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10 Attorneys for Petitioner
11 USA Waste of California, Inc. dba El Sobrante Landfill

12 **BEFORE THE HEARING BOARD OF THE**
13 **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

14 USA Waste of California, Inc.
15 dba El Sobrante Landfill
16 [Facility ID No. 113674],

17 Petitioner,

18 v.

19 South Coast Air Quality Management
20 District,

21 Respondent.

Case No.: 5139-3

**DECLARATION OF DAVID MEYER
RE REGULAR VARIANCE; FILED IN
SUPPORT OF CONSENT CALENDAR**

Date: October 3, 2024

Time: 9:30 a.m.

Place: South Coast Air Quality
Management District
21865 Copley Drive
Diamond Bar, CA 91765

22 I, David Meyer, declare:

23 1. I am the Senior District Manager for Petitioner USA Waste of California,
24 Inc. dba El Sobrante Landfill (“Petitioner”) and am responsible for oversight of
25 operations at the El Sobrante Landfill (the “Facility”). I make this declaration based
26 upon personal knowledge of the facts set forth herein and, if called as a witness in this
27 matter, I could and would competently testify to the facts stated herein.
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1 2. I am familiar with the issues presented in the petition requesting an
2 Interim and a Regular Variance filed in Case No. 5139-3 (the “Petition”) related to
3 exceedances of the 60 ppmv monthly average concentration limit for total sulfur
4 (SOx) for flaring system # 4 (the “Flare # 4 system”) at the Facility. This limit is set
5 forth in Condition # 26 (hereinafter, “Condition # 26”) of Permit to Construct/Operate
6 (“PTC/PTO”) No. R-G64402.

7 3. On August 6, 2024, I attended the proceedings before the Hearing Board
8 (the “Hearing Board”) of the South Coast Air Quality Management District
9 (“SCAQMD”) in support of Petitioner’s Petition for an Interim Variance. I am
10 familiar with the Hearing Board’s requests that Petitioner provide certain additional
11 information for the Regular Variance. To address the Hearing Board’s requests, this
12 declaration provides the following documents and information, though Petitioner feels
13 portions are beyond the scope of the variance relief requested.

14 4. **Bore Logs. Meyer Dec. Attachment 1** [*confidential*] provides bore logs
15 from 2023 documenting waste characterization in the area of concern.

16 5. **Leachate Management. Meyer Dec. Attachment 2** is Order No. R8-
17 2016-0034 issued by the Santa Ana Regional Water Quality Control Board
18 (“RWQCB”) establishing Waste Discharge Requirements (“WDRs”) for the Facility,
19 including requirements for leachate monitoring and management. **Meyer Dec.**
20 **Attachment 3** is the Facility’s Leachate and Gas Condensate Recirculation Work
21 Plan, which describes the leachate and landfill gas recirculation program that the
22 Facility has been implementing in accordance with the WDRs and 27 CCR
23 §20939(a)(4). On September 24, 2024, the RWQCB provided written approval of
24 Petitioner’s plan for off-site disposal of leachate, condensate, and subdrain liquids
25 generated at the Facility. *See Meyer Dec. Attachment 4* (RWQCB Approval of
26 Offsite Disposal Plan for Site Waste Liquids). This plan provides for the collection,
27 transportation, and disposal of collected liquids at approved off-site centralized waste
28 treatment (“CWT”) facilities. As indicated in Meyer Dec. Attachment 4, testing of

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these liquids indicated levels of constituents that are below the CWT criteria and below California Code of Regulations Title 22 hazardous waste levels. Petitioner began implementation of the plan on September 26, 2024.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 27 day of September 2024 at Corona, California.

By: 

David Meyer
USA Waste of California, Inc. dba El Sobrante Landfill
Senior District Manager

Attachment 1 to Declaration of David Meyer

**Petition for Variance Before the SCAQMD Hearing Board
(Case No. 5139-3)**

USA Waste of California, Inc. dba El Sobrante Landfill

CONFIDENTIAL - PAGES DELETED

Attachment 2 to Declaration of David Meyer

**Petition for Variance Before the SCAQMD Hearing Board
(Case No. 5139-3)**

USA Waste of California, Inc. dba El Sobrante Landfill

State of California
California Regional Water Quality Control Board
Santa Ana Region

September 16, 2016

STAFF REPORT

Item: 9

SUBJECT: Revision of Waste Discharge Requirements for El Sobrante Landfill, Order No. R8-2016-0034

DISCUSSION:

USA Waste of California (hereinafter Discharger), owns and operates El Sobrante Sanitary Landfill (ESL), a Class III municipal solid waste (MSW) landfill located at 10910 Dawson Canyon Road, Corona, California 91719-5020.

The applicable regulations governing the discharge of non-hazardous MSW to land are contained in Division 2, Title 27, California Code of Regulations (Title 27) and the Code of Federal Regulations Subpart D of Part 258 of Title 40 (Subtitle D). Landfill operations at ESL are currently regulated under waste discharge requirements (WDRs) Order No. R8-2011-0014.

Revisions are being proposed to existing WDRs for ESL that include provisions and requirements for acceptance, management, and disposal of cement-treated incinerator ash (ash), contaminated soils, cathode ray tube panel glass (CRT panel glass), and waste-derived materials. Further, the proposed revised WDRs enable the use of ash and contaminated soils as alternative daily cover provided that conditions are acceptable and that the materials are utilized appropriately in doing so. Also, the proposed revised WDRs provide a process for re-using waste-derived materials in other capacities at ESL.

Incinerator Ash

Cement-treated incinerator ash has been accepted at ESL since March 2010. Analytical data provided to Regional Board staff at that time indicated that the values for metals of concern were below levels for hazardous waste classification. However, recent review of the pH data for the ash indicated that it might still be a threat to water quality. Accordingly, Regional Board staff required that the Discharger provide documentation demonstrating that the ash is also not a designated waste and will not affect water quality.

Staff Report for Order No. R8-2016-0034
Revision of Waste Discharge Requirements for El Sobrante Landfill

In September 2015, the Discharger submitted a Report for Geochemical Modeling of Treated Ash. Based upon results of the modeling and review of analytical results for testing of leachate generated at the Landfill, it is very unlikely that the interactions between the constituents in the incinerator ash, MSW, and landfill leachate will mobilize any constituents of concern. Consequently, proper acceptance, management, and disposal of incinerator ash at the Landfill do not pose a threat to water quality and the ash is not a designated waste.

The Discharger has submitted an ash management plan to the Regional Board describing procedures for accepting and handling ash at ESL. Elements of the plan, and additional discharge specifications and provisions are incorporated into these proposed waste discharge requirements. In addition, monitoring, documentation, and reporting requirements for ash management at ESL have been incorporated into the Regional Board's Monitoring and Reporting Program for the landfill.

Waste Acceptance Program (WAP) for Contaminated Soils and CRT Panel Glass

On April 25, 2014, the Regional Board adopted Order No. R8-2014-0006, which amended waste discharge requirements for specified active landfills, including El Sobrante Landfill, within the Santa Ana Region. This order applied to acceptance of non-hazardous/non-designated contaminated soils for disposal or reuse at the specified landfills.

Order No. R8-2014-0006 required that dischargers intending to accept contaminated soils at their facilities, must develop a Waste Acceptance Program (WAP) and submit it to the Regional Board's Executive Officer for approval.

In July 2015, the Discharger submitted a revised WAP to the Regional Board for review and approval. Regional Board staff reviewed the revised WAP and found that it met the requirements of Order No. R8-2014-0006. Consequently, the Executive Officer approved the WAP in a letter dated October 29, 2015.

In July 2016, the Discharger submitted an addendum letter to the Regional Board for acceptance and disposal of CRT panel glass at ESL in accordance with the protocols described in the approved WAP, as well as additional protocols specific to CRT panel glass delivery and disposal.

To ensure that acceptance and management of contaminated soils and CRT panel glass at ESL is performed in accordance with the WAP and CRT panel glass addendum, documentation and reporting requirements for this program have been incorporated into these proposed Waste Discharge Requirements and the Regional Board's Monitoring and Reporting Program for the landfill.

Waste-Derived Materials

Regional Board staff has received requests from dischargers to consider approving the disposal or re-use of waste-derived materials at landfills. Waste-derived materials are waste materials that have been treated, processed, or otherwise re-conditioned so that the material may be beneficially re-used for structural, engineering, or other alternative purposes. Some of these waste-derived materials include, but are not limited to, tire-derived aggregate, compost and other green materials, and contaminated soils.

Some alternate purposes or re-uses include trench backfill for landfill gas pipelines, alternative daily cover, roadbase, and annulus backfill for gas extraction wells. Re-use of these waste-derived materials diverts wastes from landfills, conserves landfill capacity, and in many cases enables the use of a material that may provide superior performance as compared to other industry materials.

While there have been no specific proposals for re-use of waste-derived materials at ESL, the Discharger has indicated interest in implementing such re-use at ESL in the future. Consequently, these WDRs include provisions for enabling re-use of these waste-derived materials at ESL. Provided that re-use of these materials is conducted in accordance with the specifications and provisions described in these proposed WDRs, such re-use should not pose a threat to the quality of the waters of the State.

APPLICABLE LAWS AND REGULATIONS

The State and Regional Water Boards are authorized to regulate discharges of waste to land under: California Code of Regulations, Title 27, Division 2, Subdivision 1, "Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste (referred to as Title 27 regulations). Title 27 generally deals with non-hazardous wastes and it provides regulatory authority to the Water Boards and Cal Recycle (formerly called the California Integrated Waste Management Board) and clearly defines the responsibilities assigned to each agency. The regulations governing the disposal of waste to land includes authority for the Regional Water Boards to adopt waste discharge requirements and to establish site-specific requirements for regulatory compliance and closure design and post-closure monitoring requirements. The primary purpose of the regulations is to: 1) assure the protection of human health and the environment; 2) ensure that waste is properly contained or cleaned-up as appropriate; and 3) protect surface and groundwater from adverse impacts that could result from the discharge of waste to land. Title 27, Section 20430 requires the Discharger to implement a corrective action program to remediate releases from the Landfill, and thereby ensure that the Discharger achieves compliance with the Water Quality Protection Standards that were adopted for ESL in accordance with §20390.

The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) lists the beneficial uses and water quality objectives for surface and groundwater bodies in the Region. This Order contains waste discharge requirements that implement the Basin

Staff Report for Order No. R8-2016-0034
Revision of Waste Discharge Requirements for El Sobrante Landfill

Plan. Dischargers at El Sobrante Landfill could affect Temescal Creek Reach 2 and the Bedford Groundwater Management Zone.

The proposed Order requires the Discharger to: maintain and operate the existing landfill gas collection system; monitor groundwater on a regular basis; continue to investigate and address any contamination determined to have originated from ESL; maintain the drainage and erosion control systems on all parts of the Landfill; and document and report on these activities. These requirements are consistent with state and federal laws and regulations, including the Basin Plan, and are protective of the water resources in the area.

RECOMMENDATION:

Adopt Order No. R8-2016-0034 as presented.

Comments were solicited from the following agencies:

U. S. Environmental Protection Agency, Region 9 – Steve Wall (wall.steve@epa.gov)
and Zoe Heller (heller.zoe@epa.gov)

State Water Resources Control Board, Division of Clean Water Program – Leslie
Graves

(leslie.graves@waterboards.ca.gov)

State Water Resources Control Board, Office of Chief Counsel – David Rice
(david.rice@waterboards.ca.gov)

CalRecycle, Sacramento – Susan Markie (Susan.Markie@CalRecycle.ca.gov)

South Coast Air Quality Management District – Jay Chen (jchen@aqmd.gov)

State Water Resources Control Board, Division of Drinking Water, San Bernardino –
Sean McCarthy (Sean.mccarthy@waterboards.ca.gov)

Riverside County Local Enforcement Agency – Greg Reyes (gjreyes@rivcocha.org)

Riverside County Waste Mgmt Div – Hans Kernkamp (hkernkam@co.riverside.ca.us)

Riverside County Waste Mgmt Div – Matt Hickman (mhickman@co.riverside.ca.us)

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

ORDER NO. R8-2016-0034

**WASTE DISCHARGE REQUIREMENTS
FOR**

USA WASTE OF CALIFORNIA, INC.

