. If the Field Monitoring Parameters indicate the seepage is not groundwater, or if it is unlikely the source of the seep is groundwater, the sample shall be analyzed for the Monitoring Parameters and 5-Year COCs described in Part II.A.2.a and b.
- e. The results of all testing shall be reported to the Regional Water Board **within seven (7) days** of receipt of the written laboratory report.
- f. Seeps that continue to exist for more than one reporting period shall be monitored during each reporting period and the results shall be included in the Semi-Annual Monitoring Report.

**D. Special WMU Monitoring – LF-1**

**1. Waste Monitoring**

- a. Incoming loads of waste shall be monitored, and the following information included in each Semi-Annual Report:

**Table 7. Landfill Waste Monitoring**

Parameter	Unit	Reporting Freq.
Solid waste discharged to Landfill	Cubic yards	Semi-Annually
Type of materials discharged	--	Semi-Annually
Remaining capacity of Landfill	Cubic yards	Semi-Annually
Any discharge of wastes other than those allowed by Order R7-2020-0005	Type, volume, and location	Immediately upon becoming aware that the waste has been discharged together with action for immediate correction and prevention of recurrence.
Hazardous waste load-checking and storage (not more than 90 days)	Cubic yards	Semi-Annually

**2. Landfill Gas Monitoring**

a. The Landfill gas shall be sampled annually for:

**Table 8. Landfill Gas Monitoring**

Parameter	Unit	Parameter	Unit
Hydrogen Sulfide	mg/l	Benzene	mg/L
Oxygen	mg/l	Carbon Tetrachloride	mg/L
Methane	mg/l	Toluene	mg/L
Carbon Monoxide	mg/l	1,2-Dibromomethane	mg/L
Total Gaseous Nonmethane Organics	mg/l	Trichloroethene	mg/L
Vinyl Chloride	mg/l	Tetrachloroethene	mg/L
1,1-Dichloroethene	mg/l	Chlorobenzene	mg/L
Methylene Chloride	mg/l	Total Xylenes	mg/L
1,1-Dichloroethane	mg/l	Benzyl Chloride	mg/L
Chloroform	mg/l	1,3-Dichlorobenzene	mg/L
1,2-Dichloroethane	mg/l	1,4-Dichlorobenzene	mg/L
1,1,1-Trichloroethane	mg/l	1,2-Dichlorobenzene	mg/L

b. The gas condensate from the gas extraction system shall be sampled annually for the Laboratory Monitoring Parameters listed in Part II.A.2.a.II. The results shall be submitted annually.

**E. Special WMU Monitoring – IMP-2**

**1. Waste Capacity Monitoring**

The following shall be monitored at least monthly and included in the Semi-Annual Monitoring Report:

- a. The water level and freeboard in each impoundment cell, and the available storage capacity of the impoundment cells.
- b. The volume of liquid waste discharged into the surface impoundments in gallons.



- c. Observations of erosion, settlement, and/or subsidence along the visible areas of the impoundment(s), including the top of the berm, outer slopes, and upper region of the inner slope. Repairs shall be performed as needed and documented in the inspection logs.

## 2. LCRS Monitoring

- a. The Surface Impoundment (IMP-2) consists of two pond areas within a single double-liner containment system. The double-liner system has a primary HDPE liner and a lower HDPE liner separated by a Leachate Collection and Removal System (LCRS). The LCRS consists of a two-foot thick sand layer under the bottom of the impoundment, and 8-oz geotextile along the side slopes, which collects liquids that leak through the primary liner. The collection layer drains to a centrally-located swale containing gravel and a 6-inch diameter drainage pipe. The drainage pipe slopes westward to a 36-inch diameter vertical HDPE pipe located beyond the footprint of the impoundment that is used as a sump to collect and hold leachate pending removal. The elevation of the bottom of the sump is approximately eight feet lower than the bottom of the liner, for a total storage volume of about 425 gallons.
- b. The Facility shall monitor the height of liquid in the LCRS sump at least **weekly** to an accuracy of one-quarter (1/4) inch. The Discharger shall record the data in the weekly monitoring logs and include the data in the Semi-Annual Monitoring Report.
- c. The Discharger shall measure the electrical conductivity and pH of any liquid in the sumps **quarterly**;
- d. The Discharger shall remove fluids from the LCRS sump as often as needed to prevent the liquid in the LCRS from backing up into the lined portion of the LCRS. The Discharger shall use this information to identify the leakage rate into the sump. The removal dates, volumes and calculated leakage rates shall be included in the Semi-Annual Monitoring Report.
- e. If an automated sump-pump is installed, an alarm shall also be installed to indicate if the sump fills beyond the upper limit of the sump-pump settings. Automated systems shall also include a means of monitoring changes in the height of liquid in the sump and measuring the frequency and volume of pumping. This data shall be converted to a daily leakage rate and summarized in the Semi-Annual Monitoring Report.
- f. The rate at which liquid accumulates in the sump shall be calculated using the difference between the last reading obtained during one visit and the first reading obtained during the next visit and reported in gallons per day. If the liquid extends higher in the LCRS sump than the connection point of the drainage pipe leading from the LCRS, the volume of that drainage pipe shall be included in the calculation.