**EL SOBRANTE LANDFILL
CLASS III SOLID WASTE DISPOSAL SITE
RIVERSIDE COUNTY**

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

1. USA Waste of California, Inc. (hereinafter Discharger) owns and is responsible for the operation and maintenance of El Sobrante Landfill (ESL). ESL is a Class III landfill that accepts non-hazardous municipal solid waste (MSW). The landfill is located at 10910 Dawson Canyon Road, Corona, California, within the County of Riverside. Landfilling operations at ESL began in 1986. Approximately 468 acres of the site have been surveyed and permitted for landfill activities to date. The existing, permitted portion of ESL is located in Section 26, T4S, R6W, SBB&M, at latitude 33°47'36" and longitude -117°28'24". The location of the site is shown on Figure 1, which is hereby made a part of this order.
2. The discharge of waste to land is regulated by California Code of Regulations, Title 27, Division 2, Subdivision 1 (Title 27). The terms used in this order are contained in Title 27, Chapter 2, §20150, §20163, §20164, and §20415.
3. ESL currently operates under Waste Discharge Requirements (WDR) Order No. R8-2011-0014. The current permitted capacity of ESL is approximately 210 million cubic yards (MCY) and the permitted footprint is 468 acres. This order updates and replaces WDR Order No. R8-2011-0014.
4. Storm water discharges from ESL are regulated by State Water Resources Control Board (SWRCB) Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001, for discharges of storm water associated with industrial activities.
5. The WDRs for the site are being revised to incorporate requirements for acceptance, management, and disposal of cement-treated incinerator ash as alternative daily cover (ADC) and disposal at ESL, and to incorporate

- requirements for acceptance, management, and disposal of contaminated soils at ESL.
6. ESL is located in western Riverside County in the foothills east of the Temescal Valley, between Olsen Canyon and Dawson Canyon. Elevations across the site range from 1,450 feet above mean sea level (MSL) to 1,832 feet above MSL. Natural slopes range from 1.5 (horizontal) to 1 (vertical) to nearly flat. The steeper slopes are generally found in the eastern portions of the site.
 7. ESL is located within the Peninsular Ranges Physiographic Province and is part of the Perris Structural Block. The Glen Ivy North segment of the active Elsinore fault zone projects along the Temescal Valley approximately 2 miles west of the site. The site is primarily underlain by the meta-sedimentary rocks¹ of the Jurassic Bedford Canyon Formation. The Bedford Canyon Formation is composed mainly of thinly to thickly inter-bedded argillites, quartzites, meta-breccias, and meta-sandstones. Portions of the site are also underlain by Tertiary and Quaternary sedimentary formations including the Lake Mathews Formation, the Silverado Formation and older alluvium. Cretaceous granitic rocks associated with the Southern California Batholith are located in the extreme northeastern portion of the site, and intrusive dikes² of the Cretaceous Temescal Wash Quartz Latite Porphyry were encountered during excavation of some cells in the existing landfill area.
 8. The site is located in an arid to semi-arid environment. Average annual site precipitation is estimated to be approximately 12 inches based on precipitation data and maps from the National Weather Service (NOAA Atlas 2 dated 1973). The estimated precipitation for a 24-hour, 100-year storm event is 6 inches. The evaporation rate averages 73.39 inches per year.
 9. ESL is located between Lake Mathews to the northeast and Temescal Wash to the southeast within the Lake Mathews Hydrologic Area, in the Bedford Canyon Hydrologic Subarea of the Santa Ana River Watershed (Santa Ana Hydrologic Basin). No natural lakes or other bodies of standing water occur at the site. Ephemeral³ seeps and springs occur in several canyons located within or

¹ Sedimentary rocks that have been partially metamorphosed. Sedimentary rocks are rocks that have formed from the deposition of sediments from water or air such as silt, sand, and gravel, or through the precipitation of chemicals from water such as limestone and gypsum. Metamorphism is the process by which rocks are altered in the solid state by pressure, heat, and chemical substances.

² Intrusive dikes are tabular bodies of igneous rocks (such as granite) that are usually caused by the injection or emplacement of magma into fractures, joints, or bedding of adjacent rocks.

³ Streams or springs that only flow during part of the year, usually in direct response to precipitation.

adjacent to the landfill property. Groundwater can be found in the bedrock fractures of the Bedford Canyon Formation and in the alluvium-filled bottoms of the canyons. Depth to groundwater beneath the site varies, with groundwater in the canyon bottoms occurring at depths less than 20 feet below ground surface (bgs), and groundwater beneath the ridges occurring at depths in excess of 150 feet bgs (approximately 1,070 to 1,300 feet above MSL, respectively). Groundwater flow varies across the site, but in the vicinity of the existing landfill it flows predominantly from the northeast to the south and southwest at an average hydraulic gradient of 0.08 foot per foot.

10. A Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) became effective on January 24, 1995. The Basin Plan recognizes and lists beneficial uses and water quality objectives for surface waters and groundwater in the Santa Ana Region. The water quality objectives and the groundwater basin boundaries (now known as groundwater management zones) were updated in February 2008.
11. Surface drainage from the landfill property – and from ephemeral streams located adjacent to the landfill property – is tributary to Temescal Creek Reach 2, the intermittent beneficial uses of which include:
 - A. Agricultural supply,
 - B. Industrial service supply,
 - C. Groundwater recharge,
 - D. Contact water recreation,
 - E. Non-contact water recreation, and
 - F. Limited Warm freshwater habitat.
12. Groundwater from the fractured bedrock and alluvial deposits beneath the landfill property flows into the Bedford Groundwater Management Zone, the beneficial uses of which include:
 - A. Municipal and domestic supply,
 - B. Agricultural supply,
 - C. Industrial service supply, and
 - D. Industrial process supply.
13. On September 13, 1985, the Regional Board adopted Order No. 85-131 to regulate discharges of MSW to land at ESL. Provisions and requirements in the order reflected Federal Subtitle D and State Chapter 15 regulations existing at that time or solid waste disposal facilities.
14. In 1988, USEPA proposed draft revisions to Subtitle D Criteria in accordance with the 1984 Federal RCRA Hazardous and Solid Waste Amendments that required revision of Subtitle D Criteria for solid waste disposal facilities. In 1991, USEPA subsequently promulgated final solid waste disposal facility regulations,

which were codified as 40CFR §258. These regulations included a deadline of Oct 9, 1993 for implementation of new regulations.

15. Accordingly, on June 17, 1993, State Water Board adopted State Board Resolution No. 93-62 directing all nine Regional Boards in California to comply with new federal MSW regulations promulgated in 40CFR §258. To implement State Board Resolution No. 93-62, the Santa Ana Regional Board adopted Order No. 93-57 on September 10, 1993. Order 93-57 amended the WDRs for all landfills within the Santa Ana Region, including Order No. 85-131 for ESL.
16. On March 11, 1994, in accordance with Subtitle D requirements, the Santa Ana Regional Board adopted Order No. 94-17, which amended the WDRs for all landfills, including Order No. 85-131 for ESL, within the Santa Ana Region to implement uniform drainage control system and drainage control system maintenance requirements at landfill sites so that every site could adequately manage the precipitation and peak flows from 100-year, 24-hour storms.
17. On July 18, 1997, the State Water Resources Control Board (State Water Board) and the former California Integrated Waste Management Board (now the Department of Resources Recycling and Recovery or Cal Recycle), enacted the CCR Title 27 Solid Waste Requirements to consolidate and replace the non-hazardous waste disposal requirements of 23 CCR, Chapter 15.
18. On November 20, 1998, the Regional Board adopted Order No. 98-99, which amended the WDRs for all landfills, including Order No. 85-131 for ESL, within the Santa Ana Region by combining the requirements of Order No. 93-57 and Order No. 94-17 into one general order. This action was taken to eliminate overlap between the two orders, to provide a simpler and clearer description of requirements, and to provide a user-friendly format.
19. On October 7, 1999, the Regional Board adopted Order No. 99-79 further amending Order No. 85-131, WDRs for ESL. This amendment involved approving an engineered alternative design for the bottom and sideslope liners in Phase 4 at ESL. In addition, a subdrain system was approved to address high groundwater beneath the Phase 4 area in accordance with Title 27 requirements for a separation of 5 feet between MSW and the highest anticipated groundwater elevation; however, natural groundwater seeps had been found in some areas underlying the proposed Phase 4 area. Approval and installation of the subdrain system in Phase 4 addressed the concerns regarding the requirement for the 5-foot separation.
20. On July 20, 2001, the Regional Board adopted Order No. 01-053 revising and replacing Order No. 85-131. The revision incorporated the requirements of previous amendments and involved several key aspects of the landfill, which are summarized as follows:

- A. The Order approved vertical and lateral expansion of the permitted landfill footprint at ESL, which increased the waste disposal area from 90 acres to 495 acres (see Figure 2 – Landfill Footprint) and increasing the final elevation of the landfill from 1,425 to 1,832 feet above MSL. This expansion increased the disposal capacity of the landfill to 210.3 million cubic yards and increased the disposal life of the landfill by approximately 30 years.
 - B. The Regional Board approved use of an Engineered Alternative Design (EAD) for the bottom and side-slope liners, and the use of a sub-drain system to address the requirement for a five foot separation between groundwater and MSW.
 - C. Order No. 01-053 implemented those portions of federal regulations that are not addressed by, or are more restrictive than CCR Title 27.
 - D. In addition, Order No. 01-053 established a timeframe for implementing a corrective action program (CAP). The CAP was required to address the results of water quality monitoring which indicated that groundwater beneath the Landfill had exceeded the Ground Water Protection Standard (water standard) established for the facility in accordance with state and federal regulations.
21. The Regional Board adopted Order No. R8-2011-0014 on April 22, 2011 to update and incorporate requirements for discharges of MSW to land at ESL. This included standard discharge requirements, provisions, and monitoring and reporting requirements in accordance with Title 27 and SWRCB Resolution 93-62 for landfill design, operations, and groundwater monitoring, as well as amendments to previous orders and proposed changes in landfill operations at ESL. Specifically, Order No. R8-2011-0014 included approval of further proposed changes in the liner design from that which had been previously approved in Order No. 01-053 for expansion of landfill operations into a new area of the ESL project site
 22. There has been a total of 11 areas or phases of solid waste disposal at ESL (Phases 1-11). These phases are shown on Figure 2 – Landfill Footprint, along with the currently permitted total fill area (footprint). Future Phases 12-17 are only in the draft or conceptual stage. Construction and disposal at ESL has proceeded as follows:
 - A. The Phase 1 and 2 areas, which were constructed in 1986 and 1987, are unlined and were constructed prior to the adoption of the federal landfill regulations, 40CFR §258. The cells were constructed on excavated bedrock with a permeability of 1×10^{-6} centimeter per second (cm/s) or less. A clay liner was constructed on the west slope of the Phase 1 area

to comply with the permeability requirements that were in effect at the time of its construction;

- B. The Phase 3 – Stage 1 areas were constructed in 1987 with a pre-40CFR §258 liner that is composed of 24 inches of low permeability soil (clay with permeability of 1×10^{-7} cm/s or less), without a flexible membrane liner (FML);
- C. The remaining portions (stages or cells) of the Phase 3 area and the Phase 4 - Stage 2B area, which were constructed from 1993 through 2000, included a 40CFR §258 prescriptive clay liner system which consists of 24 inches of clay with a permeability less than 1×10^{-7} cm/s overlain by an FML;
- D. The Phase 4 – Stage 2A area has an alternative engineered liner system for both the base and side slopes which incorporates a geosynthetic clay liner (GCL) in place of the prescriptive liner's 24 inches of clay;
- E. Phase 5 was a vertical expansion above the previously constructed phases that increased the top elevation of the permitted landfill to an elevation of 1,425 feet above MSL;
- F. Phases 6 – 9A, which were constructed from 2002 through 2006, incorporated a composite liner system. The bottom liner system includes a 12-inch thick low permeability layer overlain by an FML, a GCL, another FML, a 12-inch thick leachate collection and recovery system (LCRS) drainage layer, and a 24-inch thick operations layer. Suitable cushion and filter geotextiles were placed between appropriate layers. The sideslope liner system includes an FML, a GCL, another FML, and a geocomposite drainage layer overlain by a 24-inch thick operations layer;
- G. Phase 9B - 11A, which were constructed from 2011 through 2014, incorporate a composite liner system that includes a 12-inch thick low permeability layer, overlain by an FML, a GCL, another FML, a 9-inch thick LCRS drainage layer, and a 24-inch thick operations layer. Suitable cushion and filter geotextiles were placed between appropriate layers. The sideslope liner system includes an FML, a GCL, another FML, and a geocomposite drainage layer overlain by a 24-inch thick operations layer. This area has been the active disposal area since 2015.
- H. Phase 11B (north of and adjacent to Phase 11A) was included in the expansion proposal for Phase 11A. All components of the composite liner system proposed for Phase 11B are identical to those in Phase 11A. This design was reviewed and approved by Regional Board staff at the same time as the Phase 11A design (March 2014). The Discharger expects that

construction for Phase 11B will commence during the first or second quarter of 2017.