- g. If leakage rates exceed the reporting threshold (RT) of 212 gpd, the Discharger shall follow the steps in Part II.F.3 – Excessive Leachate Production.
- h. The Discharger shall test each LCRCs annually pursuant to California Code of Regulations, title 27, section 20340(d) to demonstrate proper operation. Except for the first annual test, the results of this testing shall be compared to earlier tests made under comparable conditions.

## F. Evaluation Monitoring

### 1. Notification of a Release

Should the Discharger discover a release from the Facility, the Discharger shall:

- a. Initial Notification. Notify the Regional Water Board by phone or e-mail **within 24 hours**, and by mail **within seven days**, when the Discharger determines from monitoring results that there is measurably significant evidence of a release. (Cal. Code Regs., tit. 27, § 20420(j)(1).)
- b. Retest. The Discharger may immediately initiate the verification procedure specified in Part III.B.3 to verify that there is a “measurably significant” evidence of a release of particular constituent.<sup>7</sup> (Cal. Code Regs., tit. 27, § 20420(j)(2).)
- c. Notice to Nearby Landowners. The Discharger shall, **within 14 days** of confirming measurably significant evidence of a release, notify all persons who own the land or reside on the land that directly overlies any portion of the plume of contamination, if sampling of detection monitoring wells indicates contaminants have migrated off-site. (40 C.F.R. § 258.55(g)(1)(iii).)

### 2. Evaluation of a Release

If the Discharger determines that a previously unknown release from the Facility has occurred, the following actions shall be taken:

- a. Non-Statistical COC Scan. If the detection was made based upon sampling and analysis for Monitoring Parameters, the Discharger shall immediately sample all monitoring points in the affected medium at that waste management unit and determine the concentration of all Monitoring Parameters and Constituents of Concern for comparison with established concentration limits. Because this scan does not involve statistical testing, the Discharger will only need to collect and analyze a single water sample

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<sup>7</sup> Under California Code of Regulations, title 27, section 20420(k)(7), the Discharger may also demonstrate that a source other than the waste management unit caused the release.

from each monitoring point in the affected medium. (Cal. Code Regs., tit. 27, § 20420(k)(1).)

- b. Amended ROWD for Evaluation Monitoring Program (EMP). The Discharger shall, **within 90 days** of confirming a measurably significant evidence of a release, submit an amended Report of Waste Discharge (ROWD) proposing an evaluation monitoring program that meets the requirements of California Code of Regulations, title 27, sections 20420(k)(5) and 20425. The evaluation monitoring program shall be designed for the collection and analysis of all data necessary to assess the nature and extent of the release and to determine the spatial distribution and concentration of each constituent throughout the zone affected by the release. (Cal. Code Regs., tit. 27, §§ 20420(k)(5) and 20425(b).) For releases from MSW landfill units, the evaluation monitoring program shall also include any additional proposals necessary to comply with 40 C.F.R. § 258.55, particularly the additional monitoring wells required by 40 C.F.R. § 258.55(g)(1)(ii). Additionally, the Discharger shall add any 5-Year COC for which there is a confirmed measurably significant release to the list of Monitoring Parameters.
- c. Preliminary EFS. The Discharger shall, **within 180 days** of confirming a measurably significant evidence of a release, submit to the Regional Water Board a preliminary engineering feasibility study (EFS) report for a corrective action program that meets the requirements of California Code of Regulations, title 27, sections 20420(k)(6) and 20430. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all COCs.
- d. Additional EMP Required Actions. The Discharger shall, **within 90 days** of establishing an evaluation monitoring program (i.e., from the date of Regional Water Board approval of the program), complete and submit the following:
  - i. A report with the results and assessment/delineation of the release based on the approved evaluation monitoring program. (Cal. Code Regs, tit. 27 § 20425(b).)
  - ii. An updated engineering feasibility study for corrective action based on the data collected to delineate the release and data from the ongoing monitoring program required under title 27, section 20425(e). (Cal. Code Regs., tit. 27, § 20425(c).)
  - iii. An amended ROWD to establish a corrective action program meeting the requirements of title 27, section 20430 based on the

data collected to delineate the release and based on the updated engineering feasibility study. (Cal. Code Regs., tit. 27, § 20425(d).)<sup>8</sup>

**3. Excessive Leachate Production – IMP-2**

- a. If leakage rates in any LCRS exceed the reporting threshold (RT), the Discharger shall report this to the Regional Water Board within **48 hours** and propose further actions to evaluate whether repairs are needed. Unless a Facility-specific RT is approved by the Regional Water Board, the default RT shall be one half of the volume of the sump per day, which equates to 212 gpd for this LCRS.

**G. Corrective Action Monitoring**

The Discharger shall conduct corrective action monitoring to demonstrate the effectiveness of corrective action in accordance with California Code of Regulations, title 27, section 20430 and this MRP. The Discharger shall comply with the gas monitoring requirements in compliance with Parts II.D.2 of this MRP.

**PART III: EVALUATION OF MONITORING DATA**

Part III of this MRP provides the requirements for the analysis of detection, evaluation, and corrective action monitoring data collected from monitoring wells associated with the Facility.

**A. Water Quality Protection Standard**

For each waste management unit, the Water Quality Protection Standard (Water Standard) consists of all COCs (under title 27, section 20395), the concentration limit for each COC (under title 27, section 20400), and the points of compliance for each monitored medium (under title 27, section 20405) for the duration of the compliance period (under title 27, section 20410).

**1. Constituents of Concern (COCs)**

- a. The COCs are as defined above in Part II.A.2 and include both Monitoring Parameters and 5-Year COCs.

**2. Concentration Limits**

- a. **Default Limits.** The following concentration limits shall apply, unless the Regional Water Board approves a Concentration Limit Greater than

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<sup>8</sup> The Discharger shall (for releases from MSW landfill units) discuss the results of the updated engineering feasibility study, prior to the final selection of a remedy, in a public meeting with interested and affected parties. (40 C.F.R. § 258.56(d).)

Background (CLGB), as provided in Part III.A.2.b below:

- i. **Non-natural Constituents.** For COCs that are not naturally occurring, the concentration limit shall be the detection limit of the laboratory testing procedure.
  - ii. **Naturally-Occurring Constituents.** For naturally-occurring COCs, the concentration limit shall be the background concentration determined through either inter-well or intra-well comparisons.
- b. **CLGB.** Use of a CLGB may be proposed by the Discharger provided it is justified through a statistical analysis of relevant data (including the background dataset) and a demonstration that background concentrations would not be technologically or economically feasible for the COCs for a given monitoring well. (Cal. Code Regs., tit. 27, § 20400, subd. (c).) A concentration limit greater than background will only be considered for COCs present in monitoring wells associated with corrective action monitoring. (Cal. Code Regs., tit. 27, § 20400, subd. (h).)
  - c. **Procedure for Approval of Concentration Limits.** The Discharger shall submit a report proposing applicable background concentrations for each COC under Part III.A.2.a in the next Annual Monitoring Report. The Regional Water Board will review proposed concentration limits from the Discharger and approve, modify, or disapprove each proposed limit. (Cal. Code Regs., title 27, § 20400.) Following initial approval of the concentration limits, the Discharger shall reevaluate and propose any updates to the concentration limits **every two years** thereafter.

### 3. **Compliance Period**

- a. The compliance period for each waste management unit includes the active life of each waste management unit, the closure period, the post-closure maintenance period, and any compliance period under California Code of Regulations, title 27, section 20410.

### 4. **Points of Compliance**

- a. All monitoring wells established for the detection monitoring program shall constitute the points of compliance for the Water Standard.

## **B. Statistical and Non-Statistical Analysis of Data**

### 1. **General Requirements**

- a. California Code of Regulations, title 27, section 20415(e) describes a range of statistical and non-statistical data analysis methods that can be used to evaluate data collected during monitoring. In addition, USEPA published

*Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (EPA 530/R-09-007) in 2009.