23. Water quality at the site is currently monitored under a Detection Monitoring Program (DMP) and a Corrective Action Program (CAP) in accordance with the parameters and schedules set forth in Monitoring and Reporting Program (MRP) No. R8-2011-0014. The water quality monitoring program for ESL currently includes groundwater, surface water (including natural seeps and springs), leachate, and landfill gas (LFG) condensate.
24. Low concentrations of inorganic compounds and volatile organic compounds (VOCs) were detected in wells located near the toe of the landfill in the fall of 1987, and the landfill was placed in an Evaluation Monitoring Program (EMP). Since LFG was considered the principal source of the suspected release, a LFG collection and extraction system was installed and began operation in June 1993. In July 1996, a CAP was initiated, consisting of a groundwater extraction and treatment system, to contain and remove low concentrations of VOCs that were found in groundwater. The CAP was successful, and in June 2003, Regional Board staff permitted the Discharger to shut off the groundwater extraction and treatment system and change the CAP remedy to monitored natural attenuation (MNA) and LFG control.
25. The existing LFG collection and extraction system consists of a series of horizontal collectors and vertical wells located in each operating or completed phase of ESL. A series of LFG monitoring probes are located around the perimeter of the existing landfill footprint. Oversight of this LFG monitoring system is performed by the Riverside County Department of Environmental Health, Local Enforcement Agency.
26. The Discharger has been monitoring landfill leachate and gas condensate annually for the constituents listed in Appendix I and Appendix II of 40 CFR §258, and re-testing for each constituent newly detected above reporting limits, to create a constituent of concern (COC) list of the constituents that have been detected above reporting limits and verified to be present.
27. **CEQA Compliance** – This project involves the adoption of waste discharge requirements for an existing facility for which waste discharge requirements need to be updated, and as such, is categorically exempt from the California Environmental Quality Act in accordance with Section 15301, Chapter 3, Title 14, California Code of Regulations. This Order requires that the Discharger submit a Joint Technical Document (JTD) addendum for any proposed changes to the facility not covered in the Order. The JTD addendum must include documentation showing that the project is in compliance with CEQA.

28. The Regional Board has notified the Discharger and interested agencies and persons of the Board's intent to update the existing waste discharge requirements for the discharger, and has provided them with an opportunity to submit their written views and recommendations.
29. The Regional Board, in a public meeting, heard and considered all comments pertaining to updating the existing waste discharge requirements for ESL.

Treated Wood Waste

30. On January 1, 2005, Assembly Bill 1353 (AB 1353), a state law that governs the disposal of treated wood waste (TWW), became effective. "Treated wood," as defined in California Health and Safety Code (CHSC) §25150.7, means wood that has been treated with a chemical preservative registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136 and following), that is used for the purposes of protecting wood against insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood. The chemicals used to treat wood may include, but are not limited to, chromated copper arsenate, pentachlorophenol, creosote, acid copper chromate, ammoniacal copper arsenate, ammoniacal copper zinc arsenate, or chromated zinc chloride.
31. AB 1353 negated all existing hazardous waste variances for TWW formerly granted by the California Department of Toxic Substances Control (DTSC), and requires TWW to be disposed of in either:
 - A. A Class I hazardous waste landfill, or
 - B. A Class III landfill that meets all three of the following conditions:
 - i. The landfill has at least one composite-lined unit that meets all requirements applicable to the disposal of MSW in California after October 9, 1993. All TWW shall be disposed of in a composite-lined unit of an MSW landfill.
 - ii. The landfill must be regulated by WDRs that specifically allow discharges of TWW, as defined in CHSC §25150.7(b), or designated waste, as defined in California Water Code (CWC) §13173. All TWW accepted at a MSW landfill must be managed to prevent scavenging and landfill operations must assure compliance with CHSC §25150.7(d)(2).
 - iii. Groundwater monitoring of the composite-lined unit(s) to be used for TWW disposal does not indicate a verified release of contaminants to groundwater.

32. AB 1353 does not affect existing law (CHSC, §25143.1.5), which allows MSW landfills to accept non-hazardous TWW generated by the utility industries for disposal in composite-lined units if so authorized by the facility's WDRs.
33. On September 16, 2010, the Regional Board adopted Order No. R8-2010-0032 that amended Order No. 01-53 to allow the acceptance of TWW and other designated wastes (as approved by the Regional Board staff) into the lined portions of ESL. The requirements for management and disposal of TWW at ESL, implemented in Order No. R8-2010-0032, were incorporated into Order No. R8-2011-0014, which was adopted by the Regional Board in April 2011 (see Finding #21 above).

Incinerator Ash

34. In March 2010, the Discharger requested that the Regional Board consider its proposal for the acceptance and disposal of treated incinerator ash from the Southeast Resource Recovery Facility (SERRF) at the Landfill. SERRF is located in the City of Long Beach, California (Long Beach), and incinerates municipal solid waste generated by the Long Beach and delivered to the facility. Following incineration, the ash is treated at the facility by mixing the incinerator ash with a specialized cement mixture. This treatment process binds the ash particles and immobilizes metals and other constituents found in the ash. In March 2010, Regional Board staff indicated that it had no objection to the proposal for acceptance and disposal of the treated ash at the Landfill.
35. In May 2013, the Discharger requested that the Regional Board consider a second proposal for acceptance and disposal of treated incinerator ash at the Landfill. The ash in this proposal would be generated at the Commerce Refuse to Energy Facility (CREF) located in the City of Commerce, California (Commerce). The CREF facility also receives MSW from Long Beach, which it incinerates and treats in a process similar to the process at SERRF. In May 2013, the Regional Board staff again indicated that it had no objection to the proposal for acceptance and disposal of the treated ash at the Landfill.
36. For both of these proposals, analytical data for the ash was provided with the proposals. Statistical analysis of these results using USEPA's 90% upper confidence level method (detailed in SW-846) indicated that, in both cases, the values for metals of concern (lead and cadmium) were below levels for hazardous waste classification.
37. CCR Title 27 enables the Local Enforcement Agency (LEA) to consider and approve alternative materials for use as alternative daily cover (ADC). In particular, §20690 (b)(5) of Title 27 addresses the use of incinerator ash as ADC. To approve such use in this case, the incinerator ash must be non-hazardous. Based upon the statistical analysis for metals described above, the incinerator ash is considered non-hazardous. However, review of pH data for the incinerator

ash indicated that it might still be a threat to water quality. Accordingly, Regional Board staff required that the Discharger provide documentation demonstrating that the incinerator ash is also not a designated waste.

38. In September 2015, the Discharger submitted a Report for Geochemical Modeling of Treated Ash. Based upon results of the modeling and review of analytical results for testing of leachate generated at the Landfill, it is very unlikely that the interactions between the constituents in the incinerator ash, MSW, and landfill leachate will mobilize any constituents. Consequently, proper acceptance, management, and disposal of incinerator ash at the Landfill do not pose a threat to water quality and the ash is not a designated waste.
39. The Discharger has submitted an incinerator ash management plan to the Regional Board describing procedures for accepting and handling ash at the Landfill. Elements of this plan, and additional discharge specifications and provisions are incorporated into these waste discharge requirements. In addition, documentation and reporting requirements have been incorporated into the Regional Board's Monitoring and Reporting Program for ESL.
40. Approximately 400 tons of treated incinerator ash are delivered to the Landfill each day, which results in a total of approximately 10,000 tons per month and 120,000 tons per year. The ash is transported via Truck and Transfer rigs, which carry approximately 25 tons per load. Approximately 16 loads are delivered for disposal or re-use each day.

Waste Acceptance Program (WAP) for Contaminated Soil

41. On April 25, 2014, the Regional Board adopted Order No. R8-2014-0006, which amended waste discharge requirements for specified active landfills, including El Sobrante Landfill, within the Santa Ana Region. This order applied to acceptance of non-hazardous/non-designated contaminated soils for disposal or reuse at the specified landfills.
42. Prior to adoption of Order No. R8-2014-0006, acceptance and disposal of non-hazardous contaminated soils at the Region's landfills was overseen by Regional Board staff on a case-by-case basis. Due to the relatively large number of requests for disposal, addressing these waste discharges involved a significant time commitment for Regional Board staff for what had become routine actions. In consideration of these circumstances and to minimize time spent by Regional Board staff on this issue, the order was prepared and adopted.
43. Order No. R8-2014-0006 required that dischargers intending to accept contaminated soils at their facilities, must develop a Waste Acceptance Program (WAP) and submit it to the Regional Board's Executive Officer for approval.

44. In July 2015, the Discharger submitted a revised WAP to the Regional Board for review and approval. Regional Board staff reviewed the revised WAP and found that it met the requirements of Order No. R8-2014-0006. Consequently, the Executive Officer approved the WAP in a letter dated October 29, 2015.

Cathode Ray Tube Panel Glass

45. In September 2014, the California Department of Toxic Substances Control re-adopted emergency regulations that expanded options for disposition of Cathode Ray Tubes (CRTs) and CRT panel glass, which are components of older televisions and monitors. The emergency regulations provide CRT waste handlers with the added option of disposing of CRT panel glass at a Class II or Class III landfill.
46. CRT glass includes two types of glass. CRT *panel* glass forms the viewing surface with the phosphor screen and more significantly *does not contain* lead. CRT *funnel* glass forms the glass structure that extends from the phosphor viewing surface to the cathode ray guns and most significantly it *does contain* lead. As stated in CCR Title 22, §66261.4(h), CRT panel glass is not a hazardous waste and disposal at a Class II or Class II landfill is allowed provided that it is managed in accordance with the management standards specified in §66273.73 and §66273.75, and article 8 of chapter 23.
47. The Discharger has indicated that, on average, approximately 330 tons of CRT panel glass will be accepted each month for disposal at ESL. Delivery and disposal will be performed in accordance with the protocol contained in the WAP described in Finding 44 above, as well as a supplemental protocol specifically addressing CRT panel glass that has been added to the WAP.
48. Documentation and reporting requirements have been incorporated into the Regional Board's Monitoring and Reporting Program for delivery and disposal of CRT panel glass at ESL.

Waste-Derived Materials

49. **Waste-derived materials** are waste materials that have been treated, processed, or otherwise re-conditioned so that the material may be beneficially re-used for structural, engineering, or other alternative purposes. Some of these waste-derived materials include, but are not limited to, tire-derived aggregate, compost and other green materials, and contaminated soils.
50. Periodically, Regional Board staff receives requests from Dischargers to consider approving the disposal or re-use of waste-derived materials at landfills. Some alternate purposes or re-uses include trench backfill for landfill gas pipelines, alternative daily cover, roadbase, and annulus backfill for gas extraction wells. Re-use of these waste-derived materials diverts wastes from landfills, conserves

landfill capacity, and in many cases enables the use of a material that may provide superior performance as compared to other industry materials.

51. Section 20690 of CCR Title 27 specifies certain materials for use as alternative daily cover. However, the list of materials does not include many waste-derived materials and Title 27 does not address other potential uses of these types of materials. Consequently, these WDRs include provisions for enabling re-use of these waste-derived materials at ESL.

Delegation of Authority

52. This Order delegates authority to the Executive Officer to require that the Discharger:
- a. Revise the WAP and/or the methods and procedures for monitoring, reporting, managing, accepting, reusing, and/or disposing of incinerator ash, contaminated soils, CRT panel glass, and/or waste-derived materials at ESL to address newly discovered or newly developed information and/or regulatory guidelines.
 - b. Revise the Monitoring and Reporting Program (MRP) No. R8-2016-0034.

To meet the applicable provisions contained in the California Water Code (CWC), Title 27, and Subtitle D of the Code of Federal Regulations (40 CFR §258), **IT IS HEREBY ORDERED** that the Discharger shall comply with the following:

A. DISCHARGE SPECIFICATIONS

1. **Groundwater** – The discharge shall neither cause nor contribute to the contamination or pollution of groundwater via the release of waste constituents in either the liquid or gaseous phase.
2. **Surface Water** – The discharge shall neither cause nor contribute to any surface water contamination, pollution, or nuisance, including, but not limited to:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Increases in bottom deposits or aquatic growth;
 - c. An adverse change in temperature, turbidity, or apparent color change beyond natural background levels and occurrences;
 - d. The creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin; and

- e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of the waters of the State.
3. **Unsaturated Zone** – The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, subdrain water, or other geologic materials beneath or outside of ESL, if such waste constituents could migrate to the waters of the State and cause a condition of contamination, pollution, or nuisance.
 4. **Precipitation and Drainage Control** – Waste management units shall be designed, constructed, and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout which could occur as a result of precipitation from a 100-year, 24-hour frequency storm. In addition, the Discharger shall comply with the following:
 - a. Units shall be designed, constructed, and maintained to achieve compliance with Title 27, §20365.
 - b. Top deck surfaces shall be constructed to achieve a minimum one-percent slope and to direct flows to downdrains and other drainage control features.
 - c. Downdrains and other necessary drainage structures must be constructed for all sideslopes.
 - d. All containment structures shall be protected and maintained continuously to prevent commingling of leachate and gas condensate with surface run-on and runoff and to ensure their effectiveness.
 5. **Liquids Usage** – The discharge of liquids, including groundwater, leachate or landfill gas condensate, or their use for dust control or irrigation at ESL is prohibited, unless the following conditions are met:
 - a. The liquids are being returned to the landfill; **and**
 - b. The portion of the landfill to which these liquids are discharged is equipped with a prescriptive liner system or approved equivalent; **or**
 - c. The liquids generated from the site are disposed of offsite, in accordance with a disposal plan approved by the Regional Board staff.
 - d. Restrictions under this section shall not apply to groundwater, leachate, and landfill gas condensate that is treated in accordance with an approved plan prior to being used for dust control or irrigation over the lined portions of the site.