- b. The Discharger shall evaluate the data obtained during a monitoring period using either a statistical or non-statistical method described in title 27 or may propose another method for approval by the Regional Water Board's Executive Officer, as long as it achieves the goal of the monitoring program at least as well as the most appropriate method described in title 27, section 20415.
- c. The Discharger shall propose data analysis methods to be used in evaluating water quality monitoring data for each COC. (Cal. Code Regs., tit. 27, § 20415(e)(7).) The specifications for each data analysis method shall include a detailed description of the criteria to be used for determining "measurably significant" (as that term is defined in title 27, 20164) evidence of any release from the waste management unit and for determining compliance with the Water Standard.
- d. Monitoring reports shall describe the statistical or non-statistical method used for each COC at each monitoring point.

## 2. **Background Values**

- a. Pursuant to California Code of Regulations, title 27, section 20415(e)(10), the Discharger shall in a technical report justify the use of a procedure for determining the background value for each COC.
- b. Inter-well comparisons may be used where upgradient and downgradient wells intercept the same aquifer and are expected to have similar concentrations of naturally-occurring constituents. Intra-well comparisons shall be used where uncontaminated background wells are not present, or the chemical composition of upgradient and downgradient wells are significantly different.
- c. In establishing background values for COCs, the Discharger shall ensure that sampling methods used comply with California Code of Regulations, title 27, section 20415(e)(12), including that the number and kinds of samples collected must be appropriate for the form of data analysis employed and, in the case of statistical data analysis, follow generally accepted statistical principles. The sampling method (including the sampling frequency and the interval of time between successive samples) shall be appropriate for the medium from which samples are taken (e.g., groundwater, surface water, and soil-pore liquid). (See also Cal. Code Regs., tit. 27, § 20415(e)(6).) For groundwater, sampling shall be scheduled to include the times of expected highest and lowest elevations of the potentiometric surface.

### 3. **Determination of Measurably Significant Evidence of a Release**

- a. Initial Determination of Measurably Significant Evidence of a Release. The Discharger shall use a statistical or nonstatistical data analysis method that complies with California Code of Regulations, title 27, section 20415(e)(7)-(10) to compare the concentration of each COC with its respective background concentration to determine whether there has been measurably significant evidence of a release from the waste management unit. Whenever a COC is detected at a detection monitoring point at a concentration that exceeds the concentration limit from the Water Standard, the Discharger shall preliminarily conclude that there is measurably significant evidence of a release and follow the notification procedures in Part II.F.1. (Cal. Code Regs., tit. 27, § 20420(i).)
- b. Confirmation of a Measurably Significant Evidence of a Release. If there is a preliminary indication of a release, within **30 days** of such indication (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(3)), the Discharger may implement a verification procedure/retest option in accordance with California Code of Regulations, title 27, section 20415(e)(8)(E).<sup>9</sup>
  - i. Retest Method. The verification procedure shall include either: (1) a single “composite” retest (i.e., a statistical analysis that augments and reanalyzes the data from the monitoring point that indicated a release), or (2) at least two “discrete” retests (i.e., statistical analyses, each of which analyzes only newly-acquired data from the monitoring point that indicated a release). (Cal. Code Regs., tit. 27, § 20415(e)(8)(E).) The Discharger may use an alternate method with prior approval by the Regional Water Board that complies with the requirements of title 27, section 20415(e)(8)(E) in addition to the performance standards of title 27, section 20415(e)(9).
  - ii. Retest Samples. The retest samples shall be collected from the monitoring point where the release is preliminarily indicated and shall be analyzed for the constituents that caused the need for the retest. (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(7).)
  - iii. Retest Reporting. The Discharger shall report to the Regional Water Board the results of both the initial statistical test and the results of the verification procedure, as well as all concentration data collected for use in these tests, within **seven days** of the last

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<sup>9</sup> Under California Code of Regulations, title 27, section 20420(k)(7), the Discharger may also demonstrate that a source other than the waste management unit caused the release.

laboratory analysis of the samples collected for the verification procedure. (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(6).)

If the retest results of one or more of the retest data suites confirm the original indication, the Discharger shall conclude that measurably significant evidence of a release has been confirmed. The Discharger shall then follow the procedures identified in Part II.F.2.

#### **PART IV: REPORTS TO BE FILED WITH THE REGIONAL WATER BOARD**

Part IV provides a description of the reports required to be submitted to the Regional Water Board for the Facility.

##### **A. Required Reports**

1. **Semi-Annual Monitoring Reports** – For each monitored medium, all monitoring results shall be reported semi-annually. Semi-Annual Monitoring Reports shall include, at a minimum, the following:
  - a. **Topographic Map.** A topographic map (or copy of an aerial photograph), at an appropriate scale, identifying the maximum lateral extent of wastes in the Facility, the locations of observation stations, monitoring points, background monitoring points, the groundwater elevation contours with interpreted groundwater flow direction and gradient.
  - b. **Groundwater Elevations.** The method and time of groundwater elevation measurements, a description of the method used to purge the well and collect groundwater samples, and quality assurance/quality control (QA/QC) procedures used.
  - c. **Field Logs.** Field logs used during well purging and sampling. At a minimum, the field logs should include the following:
    - I. The well number;
    - II. The sampling date and time;
    - III. The method of monitoring Field Monitoring Parameters and calibration of equipment used to monitor Field Monitoring Parameters;
    - IV. The purge method (if a pump is used, include the depth of pump placement in each well and the pumping rate); and
    - V. The purge and sample collection information such as: date each well was purged; well recovery time; method of disposal of the purged water; an estimate of the volume of water purged from each well; the results of all field analyses; depth to groundwater prior to purging, at the conclusion of purging, and when the sample was



collected; the method of measuring the water level; and field personnel names and signature.

- d. **Data Tables.** Cumulative tabulated monitoring data for all monitoring points and constituents (including the Monitoring Parameters and 5-Year COCs). Concentrations below the laboratory reporting limit shall not be reported as “ND,” unless the reporting limit is also given in the table. Otherwise, they shall be reported “<” next to the reporting limit (e.g., <0.10). Upon request of Regional Water Board staff, data files shall be provided electronically in a file format approved by the Regional Water Board. Any electronic files submitted to the Regional Water Board in accordance with Order R9-2020-0005 and this MRP, shall not be password protected.
- e. **Graphical Display.** For monitoring wells in corrective action or evaluation monitoring, a graphical display of groundwater concentrations for all COCs for which there is measurably significant evidence of a release, including all historical data for those COCs from at least 5 years prior to the detection of a release at that location. Each graph shall plot the concentration of one or more constituents at an appropriate scale that allows changes in concentrations to be discerned, including the use of a semi-log scale for concentrations that change by more than three orders of magnitude.
- f. **Summary of Groundwater Conditions.** A written summary of the monitoring results and any changes to the groundwater monitoring system since the previous report. The written summary shall include a discussion of the groundwater flow rate and direction,<sup>10</sup> the appearance of trends or other information that may indicate a potential change in the hydrogeologic conditions beneath and adjacent to the Facility.
- g. **Evaluation of Groundwater Data.** An evaluation of the groundwater monitoring data analyzed according to the methods described in Part III of this MRP, and whether the analysis indicates a release of waste constituents or waste degradation products from the Facility.
- h. **Leachate Evaluation.** A summary of leachate data for each applicable waste management unit, including any laboratory results and measurements of the height of liquids in LCRS sumps. The Discharger shall also calculate the leakage rate.
- i. **Waste Volumes.** A summary of all required information concerning waste volumes for each applicable waste management unit.

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<sup>10</sup> The estimated quarterly groundwater flow rate and direction in the uppermost aquifer, in any zones of perched water, and in any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report. (Cal. Code Regs., tit 27, § 20415(e)(15).)