6. **Acceptable Waste** – Wastes disposed of at ESL shall be limited to non-hazardous municipal solid wastes, liquids or semi-solid waste, contaminated soils that are not hazardous, inert solid wastes, treated woodwaste, and designated wastes. Unless specified in another section of these WDRs, wastes meeting the following definitions may be accepted for disposal at ESL:
- a. Non-hazardous solid waste, as defined under Title 27, §20220(a), means all putrescible and non-putrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded wastes (whether of solid or semi-solid consistency), provided that such wastes do not contain wastes which must be managed as hazardous wastes.
 - b. Liquids or semi-solid waste, including dewatered sewage sludge and water treatment sludge, that meets the following criteria [Title 27, §20200(d)(3) and §20220(c)]:
 - i. The waste is not at hazardous levels as defined in Title 22, California Code of Regulations, §66261.3 et seq.;
 - ii. The waste contains less than 50 percent (<50%) solids by weight; and
 - iii. The Discharger has demonstrated to Regional Board staff that such waste will not exceed the moisture holding capacity of the landfill, either initially or as a result of waste management operations, compaction, or settlement.
 - c. Inert waste, as defined in Title 27, §20230, means that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste.
 - d. Designated wastes, as defined in CWC, §13173, that are approved by Regional Board Executive Officer.
 - e. Off-specification liquids in consumer packaging may be accepted for disposal at ESL on a case-by-case basis with the approval of the Regional Board's Executive Officer.
7. **Sewage Treatment Plant Grit and Screenings** – All sewage treatment plant grit and screening residues disposed of at the site must be segregated from public access and shall meet the following criteria:

- a. A moisture content of less than 50 percent;
 - b. Disinfection in accordance with a method approved by the local Department of Environmental Health and the Regional Board; and
 - c. An analysis for heavy metals.
8. **Treated Wood Waste** – Treated wood waste⁴ (TWW) and designated waste, as approved by the Executive Officer of the Regional Board, may only be disposed of in composite-lined WMUs meeting all the requirements for a composite liner and leachate collection and removal system.
9. If monitoring at the composite-lined portion of a landfill unit that has received TWW indicates a verified release, the disposal of TWW to that landfill unit shall immediately cease until corrective action, implementing the requirements of Title 27 §20385, results in cessation of the release.
10. The discharger shall manage and dispose of TWW in accordance with the site's TWW Management and Disposal Plan and all requirements of CHSC §§25143.1.5 and 25150.7.
11. **Incinerator Ash** – Acceptance, management, and disposal of treated incinerator ash at ESL must be implemented by the Discharger in accordance with the following specifications:
- a. Only treated incinerator ash from the SERRF and CREF facilities may be accepted at ESL. Incinerator ash from any other source shall not be accepted without Regional Board action to amend ESL's WDRs. Such an amendment will require the Discharger to file a ROWD and an appropriate filing fee at least 120 days prior to the proposed start of acceptance and disposal.
 - b. Treated ash shall only be placed over composite lined areas of ESL. A map depicting the areas where treated ash was deposited shall be included in annual reports.
 - c. Treated ash shall be managed at ESL in such a manner as to prevent the discharge of treated ash or any component or constituent of treated ash to surface waters or groundwater.

⁴ Treated wood waste as defined in CHSC §§25143.1.5 and 25150.7

- d. Treated ash may be beneficially reused at ESL as base for a wet-weather deck, as base for vehicle access and transport roads within disposal areas, and as an alternative daily cover. Other uses for the treated ash at ESL shall be approved by the Executive Officer prior to implementation by the Discharger.
- e. Treated ash that is reused as base for vehicle access and transport roads at ESL shall be utilized in accordance with the following:
 - i. Two feet of clean earthen material shall be placed over the treated ash used for road base.
 - ii. Roads utilizing treated ash as road base shall only be constructed during periods of dry weather
 - iii. Roads shall be designed and maintained to prevent erosion and potential exposure of treated ash used for road base.
- f. Dust suppression measures shall be employed to minimize potential dust generation and atmospheric discharge during the unloading and disposal of treated ash, and during any construction activities utilizing treated ash.
- g. The Regional Board's Executive Officer may require monitoring of treated ash from the SERRF and CREF facilities for non-organic and non-volatile constituents specified in California Code of Regulations (CCR), Title 22, Section 66261.24 (potential organic and volatile constituents are removed by the incineration process) based upon results of leachate and landfill gas condensate monitoring as required in the MRP for ESL. Monitoring of the treated ash shall be conducted in accordance with the procedures and methods described in the MRP for ESL. Further, based upon review of the monitoring results, the Executive Officer may require routine sampling and analysis for additional constituents at other monitoring points at ESL.
- h. Treated ash received at ESL shall be monitored in accordance with the requirements contained in the MRP for ESL.
- i. Any treated ash that does not conform with the requirements of 22CCR §66261.24 or 40CFR §261.24 shall not be accepted or discharged at ESL.
- j. Descriptions and summaries of the quality and quantity of incinerator ash accepted and discharged at ESL shall be monitored and reported in accordance with MRP No. R8-2016-0034.

12. **Waste Acceptance Program** – Acceptance, management, and discharge of contaminated soils and CRT panel glass at ESL must be implemented by the Discharger in accordance with the Waste Acceptance Program (WAP), dated July 2015, and approved by the Executive Officer on October 29, 2015, as well as the following specifications:
 - a. The Discharger must fully review and evaluate sampling and analytical data for each discrete quantity of contaminated soil proposed for acceptance at ESL to ensure that waste characterizations and certifications are accurate and correct in accordance with state and federal requirements and regulations, to ensure that no hazardous wastes are accepted at ESL, and to ensure that contaminated soils are accepted, managed, and discharged in accordance with the WAP.
 - b. Acceptance, management, and discharge of contaminated soils and CRT panel glass at ESL must be monitored and reported in accordance with MRP No. R8-2016-0034.
 - c. **CRT Panel Glass** – Cathode Ray Tube Panel Glass (CRT Panel Glass) accepted at ESL must be delivered and disposed at ESL in accordance with the supplemental CRT panel glass protocol described in the Discharger's letter to the Regional Board dated July 8, 2016, which is hereby appended to the previously approved WAP.

13. **Waste-Derived Materials** – All non-hazardous waste-derived materials accepted at ESL for disposal or onsite re-use shall meet the following requirements:
 - a. The beneficial re-use of waste materials or waste-derived materials, excluding contaminated soils, at ESL shall be evaluated and approved by the Executive Officer of the Regional Board on a case-by-case basis.
 - b. **Interim Cover** – For use as interim cover (alternative daily cover and intermediate cover), waste-derived materials shall be designed, managed, and constructed to minimize percolation of liquids through waste as required under Title 27, §20705(b).
 - c. **Limitations for Use as Cover Materials** – Waste-derived materials used for interim or alternative daily cover shall meet the requirements stated in Title 27, §20705(e) and shall only consist of those materials that comply with the following:
 - i. **Match Unit Classification** – Waste-derived materials shall meet the classification criteria for wastes that can be discharge to ESL. Therefore, a material that would be classified as a designated waste cannot be utilized for daily or intermediate cover, or other re-use at ESL unless that material is approved for discharge (as a

waste) to that landfill pursuant to Title 27, §20200(a)(1) or is authorized by these WDRs, and

- ii. **Composition** – Waste-derived materials shall only consist of materials whose constituents (other than water) and foreseeable breakdown byproducts, under the chemical, biochemical, and temperature conditions which they are likely to encounter within ESL, either:
 - (a) for non-composite lined portions of ESL, are mobilizable only at concentrations which would not adversely affect beneficial uses of waters of the State, in the event of a release, or
 - (b) for composite-lined portions of ESL, are included in the group of constituents that are regularly monitored and analyzed as part of the MRP for ESL.

- d. To satisfy the requirements of 13b and 13c above, the Discharger shall complete either of the following:
 - i. Perform a demonstration with the proposed materials for use as an alternative cover and submit a description and evaluation of performance for approval by the Executive Officer.
 - ii. Provide satisfactory documentation and justification supporting use of the proposed materials as an alternative cover for review and approval by the Executive Officer.

B. DISCHARGE PROHIBITIONS

1. The discharge of MSW to any area of ESL beyond the existing footprint of the site is prohibited, unless approved by the Regional Board, and unless such discharge is to an area equipped with a containment system that is constructed in accordance with the standard of the industry, and that meets the additional requirements for both liners and leachate collection systems in accordance with an approved JTD or JTD addendum, and any additional requirements of Title 27, §§20330, 20080, 20340, and 20360; and State Board Resolution No. 93-62.
2. The discharge of hazardous wastes at the site is prohibited.
3. The disposal of liquid wastes into the landfill is prohibited, except as allowed by Discharge Specifications A.5 or A.6 of this order.
4. The discharge of TWW and designated wastes in unlined waste management units (WMUs) at the site is prohibited.

5. The discharge of any TWW that has been removed from electric, gas, or telephone service and is subject to regulation as a hazardous waste under the federal act is prohibited at ESL.
6. No radioactive waste, including low level radioactive waste, as defined by the agency with jurisdictional authority, shall be disposed of at ESL.
7. No medical wastes, including infectious materials, hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal and human diseases shall be disposed of at ESL.

C. PROVISIONS

1. The Discharger shall comply with all discharge prohibitions, discharge specifications, provisions, and monitoring and reporting requirements of this order upon its adoption.
2. The discharge of wastes shall not cause the release of pollutants or waste constituents in a manner that could cause a condition of contamination, pollution, or nuisance to occur, as indicated by the most appropriate statistical or non-statistical data analysis method and retest method.
3. The treatment or disposal of wastes shall not cause a nuisance or pollution, as defined in CWC §13050.
4. All wastes shall be maintained on property owned or controlled by the Discharger.
5. There shall be no disposal of wastes that contain any substances in concentrations toxic to human, animal, or plant life, such that these wastes could commingle with waters of the State.
6. **Engineered Alternative Liner Design** – The Discharger has demonstrated that the Engineered Alternative Design liner system (EAD) for ESL (including the expansion areas) satisfies the criteria for an engineered alternative to the prescriptive standard design (PSD) (as provided in Title 27, §20080 (b)). The performance of the EAD equals or exceeds the waste containment capability of the PSD. For each phase of liner construction, the following shall apply:
 - a. Each phase of construction at ESL shall be completed in accordance with, and shall include all components of, the approved EAD liner system;
 - b. An approved construction quality assurance/ construction quality control (CQA/CQC) program for the EAD shall be implemented during each phase of construction;

- c. All mitigation measures proposed by the Discharger or the Regional Board shall be implemented to protect water quality;
 - d. The Discharger and its contractors shall submit progress reports on a daily basis to the Regional Board during the construction of the landfill's EAD so that compliance with Item 6.a., above, can be determined. Daily summary reports, including all construction activities and tests, shall be submitted by 12:00 PM the following business day;
 - e. Within 90 days of completing installation and construction of the EAD, the Discharger shall submit a final as-built report including drawings, maps, and CQA/CQC certification; and
 - f. If the EAD fails to perform as expected, the Regional Board has the authority to require additional protective measures at the landfill.
7. The operation of ESL shall not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act (CWA), including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to CWA §402.
 8. During the months when precipitation can be expected, disposal activities shall be confined to the smallest area possible based on operational procedures and the anticipated quantity of wastes that will be received.
 9. The Discharger shall remove and properly dispose of any wastes that are placed at the site in violation of these requirements.
 10. The Discharger shall require all operators that submit a request to dispose of sewage treatment plant grit and screening residues at the ESL to provide a minimum 24-hour notice to landfill personnel, or a written schedule of expected delivery dates and approximate arrival times, before these materials can be transported to the ESL.
 11. The Discharger shall establish and maintain permanent monuments in California coordinates (or equivalent) to define the boundary of the footprint of the landfill. The benchmarks shall be certified by a licensed surveyor or a professional civil engineer authorized to practice in California.
 12. Prior to the initiation of waste discharge in the approved expansion area phases, the Discharger shall install an approved expanded groundwater monitoring network as necessary.
 13. The water used during landfill operations shall be limited to the minimum amount reasonably necessary for dust control purposes, fire suppression, and minor maintenance.