- j. **Evaluation of Corrective Actions.** A written summary that includes a discussion and evaluation of the effectiveness of corrective action measures implemented at the site to mitigate the release of waste constituents from the Facility.
  - k. **Site Inspections.** A written summary of inspections by the Discharger, Local Enforcement Agency (LEA), CalRecycle, and/or Regional Water Board and correspondence with the LEA and/or CalRecycle shall be included in an appropriate place in the Semi-Annual Monitoring Report. Copies of inspection reports shall be included in an appendix to the report.
2. **Annual Summary Report** – The Discharger shall submit an annual report covering the period from January 1 through December 31 to the Regional Water Board. If desired, the Annual Monitoring Report may be combined with the Semi-Annual Monitoring Report, but if so, shall clearly state that it is both a semi-annual and annual monitoring report in its title. The Annual Summary Report shall include, at a minimum, the following:
- a. **Topographic Map.** A topographic map (or copy of an aerial photograph), at an appropriate scale, identifying all monitoring points, and groundwater elevation contours with interpreted groundwater flow direction and gradient. Maps must also be updated to show the maximum extent of any waste constituent or waste degradation product in groundwater.
  - b. **Summary of Groundwater Monitoring Data.** A written summary of the groundwater monitoring results, indicating any changes made or observed since the previous Annual Summary Report. If a 5-year COC event was performed, then these parameters shall be presented in tabular format. All analytical data obtained during the previous year shall be presented in tabular form. Upon request of the Regional Water Board, the data shall be provided electronically in a file format and media acceptable to the Regional Water Board.
  - c. **Graphical Display.** A graphical display for all data collected for each monitoring point and background monitoring point. Each graph shall plot the concentration of one or more constituents over time for a given monitoring point. For any given constituent, the scale for all plots should be the same to facilitate comparison and identification of trends. On the basis of any outliers noted in the plotted data, the Regional Water Board may direct the Discharger to carry out a preliminary investigation, in accordance with Part II.F of this MRP, to determine whether a release is indicated. Trend analyses shall include identification of current trends, a comparison to previously identified trends, and a discussion of any significant changes in the trends. This shall be prepared for groundwater and any unsaturated/vadose zone monitoring points (including subdrains, lysimeters, or landfill gas).

- d. **Background Concentration Limits Update.** Reevaluate background concentration limits (required every two years per Part III.A.2.c) and propose any appropriate changes.
- e. **Leachate Data Summary.** A summary of leachate data for each applicable waste management unit, consisting of the monthly total volume of leachate collected during the reporting year from the LCRS and any other leachate collection systems to demonstrate the effectiveness of the leachate collection and removal system. This summary shall contain a brief discussion of the leachate sampling results and volume produced and how the leachate was disposed of during the reporting period. This summary shall also include a table consisting of the last five years of leachate data collected at the Facility.
- f. **Annual Waste Acceptance Summary.** An annual tonnage summary consisting of the monthly total volume of wastes (in cubic yards), and weight (in tons) accepted at the Facility. The summary shall contain a table that lists each category of waste (i.e., MSW, sludge, contaminated soils, biosolids, etc.) and the volume accepted at the Facility each month during the reporting period. Further, the annual summary shall identify the source of non-MSW waste streams (i.e., sludges, sediments, biosolids, grit, etc.) discharged at the Facility during the reporting period.
- g. **Landfill Gas Data Summary.** A landfill gas data summary consisting of all landfill gas data collected during the past year in accordance with the requirements set forth by CalRecycle, the LEA, and this Order. This summary shall also contain a brief discussion of the findings and observations made during the past year regarding landfill gas production, migration, and/or any issues with the landfill gas monitoring system noted during the previous year.
- h. **Site Conditions Summary.** Include a comprehensive discussion regarding the condition of the Facility, including, but not limited to, interim cover areas, the current operational area, maintenance roads, the erosion and drainage control measures implemented to control run-on and run-off during the rainy season, the condition of monitoring wells, piezometers, landfill gas probes, and any other monitoring device located at the Facility. The discussion should also highlight any areas of noncompliance observed and repaired during the previous year and should be documented with photographs and inspection reports.
- i. **Compliance Summary.** Include a comprehensive discussion of the compliance issues during the reporting period (the past year), and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Order or this MRP.

## **B. Report Schedule**

Semi-annual monitoring reports shall be submitted to the Regional Water Board in accordance with the following schedule:

**Table 9. Semi-Annual Reporting Schedule**

<b>Monitoring Period</b>	<b>Report Due</b>
January – June	August 15
July - December	February 15

Annual monitoring reports shall be submitted to the Regional Water Board by February 15 of the following year.

**C. Standard Reporting Procedures**

1. A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and if the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules, is contained in the accompanying report.
2. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
3. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Regional Water Board.
4. As specified in Standard Provisions J.13, all monitoring reports shall be certified under penalty of perjury to be true and correct. Each report shall contain the following completed declaration:

“I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_(Signature)

\_\_\_\_\_ (Title)”

5. The monitoring reports and any other information requested by the Regional Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:
  - a. The authorization is made in writing by the person described above;
  - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
  - c. The written authorization is submitted to the Regional Water Board's Executive Officer.
6. As specified in Standard Provisions J.12, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
7. As specified in Standard Provisions J.11, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under this MRP and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and monitoring reports to the State Water Board's Geotracker database. Documents that are too large to be uploaded into Geotracker should be broken down into smaller electronic files and labelled properly prior to uploading into Geotracker.