14. Adequate cover shall be placed over all lifts at all times, with the exception of the active face of the landfill, which receives daily cover or an approved alternative daily cover (ADC) for protection.
15. At the end of each operating day, as defined in the ESL's solid waste facility permit, or if landfilling operations cease for more than a 12-hour period, daily cover or an approved ADC must be placed over the active face in a quantity and depth sufficient to prevent any waste from daylighting or as directed by Regional Board staff.
16. The Discharger shall notify the Regional Board within 48 hours (or two business days) of any slope failure occurring in a waste management unit. Any failure that threatens the integrity of containment features or the landfill shall be promptly corrected after a remediation workplan and schedule have been approved by the Executive Officer of the Regional Board, unless it poses an immediate threat to the environment or landfill containment structures. Then it will be corrected as soon as possible.
17. The Discharger shall implement the attached MRP No. R8-2016-0034 to ensure compliance with these waste discharge requirements, and to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Unit, or any unreasonable impairment of beneficial uses caused by or associated with discharges of waste to the Unit.
18. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer of the Regional Board, proposing modifications to MRP No. R8-2016-0034. The Discharger shall implement any changes in the revised MRP upon receipt of a signed copy.
19. The Discharger shall install any additional ground water, soil pore liquid, soil pore gas, or leachate monitoring devices determined by the Executive Officer of the Regional Board to be necessary to comply with MRP No. R8-2016-0034.
20. The Discharger shall expand the existing landfill gas collection and recovery system as the landfill operation progresses to prevent the migration of landfill gas to groundwater and to the environment.
21. **Concentration Limits** – The concentration limit for any given Constituent of Concern (COC) or Monitoring Constituent in a given monitored medium at ESL shall be in accordance with Title 27, §20400. These limits are specified in the attached MRP.
22. Alternative daily cover at ESL may be used consistent with §20690 of 27CCR and the provisions and specifications of these WDRs and the MRP.

23. The Discharger shall notify the Regional Board staff site representative by telephone and/or email within two business days of determination of a failure of facilities necessary to maintain compliance with the requirements in this order. Within seven days, the notification shall be submitted in writing to the Regional Board.
24. The Discharger shall permit the Regional Board:
 - a. Entry upon premises where a discharge source is located;
 - b. To copy any records required to be kept under terms and conditions of this order;
 - c. To photograph or videotape any structures, facilities, activities, or other phenomena that could result in adverse impacts to water quality and that are pertinent to compliance of the landfill with its WDRs; and
 - d. To sample any discharges.
25. The Discharger shall notify the Regional Board in writing of any proposed change in ownership or responsibility for construction, operation, closure or post-closure maintenance of the landfill. This notification shall be given prior to the effective date of the change and shall include a statement by the new Discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing WDRs and any revisions thereof.
26. The Executive Officer is hereby authorized:
 - a. To require, based upon newly discovered or newly developed information and/or regulatory guidelines, that the Discharger revise the WAP and/or the methods and procedures for monitoring, reporting, accepting, managing, reusing, and/or disposing of the materials listed below at ESL:
 - i. Incinerator Ash;
 - ii. Contaminated Soils;
 - iii. CRT Panel Glass;
 - iv. Waste-Derived Materials.
 - b. To require and approve changes to MRP No. R8-2016-0034.
27. The Discharger shall maintain a copy of this order at the site so as to be available at all times to site operating personnel.
28. This Order supersedes and replaces WDR Order No. R8-2011-0014, which is hereby rescinded.

D. CONTINGENCY RESPONSES

1. **Measurably Significant Evidence of a Release** – If previously undetected measurably significant evidence of a release, as described in the MRP, has tentatively been identified in groundwater at the site, the Discharger shall immediately notify the site's designated Regional Board staff person by phone and/or email. The Discharger shall also provide written notification within seven days of such determination (Title 27, §20420(j)(1)) and shall carry out a discrete retest in accordance with Title 27, §20415(e)(8)(E). The Discharger shall inform the Regional Board of the outcome of the retest as soon as the results are available, and submit written results within seven days of receipt of the final retest laboratory report.
2. **Optional Demonstration** – If measurably significant evidence of a release is verified per Section D.1. above, but is believed to be derived from off-site sources or due to natural changes in water chemistry, the discharger may propose to demonstrate that the landfill is not the cause of the release in accordance with Title 27, §20420(k)(7).
3. **Response to Verified Evidence of a Release** – If measurably significant evidence of a release is verified per Section D.1. above, and it is determined that the landfill is the cause of the release, then the discharger shall:
 - a. Implement those response actions described in Title 27, §20420 (k), and
 - b. Implement an Evaluation Monitoring Program (EMP) pursuant to Title 27, §20425.
4. **Implementation of Corrective Action Program** – If the Regional Board determines that the Discharger has satisfactorily implemented and completed the EMP release response actions described above, the Discharger shall implement a Corrective Action Program (CAP) pursuant to Title 27, §20430, based upon results of the EMP and other monitoring activities.
5. **Physical Evidence of a Release** – If either the Discharger or the Regional Board determines that there is significant physical evidence of a release (Title 27, §20385(a)(3)), the Discharger shall conclude that a release has been discovered and shall:
 - a. Immediately notify the Regional Board of this fact by email (or acknowledge the Regional Board's determination);
 - b. Comply with the requirements of Title 27, §20420(k) for all potentially affected monitored media; and

- c. Conduct any additional investigations stipulated in writing by Regional Board staff for the purpose of identifying the cause of the release.
6. **Release Beyond Facility Boundary** – Any time the Discharger or Regional Board staff concludes that a release from the Unit has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).
 - a. **Initial Notice** – Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
 - b. **Updated Notice** – Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
 - c. **Submittal** – Each time the Discharger sends a notification to Affected Persons, the Discharger shall, within seven days of sending such notification, provide Regional Board staff with both a copy of the notification and a current mailing list of all Affected Persons.
7. **Liquid Waste Spill** – The Discharger shall notify Regional Board staff by telephone or electronic mail within 24 hours (or one business day) of the discovery of any liquid waste spill in the WMU area. A written report shall be filed with Regional Board staff within seven (7) days, containing at least the following information:
 - a. **Map** – A map showing the location(s) of the discharge.
 - b. **Flow Rate** – An estimate of the flow rate of the discharge.
 - c. **Description** – A description of the nature and extent of the discharge (e.g., all pertinent observations and analysis).
 - d. **Sampling** – A description of any sample(s) collected for laboratory analysis and a copy of the analytical results of the sample.
 - e. **Corrective Measures** – A description of the corrective measure(s) implemented, and any proposed mitigation measures for approval by Regional Board staff.
8. **Facility Failure** – The Discharger shall notify Regional Board staff by telephone and/or email within 48 hours (or two business days) of any slope failure or failure of facilities necessary to maintain compliance with the requirements in this Order. Within seven (7) days, the notification shall be submitted in writing to Regional Board staff. Any failure that threatens the integrity of the waste containment

features or the landfill shall be promptly corrected after a remediation workplan and schedule have been approved by Regional Board staff, unless it poses an immediate threat to the environment or landfill containment structures. Then it will be corrected as soon as possible.

9. **Leachate Seep** – The Discharger shall report within 24 hours by telephone and/or email the discovery of any seepage from, or soil staining at, the site. If feasible, a sample of the leachate shall be collected and analytical data submitted to the Regional Board. A written report shall be filed with the Regional Board within seven days, containing at least the following information:
 - a. **Map** – A map showing the location(s) of seepage;
 - b. **Flow rate** – An estimate of the flow rate or volume;
 - c. **Description** – A description of the nature of the discharge (e.g., all pertinent observations and analyses); and
 - d. **Corrective measures** - Measures proposed to address any seep(s) for approval by Regional Board staff.

E. MONITORING, SAMPLING, AND ANALYSIS SPECIFICATIONS

1. **Monitoring and Sampling** – All water quality monitoring and sampling analyses for the monitored media, and the monitoring points and background monitoring points for each such medium, shall be performed in accordance with Title 27, §20415.
2. **Monitoring Constituents** – Monitoring constituents for the required monitoring program(s) at the landfill shall be approved by Regional Board staff. Regional Board staff may approve alternative monitoring constituents that meet the requirements of both Title 27, §§20380 et seq. and 40 CFR §258.54. Regional Board staff may also approve alternative statistical methods that meet the requirements of Title 27, §20415(e) and 40 CFR §258.53.
3. **Latter Third/Thirty Days** – For any given monitored medium, samples shall be taken from all monitoring points and background monitoring points to satisfy the data analysis requirements. All samples shall be taken during the latter third of the Reporting Period within a maximum of 30 days, and shall be taken in a manner that ensures sample independence to the greatest extent feasible, in accordance with Title 27, §20415(e)(12)(B).
4. **Groundwater Surface Elevation** – In accordance with Title 27, §20415(e)(13), the groundwater monitoring program shall include an accurate determination of the groundwater surface elevation at each well each time groundwater is sampled. Groundwater elevations taken prior to purging the well and sampling

for monitoring constituents shall be used to fulfill the Spring and Fall groundwater flow rate/direction analyses required under this section.

5. **Data Analysis** – Data analysis shall be carried out as soon as the monitoring data are available, in accordance with Title 27, §20415(e) and the MRP.
6. **Groundwater Flow Rate and Direction** – Groundwater flow rate and direction shall be monitored in accordance with Title 27, §20415(e)(15). This information shall be included in the regular monitoring reports for ESL.

F. DRAINAGE AND EROSION CONTROL SPECIFICATIONS

1. Waste management units shall be designed, constructed, and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout which could occur as a result of precipitation from a 100-year, 24-hour frequency storm. This shall be accomplished by, at a minimum, the following:
 - a. Top deck surfaces shall be constructed and maintained to achieve a minimum of one percent (1%) slope, including structures which direct water to downdrains;
 - b. Downdrains and other necessary drainage structures must be constructed for all sideslopes as necessary; and
 - c. All components of the facility drainage system must be designed, constructed, and maintained to withstand site-specific maximum intensity precipitation (peak flow⁵) from a 100-year, 24-hour storm (6 inches).
2. The Discharger shall design, construct, and maintain a **run-on** drainage control system to prevent flow from off-site sources onto the disposal areas of the landfill (active or inactive portions), and to collect and divert both the calculated volume of precipitation and the peak flow from off-site sources that result from a 100-year, 24-hour storm;
3. The Discharger shall design, construct, and maintain a **runoff** drainage control system to minimize sheet flow from the disposal areas, and to collect and divert both the calculated volume of precipitation and the peak flow from on-site surface runoff that results from a 100-year, 24-hour storm; and
4. The Discharger shall design, construct, and maintain drainage control structures to divert **natural seepage** from native ground and to prevent such seepage from entering the waste management units.

⁵ Peak flow is the maximum expected flow of run-on and runoff resulting from precipitation both on and off-site for a given recurrence interval.

5. All drainage structures shall be protected and maintained continuously to ensure their effectiveness.
6. Leachate and landfill gas condensate containment system structures shall be protected and maintained continuously to ensure their effectiveness and to prevent commingling of leachate and gas condensate with surface run-on and runoff.
7. Annually, **by October 1**, all drainage control system construction and maintenance activities shall be completed. By December 31 of each year, the Discharger shall submit a drainage control system maintenance report to the Executive Officer of the Regional Board. The drainage control system maintenance report shall include, but not be limited to, the following information:
 - a. For the previous 12 months, a summary of the adequacy and effectiveness of the drainage control system to collect and divert the calculated volume of precipitation and peak flows resulting from a 100-year, 24-hour storm;
 - b. A tabular summary of both new and existing drainage control structures, including the types and completion dates of maintenance activities performed for each of these structures; and
 - c. An 11"x17" or larger site map indicating the locations of the elements listed in Item 5.b., above, and the flow direction of all site drainage.
8. At least 30 days prior to the construction of any new elements of the drainage control system, the Discharger shall submit a workplan outlining all design parameters and calculations, construction details, and a construction quality assurance plan for approval by the Executive Officer of the Regional Board.
9. The Discharger shall submit as-built drawings within 90 days of completing construction of any new elements of the drainage control system at the site.
10. All design plans, construction plans, and operation and maintenance plans shall be prepared by, or prepared under the direct supervision of, a registered civil engineer or a certified engineering geologist.
11. Periodic inspection of the waste management units, the drainage control system, and all containment structures shall be performed to assess the conditions of these facilities and to initiate corrective actions necessary to maintain compliance with this order.

12. The facility shall be surveyed annually by **October 1** of each year, either by aerial surveillance or a licensed surveyor to assure compliance with the one percent slope requirement in specification F.1.a. above. By December 31 of each year, a map compiled from this survey data shall be submitted to the Regional Board, showing landfill elevations, the flow direction of all site drainage, the drainage control system, and containment structures. This map may be submitted as part of the drainage and erosion control system maintenance report required above in specification F.7.

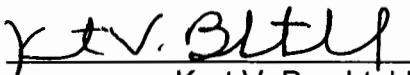
G. REQUIRED REPORTS AND NOTICES

1. The Discharger shall provide all reports and notices in accordance with the requirements of the MRP.
2. All applications, reports or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR §122.22.
3. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, reissuing, or terminating this order. The Discharger shall also furnish to the Regional Board, upon request, copies of records that this order requires the Discharger to maintain.
4. The Discharger shall file a JTD or JTD amendment with the Regional Board at least 120 days before making any material change or proposed change in the character, location, volume, treatment, or disposal methods of any discharge of waste.
5. The Discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or site activities that may result in noncompliance with these WDRs.
6. In the event of any change in control or ownership of land or waste discharge facilities currently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this order by letter. A copy of this letter shall be signed by the new owner accepting responsibility for complying with this order, and shall be forwarded to the Executive Officer of the Regional Board.
7. **Closure and Post-Closure Plans** – In accordance with Title 27, §21710(a)(2) and §21780 (b)(3), final closure and PCMPs for solid waste landfills shall be submitted two years prior to the anticipated date of closure. Within five years of the anticipated date of closure, the operator may submit the final closure and PCMPs in lieu of submitting new or updated preliminary closure and PCMPs.

8. **Final Cover** – An alternative monolithic final cover using on-site soil was modeled to determine whether the alternative cover would be consistent with the performance goals addressed by the prescriptive standard. Based on previous experience of cover construction at the site, the soils used for final cover shall have an average hydraulic conductivity of less than or equal to 1×10^{-5} cm/sec. At no time shall the hydraulic conductivity of any soil samples collected to determine hydraulic conductivity exceed 5×10^{-5} cm/sec.

9. **Financial Assurance Plans** – The Discharger shall obtain, maintain, and submit assurances of financial responsibility for:
 - a. Closure activities pursuant to Title 27 §22205;
 - b. Post-closure maintenance activities pursuant to Title 27 §22210;
 - c. Operating liability pursuant to Title 27 §22215; and
 - d. Corrective action activities pursuant to Title 27 §22220.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 16, 2016.


Kurt V. Berchtold
Executive Officer

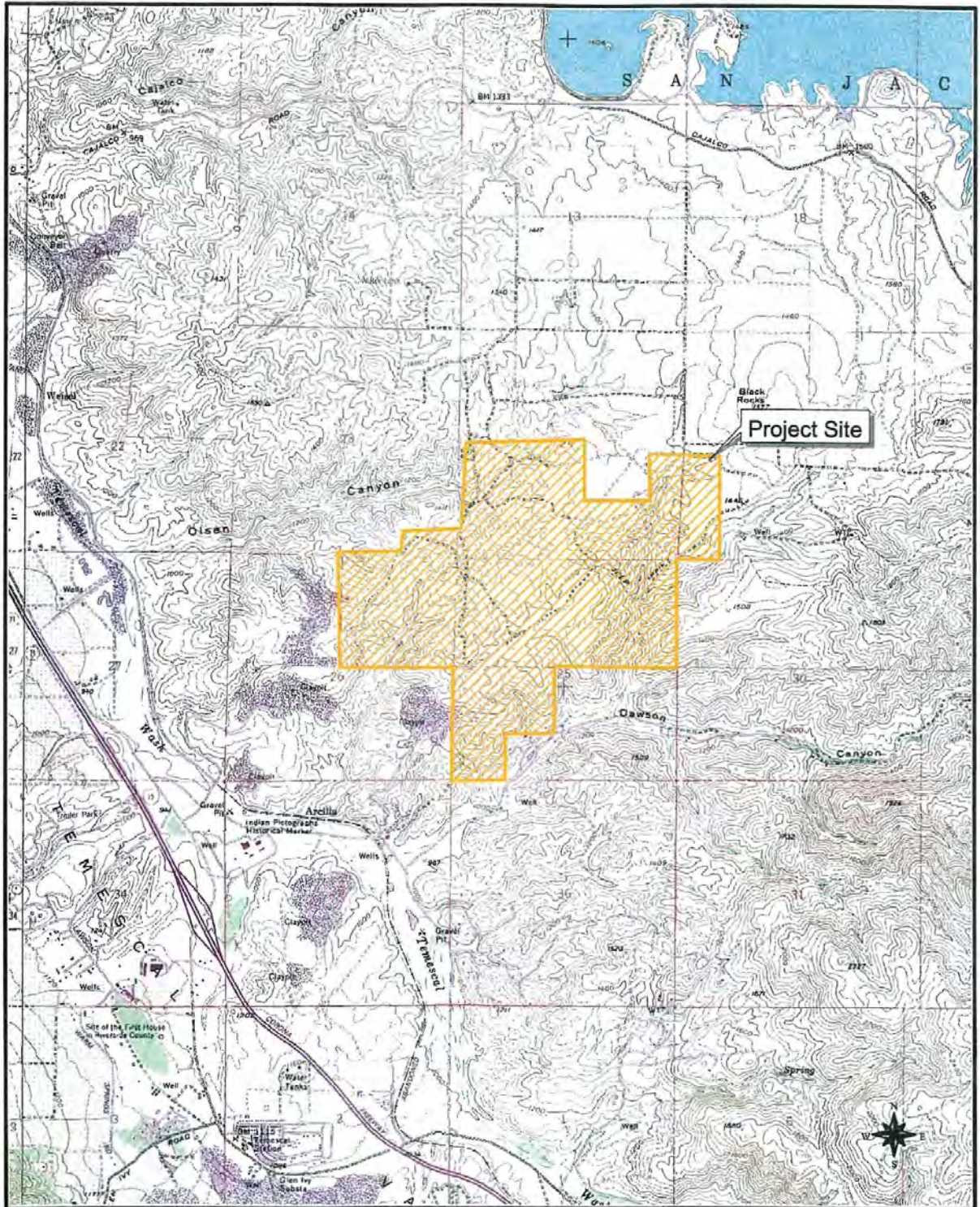


FIGURE 1 - Map Showing Location of El Sobrante Landfill

1:36000

1000 0 1000 2000 3000 Feet

Source: USGS Lake Mathews,
Santiago Peak, Alberhill and Corona South, California
1988-Lake Mathews, Alberhill and Santiago Peak 1982- Corona South



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER NO. R8-2016-0034

MONITORING AND REPORTING PROGRAM

FOR

USA WASTE OF CALIFORNIA, INC.

EL SOBRANTE LANDFILL
CLASS III SOLID WASTE DISPOSAL SITE
RIVERSIDE COUNTY

A. GENERAL

1. The Discharger shall comply with all the monitoring programs required under this Monitoring and Reporting Program (MRP).
2. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer (EO) of the Regional Board, proposing modifications to the MRP. The Discharger shall implement any changes in the revised MRP approved by the Regional Board's EO upon receipt of a signed copy of the revised MRP.
3. This MRP may be revised and approved by the EO of the Regional Board as necessary to reflect changes in the required water quality programs.

B. WATER QUALITY PROTECTION STANDARD

1. In accordance with Title 27, §20390 - §20405, the Water Quality Protection Standard (WQPS) for ESL shall consist of a list of Constituents of Concern (COCs), Concentration Limits for each COC, and a Point of Compliance and all designated Monitoring Points. These components of the WQPS shall be established in accordance with the procedures described in this section.
2. **Constituents of Concern (COCs):** As of the date of this MRP, the COCs for ESL shall consist of those constituents listed in Appendix II of 40 CFR 258
3. **Concentration Limits:** The concentration limits for the COCs and any given constituent in a given monitored medium (e.g., the uppermost aquifer) is either the natural background level, the laboratory RL, or the PQL for the constituent as follows:

- a. If the constituent (e.g., TDS) naturally exists in the monitored medium, or has been demonstrated to have originated off-site, the limit shall be the statistically calculated value, based on a minimum of eight background data points.
 - b. If the constituent (e.g., a VOC) does not naturally exist in the monitored medium, the laboratory RL/PQL shall be the limit.
4. **Points of Compliance Wells:** In accordance with Title 27, §20405, the Points of Compliance (POC) where the WQPS applies shall be a vertical surface, located at the hydraulically downgradient limit of each WMU, that extends through the uppermost aquifer underlying the WMU at the landfill site or an alternate location approved by the EO of the Regional Board. Due to the nature of the hydrogeology at the site, for ESL, the POC shall include all of the monitoring wells listed in Table 1 and indicated on Figure 1 of this MRP.
 5. The WQPS shall apply during the active life of the landfill, the closure period, the post-closure maintenance period, and during any compliance period. [Title 27, §20410]
 6. Unless the Discharger proposes, and the EO of the Regional Board approves, an alternative WQPS, the Discharger shall perform the monitoring activities in compliance with the WQPS specified in this MRP.

C. WATER QUALITY MONITORING PROGRAM

1. **Groundwater Quality Monitoring** – The Discharger shall conduct the following groundwater monitoring activities at the Landfill:
 - a. **Semi-Annual Monitoring** shall be conducted at all groundwater monitoring wells (see Table 2 and Figure 2), and seeps and subdrains. On a semi-annual basis, water samples shall be collected from these monitoring points and analyzed for the constituents listed in Table A of this MRP. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section D Data Analysis Methodology of this MRP.
 - b. **Five-Year Evaluation:** Every five years, continuing in 2021, alternately in the Summer (by September 30) and Winter (by March 31), the Discharger shall collect water samples from all ground water monitoring wells, seeps, and subdrains and analyze these samples for those constituents listed in Table A and Table B of this MRP. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section D Data Analysis Methodology of this MRP.

2. **Leachate and Gas Condensate Monitoring** shall be conducted at all landfill leachate and gas condensate monitoring points. On an annual basis, samples shall be collected from these monitoring points and analyzed for all constituents listed in Table A and Table B of this MRP. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section D Data Analysis Methodology of this MRP. If there are any newly detected constituents at levels above the reporting limit in samples collected from one or more of these monitoring points, the subject monitoring points must be re-sampled and retested. Results from this retest must be evaluated in relation to the initial results for the purpose of verification.
3. The Regional Board's Executive Officer may require that additional **monitoring constituents be added to the list of constituents** described above based upon analysis of monitoring data results, and that monitoring samples must be analyzed for these constituents on a regular basis.
4. **Sample collection, storage, and analysis** shall be performed in accordance with the most recent version of standard U.S. EPA Methods (U.S. EPA Publication "SW-846"), and in accordance with a sampling and analysis plan acceptable to the EO of the Regional Board.
5. **Laboratory water quality analyses** must be performed by a State of California-approved laboratory and specific analytical methods must be identified. In addition, the Discharger is responsible for ensuring that laboratory analyses of samples from all monitoring points are performed in accordance with the following requirements:
 - a. The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., Trace or ND determinations) in historical data for that medium, the SW-846 analytical method having the lowest Method Detection Limit (MDL) shall be selected.
 - b. Trace results (results falling between the MDL and the Practical Quantitation Limit (PQL)) for organic compounds shall be reported as such.
 - c. MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the

results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.

- d. For each constituent monitored during a given reporting period, the Discharger shall include in the monitoring report a listing of the prevailing MDL and PQL for that constituent, together with an indication as to whether the MDL, PQL, or both have changed since the prior reporting period. The Discharger shall require the analytical laboratory to report censored data (trace level and non-detect determinations). In the event that a constituent's MDL and/or PQL change, the Discharger shall highlight that change in the report's summary and the report shall include an explanation for the change.
 - e. Quality assurance and quality control (QA/QC) data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:
 - i. The method, equipment, and analytical detection limits.
 - ii. The recovery rates, including an explanation for any recovery rate that is outside the USEPA-specified recovery rate.
 - iii. The results of equipment and method blanks.
 - iv. The results of spiked and surrogate samples.
 - v. The frequency of quality control analysis.
 - vi. The name and qualifications of the person(s) performing the analyses.
 - f. QA/QC analytical results involving detection of common laboratory contaminants in any sample shall be reported and flagged for easy reference.
6. **Groundwater Flow Direction:** The Discharger shall measure the water level in each groundwater monitoring well at least quarterly and determine the presence and character of horizontal and vertical gradients (if applicable), and groundwater flow rate and direction for the respective groundwater body.

D. DATA ANALYSIS METHODOLOGY

1. **Detection Wells, Evaluation Wells, and Background Wells** – Analytical monitoring data generated from analysis of groundwater samples from Detection Monitoring Wells, Evaluation Monitoring Wells, and Background Monitoring Wells shall be evaluated as follows:
 - a. Monitoring data for Table A organic constituents shall be evaluated using non-statistical data analysis methods to determine whether there is measurably significant evidence of a release from ESL.

- b. Monitoring data for Table A inorganic constituents shall be evaluated using statistical data analysis methods specified in Title 27, §20415(e)(8)(C, D, and E) to determine whether there is measurably significant evidence of a release from ESL.
 - c. Monitoring data for Table A supplemental constituents shall be evaluated as needed to provide water quality characterization regarding hydrogeochemical conditions and to assist in making determinations regarding measurably significant evidence of a release from ESL or other changes in site conditions.
 - d. On an annual basis, all Table A constituents that have been detected in a groundwater sample three or more times during the previous five years shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
 - e. Monitoring data for Table B organic constituents generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using non-statistical data analysis methods to determine whether there is measurably significant evidence of a release from ESL.
 - f. Monitoring data for Table B inorganic constituents, including but not limited to metals, cyanide, and sulfide, which are generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using statistical data analysis methods specified in Title 27, §20415(e)(8)(C, D, and E) to determine whether there is measurably significant evidence of a release from ESL.
 - g. In evaluating the results of a Five-Year Evaluation Event (Event), all Table B constituents that have been detected during an Event shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
2. **Corrective Action Wells** – Analytical monitoring data generated from analysis of groundwater samples from Corrective Action Monitoring Wells shall be evaluated as follows:
- a. Monitoring data for Table A organic constituents shall be evaluated based on statistical determination of increasing or decreasing trends
 - b. Monitoring data for Table A inorganic constituents shall be evaluated based on statistical determination of trends and site hydrogeochemical relationships and responses.

- c. Monitoring data for Table A supplemental constituents shall be evaluated as needed to provide water quality characterization in relation to hydrogeochemical conditions, to indications of a release, or to changes in other site conditions.
 - d. On an annual basis, all Table A constituents that have been detected in a groundwater sample three or more times during the previous five years shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
 - e. Monitoring data for Table B organic constituents generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using non-statistical data analysis methods to determine whether there is measurably significant evidence of a release from ESL.
 - f. Monitoring data for Table B inorganic constituents, including but not limited to metals, cyanide, and sulfide, which are generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using statistical data trend analysis methods specified in Title 27, §20415(e)(8)(C, D, and E) to characterize water quality conditions.
 - g. In evaluating the results of a Five-Year Evaluation Event (Event), all Table B constituents that have been detected during an Event shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
3. **Expansion Area Wells** – Analytical monitoring data generated from analysis of groundwater samples from Expansion Area Monitoring Wells is evaluated as needed for assessment of background analytical laboratory data collection and for regional reference.
 4. **Seeps and Subdrains** – Analytical monitoring data generated from analysis of samples from seeps and subdrains shall be evaluated as follows:
 - a. Monitoring data for Table A organic constituents shall be evaluated based on statistical determination of increasing or decreasing trends.
 - b. Monitoring data for Table A inorganic constituents shall be evaluated based on statistical determination of trends and hydrogeochemical relationships and responses.
 - c. Monitoring data for Table A supplemental constituents shall be evaluated as needed to provide water quality characterization in relation to hydrogeochemical conditions, to indications of a release, or to changes in other site conditions.

- d. On an annual basis, all Table A constituents that have been detected in a seep or subdrain sample three or more times during the previous five years shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
 - e. Monitoring data for Table B organic constituents generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using non-statistical data analysis methods to determine whether there is measurably significant evidence of a release from ESL.
 - f. Monitoring data for Table B inorganic constituents, including but not limited to metals, cyanide, and sulfide, which are generated as part of a Five-Year Evaluation Event pursuant to Section C.1.b. above shall be evaluated using statistical data trend analysis methods specified in Title 27, §20415(e)(8)(C, D, and E) to characterize water quality conditions.
 - g. In evaluating the results of a Five-Year Evaluation Event (Event), all Table B constituents that have been detected during an Event shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.
5. **Leachate and Landfill Gas Condensate** – Analytical monitoring data generated from analysis of leachate and landfill gas condensate samples shall be evaluated as follows:
- a. Monitoring data for all organic constituents shall be evaluated for presence or absence in samples and for comparison with constituents listed on the Table of Detected Constituents.
 - b. Monitoring data for all inorganic constituents shall be evaluated for comparison with groundwater monitoring data and shall also be evaluated using statistical data analysis methods approved by the Executive Officer to evaluate trends and to determine whether there is increasing concentrations of inorganic constituents.
 - c. Monitoring data for Table A supplemental constituents shall be evaluated to provide water quality characterization in relation to hydrogeological conditions, to indications of a release, or to changes in other site conditions.
6. **Measurably Significant Evidence of Release of Table A or Table B Organic Constituents at Detection Monitoring Wells and Evaluation Monitoring Wells:** Measurably significant evidence of release of an organic constituent to groundwater at Detection Monitoring Wells and Evaluation Monitoring Wells will be tentatively determined to have occurred if either of the two following conditions is met:

- a. Analysis of groundwater samples from any well indicates that concentrations of three or more organic constituents have exceeded their laboratory method detection limits (MDLs) in the sample; or
 - b. Analysis of groundwater samples from any well indicates that concentrations of one or more organic constituents have exceeded their laboratory practical quantitation or reporting limit (PQL or RL) in the sample.
7. **Measurably Significant Evidence of Release of Table A or Table B Inorganic Constituents at Detection Monitoring Wells and Evaluation Monitoring Wells:** Measurably significant evidence of release of inorganic constituents to groundwater at a Detection Monitoring Well or Evaluation Monitoring Well will be tentatively determined to have occurred when the concentration of any inorganic constituent in a groundwater sample collected from a Detection Monitoring Well or Evaluation Monitoring Well is determined to be above a statistically calculated limit such as, but not limited to, an intra-well Shewart-CUSUM control chart limit or, as appropriate, an intra-well prediction limit.
8. **Measurably Significant Evidence of Release of Table A or Table B Organic Constituents at Corrective Action Monitoring Wells:** Measurably significant evidence of release of Table A or Table B organic constituents to groundwater at Corrective Action Monitoring Wells will be tentatively determined to have occurred if either of the two following conditions is met:
 - a. Analysis of groundwater samples from any well indicates that concentrations of three or more previously undetected organic constituents have exceeded their laboratory method detection limits (MDLs) in the sample; or
 - b. Analysis of groundwater samples from any well indicates that concentrations of one or more previously undetected organic constituents have exceeded their laboratory practical quantitation or reporting limit (PQL or RL) in the sample.
9. **Measurably Significant Evidence of Release of Table A or Table B Inorganic Constituents at Corrective Action Monitoring Wells:** Measurably significant evidence of a previously undetected release of Table A or Table B inorganic constituents to groundwater at Corrective Action Monitoring Wells will be tentatively determined to have occurred based upon evaluation of analytical results by the Discharger in coordination with concurrent evaluation by the Executive Officer.

E. CONTINGENCY RESPONSES

1. **Measurably Significant Evidence of a Release** – If previously undetected measurably significant evidence of release is indicated in a groundwater monitoring well per Section D above, the Discharger shall immediately notify the Regional Board and shall collect additional groundwater samples from the subject well within 30 days of the notification (unless laboratory contamination is suspected). The additional groundwater samples shall be tested in a laboratory only for the constituent(s) detected in the previous sample that indicated measurably significant evidence of a release. If analysis of the monitoring data for the additional sample also indicates measurably significant evidence of a release, these results shall serve as verification that such a release has occurred.
2. **Optional Demonstration** – If measurably significant evidence of a release is verified per Section E.1. above, but is believed to be derived from off-site sources or due to natural changes in water chemistry, the discharger may propose to demonstrate that the landfill is not the cause of the release in accordance with Title 27, §20420(k)(7).
3. **Response to Verified Evidence of a Release** – If measurably significant evidence of a release is verified per Section E.1. above, and it is determined that the landfill is the cause of the release, then the discharger shall:
 - a. Implement those response actions described in Title 27, §20420 (k)(1) – (6), and
 - b. Implement an Evaluation Monitoring Program (EMP) pursuant to Title 27, §20425.
4. **Implementation of Corrective Action Program** – If the Regional Board determines that the Discharger has satisfactorily implemented and completed the EMP release response actions described above, the Discharger shall implement a Corrective Action Program (CAP) pursuant to Title 27, §20430, based upon results of the EMP and other monitoring activities.
5. **Table of Detected Constituents** – Any previously undetected constituent(s) that is/are detected in samples collected from a groundwater monitoring well, and confirmed per the requirements of Section E.1 above, shall be automatically and immediately added to the Table of Detected Constituents (Section G.2.e. below) for ESL. The newly updated Table of Detected Constituents (indicating the newly added constituent(s)) shall be submitted by the Discharger to the Regional Board within 14 days following the addition of any new constituent(s) to the Table. This constitutes the means by which the Discharger shall meet the requirements of 40CFR Part 258.55(d)(1).

6. **Physical Evidence of a Release** – If either the Discharger or the Regional Board determines that there is significant physical evidence of a release pursuant to Title 27, §20385(a)(3) and Section F.1. of the MRP, the Discharger shall conclude that a release has been discovered and shall:
 - a. Within seven (7) days notify Regional Board staff of this fact by email (or acknowledge the Regional Board's determination);
 - b. Carry out the requirements of release discovery response in Section E.3., above, for all potentially affected monitored media.
 - c. Carry out any additional investigations stipulated in writing by Regional Board staff for the purpose of identifying the cause of the indication.

7. **Release Beyond Facility Boundary** – Any time the Discharger concludes that a release from the landfill has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons) as follows:
 - a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
 - b. Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
 - c. Each time the Discharger sends a notification to Affected Persons (under Section E.7.a. or E.7.b., above), it shall, within seven days of sending such notification, provide Regional Board staff with, and add into the Facility's operating record, both a copy of the notification and a current mailing list of Affected Persons.

8. **Liquid Waste Spill** – The Discharger shall notify Regional Board staff by telephone or electronic mail within 24 hours (or one business day) of the discovery of any liquid waste spill in the WMU area. A written report shall be filed with Regional Board staff within seven (7) days, containing at least the following information:
 - a. Map – A map showing the location(s) of the discharge.
 - b. Flow Rate – An estimate of the flow rate of the discharge.
 - c. Description – A description of the nature and extent of the discharge (e.g., all pertinent observations and analysis).

- d. **Sampling** – A description of any sample(s) collected for laboratory analysis and a copy of the analytical results of the sample.
 - e. **Corrective Measures** – A description of the corrective measure(s) implemented, and any proposed mitigation measures for approval by Regional Board staff.
9. **Facility Failure** – The Discharger shall notify Regional Board staff by telephone and/or email within 48 hours (or two business days) of any slope failure or failure of facilities necessary to maintain compliance with the requirements in this Order. Within seven (7) days, the notification shall be submitted in writing to Regional Board staff. Any failure that threatens the integrity of the waste containment features or the landfill shall be promptly corrected after a remediation workplan and schedule have been approved by Regional Board staff, unless it poses an immediate threat to the environment or landfill containment structures. Then it will be corrected as soon as possible.
10. **Leachate Seep** – The Discharger shall immediately notify Regional Board staff by telephone and/or email within 48 hours (or two business days) following the discovery of any seepage from, or soil staining, at the site. If feasible, a sample of the leachate shall be collected for analysis. A written report shall be filed with Regional Board staff within seven (7) days, containing at least the following information:
- a. **Map** – A map showing the location(s) of seepage;
 - b. **Flow rate** – An estimate of the flow rate or volume;
 - c. **Description** – A description of the nature of the discharge (e.g., all pertinent observations and analyses);
 - d. **Corrective measures** - Measures proposed to address any seep(s) for approval by Regional Board staff;
 - e. A copy of the laboratory analytical results of the seep sample shall be submitted to Regional Board staff within 60 days after filing the written report.
11. **Incinerator Ash Monitoring** – Based upon evaluation of analytical results for monitoring of leachate and landfill gas condensate as described in the WDRs (Discharge Specification A.11) and in Section D.5. above, incinerator ash shall be monitored as described below.
- a. For the constituents listed below, treated incinerator ash samples shall be sampled and analyzed in accordance with the frequency indicated below, and in accordance with the Waste Extraction Test (WET) procedures contained in 22CCR, Division 4.5, Chapter 11, Appendix II, by citrate buffer extraction, for

Constituent Units		Sampling & Testing Frequency
Cadmium	mg/L	once per quarter*
Copper	mg/L	once per quarter*
Lead	mg/L	once per quarter*
Zinc	mg/L	once per quarter*
pH	pH units	once per quarter*

*The Executive Officer may require more frequent sampling based upon number and frequency of exceedances for the same constituent until the exceedances are corrected.

- b. Analyses of treated incinerator ash shall be made on samples collected during a five day period of each quarter (at least one each day). These daily samples shall be composited into one quarterly sample to ensure samples are representative of the waste stream. Sample collection and compositing shall be performed in accordance with the sampling and compositing procedure submitted to the Regional Board as an attachment to the Discharger's letter, dated May 4, 2015. Other sampling and compositing procedures shall only be used following approval by the Executive Officer.
- c. A description of, and the results of, incinerator ash monitoring activities shall be included in the Annual Summary Reports. The Discharger shall summarize, tabulate, and report upon incinerator ash sampling activities and the results of analytical testing.

F. GENERAL SITE MONITORING

- 1. **Facility and Systems Monitoring** – The Discharger shall regularly inspect and evaluate ESL facility and associated systems to determine their condition and effectiveness, and to ascertain whether significant physical evidence of a release has occurred. Significant physical evidence of a release includes 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 site and any other change to the environment that could reasonably be expected to be the result of a release from the facility and associated systems. These regular inspections and evaluations shall include the following:
 - a. Monthly, the Discharger shall inspect all **waste management units** and shall evaluate their condition and effectiveness in achieving compliance with Discharge Specifications in the WDRs. All areas of slope failure, differential settlement, fissuring, erosion, ponding, leachate staining, and seepage into or from the landfill shall be identified, field-marked, and documented. In the event seepage is discovered, the location of each seep shall be mapped and a mitigation plan submitted for the approval of

Regional Board staff. All such field conditions and events shall be photographed for the record.

- b. At a minimum, all systems such as **landfill gas condensate collection, leachate containment, groundwater extraction, and seep water collection systems** shall be inspected and evaluated on a monthly basis for their condition and effectiveness. All deficiencies identified and the dates and types of corrective action taken shall be recorded in a permanent log. All deficiencies shall be documented for the record. The volume of liquids collected in the containment structures shall be recorded monthly. Liquid samples, such as landfill gas condensate and leachate, shall be collected in accordance with the monitoring frequency in Table 3, and analyzed in accordance with Section C of this MRP.
 - c. At a minimum, all **run-on and runoff drainage control structures** shall be inspected and evaluated quarterly for their condition and effectiveness in achieving compliance with Discharge Specification F.3. of the WDRs. During dry weather conditions, the condition and effectiveness of the drainage control system shall be evaluated on the basis of its conformance to the as-built drawings, or revised drawings, for the system. All deficiencies shall be identified, repaired, and recorded.
2. **Annual Aerial or Ground Survey** – To ensure adequate drainage and erosion control at ESL in accordance with Discharge Specifications A.4., F.1., and F.10. of the WDRs, an **aerial or ground survey** of the landfill facility shall be performed annually by October 1 in accordance with the schedule in Table 3 of this MRP. The Discharger shall notify the Regional Board if performance of the aerial photogrammetric survey cannot be achieved by the October 1 deadline due to bad weather conditions or bad visibility.
 3. **Surface Water Monitoring:** Surface water monitoring at the site shall be conducted as required under the State NPDES General Industrial Stormwater Permit.
 4. **Treated Incinerator Ash Monitoring** – Incinerator ash discharge information shall be submitted in the Annual Summary Reports. For each annual reporting period, the Discharger shall tabulate and report upon the quantity of treated incinerator ash accepted and discharged each calendar month at ESL, the manner and quantities of incinerator ash disposal or reuse (e.g., ADC, road base, wet-weather deck, etc.), and shall include a map depicting the location(s) where treated incinerator ash was placed.
 5. **Contaminated Soil Monitoring for the Waste Acceptance Program**
Contaminated soil discharge information shall be compiled and submitted in the Annual Summary Reports. For each annual reporting period, the Discharger shall tabulate and report upon each case and discrete quantity of contaminated

soil accepted, managed, and discharged at ESL. Details that must be tabulated and reported upon include the following:

- a. Name of the agency, organization, or corporation (generator) that generated the contaminated soils
 - b. Owner of the contaminated site property
 - c. Names and locations of the sites of origination from which the contaminated soils were generated
 - d. Type or types of operation(s) conducted at the site(s) of origination
 - e. Type or types of activity(ies) or operation(s) which produced the contaminated soils
 - f. Discrete and total quantities of contaminated soils
 - g. Number of soil samples collected for analysis of each discrete quantity of contaminated soil
 - h. The laboratory analyses performed to characterize the contaminated soils
 - i. The COCs and corresponding concentrations identified in each discrete quantity of contaminated soils
 - i. Dates that contaminated soils were delivered to and accepted at ESL
 - j. Number of truckloads used to transport discrete quantities of contaminated soils
 - k. Type of end use or location of disposal for each discrete quantity of contaminated soil
6. **CRT Panel Glass Monitoring** – Information regarding acceptance and disposal of CRT panel glass at ESL shall be compiled and submitted in the Annual Summary Reports. For each annual reporting period, the Discharger shall tabulate and report upon the total quantities of CRT panel glass accepted at ESL each month as well as for the annual reporting period. In addition, the identification of CRT panel glass generators and their respective quantities delivered to ESL (monthly and annually) shall be included in the Annual Summary Reports.
7. **Waste-Derived Materials Monitoring** – Information regarding acceptance and re-use of waste-derived materials (as defined in the WDRs) at ESL shall be compiled and submitted in the Annual Summary Reports. For each annual reporting period, the Discharger shall tabulate and report upon instances where waste-derived materials are re-used for purposes other than disposal at ESL during the annual reporting period. For each instance, the Discharger shall indicate the type and amount of waste-derived materials re-used, as well as the specific method and location of re-use.

G. REPORTING

1. **Semi-Annual Groundwater Monitoring Reports** – The Discharger shall submit semi-annual monitoring reports to the Regional Board summarizing groundwater monitoring activities for the previous monitoring period. The semi-annual

summary reports are due to the Regional Board within thirty (30) days following the end of the monitoring period. The semi-annual report for the Fall/Winter monitoring period may be combined with the annual water quality monitoring report (as indicated in Section G.2 below). Semi-annual monitoring reports shall include the following:

- a. **Results and Findings of Facility and Systems Monitoring** – At a minimum, the following information shall be included in the report:
 - i. **Waste Management Units** – Monthly field inspection records for these units and statements describing the condition and performance of these units
 - ii. **Management of Liquids** – A summary of the total volumes, on a monthly basis, of landfill leachate and gas condensate collected at the site, and how these liquids are managed.
 - iii. **Waste type and placement** – The quantity and types of wastes discharged and a map indicating the locations in the landfill where waste has been placed since submittal of the last such report; and
 - iv. **Daily cover** – If alternative daily cover (ADC) is used at the site that meets the requirements of Title 27, §20705(e), and has been approved by Regional Board staff, the type, amount (including, if applicable, average thickness), method of placement, and any problems or deficiencies encountered must be noted in the report.
- b. **Well Information** – For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used to remove stagnant water in the well before sampling, pursuant to Title 27, §20415(e)(12)(B);
- c. **Other Monitored Media** – The report shall include a description of other monitoring activities that occurred during the monitoring period including monitoring of subdrains, and seeps. A tabulated summary of analytical results from these activities shall also be included in the report.
- d. **Groundwater Elevations and Contours** – For each monitoring point addressed by the report, a tabular summary and graphical presentation of all measured groundwater elevation data, and a groundwater elevation contour map, showing the direction of groundwater flow under/around ESL based upon water level elevations taken for the monitoring period;
- e. **Sampling Information** – For each monitoring point addressed by the report, field sampling records showing the type of pump or other device used and its vertical placement for sampling, and a detailed description of

the sampling procedures (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name(s) and qualifications of the person(s) taking the samples, and any other observations); and

- f. **Analytical Data and Results** – The report shall include a summary of all analytical monitoring results. Data shall be summarized and presented in a tabular format. Statistical and non-statistical analyses of the analytical data shall be presented. An evaluation and interpretation of the data analyses shall be also be included. A copy of the laboratory analytical results shall be included.
 - g. **QA/QC Summary and Evaluation** – The report shall include a summary describing laboratory and field QA/QC activities performed as part of monitoring activities. The summary shall include a discussion of any water sampling and monitoring activities that deviated from the sampling and quality assurance plans.
 - h. **Compliance Record Discussion** – A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the landfill's waste discharge requirements relating to water quality issues;
 - i. **Tabulation of Monitoring Data** – All analytical monitoring data obtained during the two previous semi-annual reporting periods shall be presented in tabular form in the annual summary report and shall be uploaded electronically onto the State's database (GeoTracker) within one month following the submittal of the semi-annual monitoring reports to the Regional Board.
 - j. **Graphical Presentation** – Graphical presentation of Groundwater Analytical Data shall be completed in accordance with Title 27, §20415(e)(14) and shall include as necessary time-series concentration plots as described in Section D above;
 - k. **Conclusions** – Each report shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities that were conducted during the monitoring period.
2. **Annual Summary Monitoring Report** – The discharger shall submit an annual report to the Regional Board covering the previous monitoring year (April 1 of the previous year through March 31 of the following year). The annual summary reports are due on April 30. This report may be combined with the water quality monitoring report for the period ending March 31, and shall include, but not be limited to, the following:

- a. **Results and Findings of Facility and Systems Monitoring** – At a minimum, the following information shall be included in the report:
 - i. **Waste Management Units** – Monthly field inspection records for these units and statements describing the condition and performance of these units
 - ii. **Landfill Gas Condensate and Leachate Containment Systems, Subdrain, and Vadose Zone Monitoring System** – A summary of the results of inspecting and evaluating the landfill leachate and gas condensate monitoring, collection, and control facilities as required in Section F.1.b. of this MRP. In addition, the reports shall include monthly field inspection records and monitoring data for the systems listed above and statements describing the condition and performance of these systems.
 - iii. **Drainage and Erosion Control Systems** – Quarterly field inspection records and monitoring data for these systems and statements describing the condition and performance of these systems
 - iv. **Management of Liquids** – A summary of the total volumes, on a monthly basis, of landfill leachate and gas condensate collected at the site, and how these liquids are managed.
 - v. **Waste Type and Placement** – The quantity and types of wastes discharged and a map indicating the locations in the landfill where waste has been placed since submittal of the last such report; and
 - vi. **Daily Cover** – If alternative daily cover (ADC) is used at the site that meets the requirements of Title 27, §20705(e), and has been approved by Regional Board staff, the type, amount (including, if applicable, average thickness), method of placement, and any problems or deficiencies encountered must be noted in the report.
- b. **Compliance Record Discussion** – A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the landfill's waste discharge requirements relating to water quality issues;
- c. **Summary of Changes** – A written summary of monitoring results and monitoring and control systems, indicating any changes made or observed since the previous annual report;

- d. **Waste Allocation Map** – A map showing the area, if any, in which filling has been completed during the previous calendar year;
- e. **Table of Detected Constituents** – In the first Annual Summary Report submitted to the Regional Board following adoption of the WDRs and this MRP by the Regional Board, the Discharger shall include a table containing any constituent that is or has been detected in samples collected from a groundwater monitoring well at the site, and confirmed per the requirements of Section E.1 above. Annually, the Discharger shall update the constituents contained on the Table of Detected Constituents in accordance with Section E.5. of this MRP;
- f. **Table of Concentration Limits** – In the first Annual Summary Report submitted to the Regional Board following adoption of the WDRs and this MRP by the Regional Board, the Discharger shall include a table containing the concentration limits for each constituent on the COC list (Section B.2. above) in accordance with Section B.3. of this MRP. Bi-annually, the Discharger shall update this Table of Concentration Limits in accordance with Section B.3. of this MRP;
- g. **Incinerator Ash** – In accordance with Section F.4. above, Annual Reports shall include a section that contains a summary description of incinerator ash acceptance, discharge, and monitoring activities. In addition, Annual Reports shall include the following at a minimum:
 - i. Tabulation of monthly quantities of treated incinerator ash accepted and discharged at ESL
 - ii. A map depicting the locations at ESL where incinerator ash was discharged and the manner of discharge
 - iii. Identity of personnel who collected, transported, and analyzed incinerator ash samples as applicable
 - iv. Detailed tabulation of incinerator ash sampling and testing activities and results as applicable
- h. **Contaminated Soil** – In accordance with Section F.5. above, Annual Reports shall include a section that contains a summary description of contaminated soil acceptance, discharge, and monitoring activities. In addition, Annual Reports shall include a tabular summary that includes the following at a minimum:
 - i. Name of the agency, organization, or corporation (generator) that generated the contaminated soils
 - ii. Owner of the contaminated site property

- iii. Names and locations of the sites of origination from which the contaminated soils were generated
 - iv. Type or types of operation(s) conducted at the site(s) of origination
 - v. Type or types of activity(ies) or operation(s) which produced the contaminated soils
 - vi. Discrete and total quantities of contaminated soils
 - vii. Number of soil samples collected for analysis of each discrete quantity of contaminated soil
 - viii. The laboratory analyses performed to characterize the contaminated soils
 - ix. The COCs and corresponding concentrations identified in each discrete quantity of contaminated soils
 - x. Dates that contaminated soils were delivered to and accepted at ESL
 - xi. Number of truckloads used to transport discrete quantities of contaminated soils
 - xii. Type of end use or location of disposal for each discrete quantity of contaminated soil
- i. **CRT Panel Glass** – Information pertaining to acceptance and disposal of CRT panel glass at ESL in accordance with Section F.6. above.
 - j. **Waste-Derived Materials** – Information pertaining to acceptance and re-use of waste-derived materials at ESL in accordance with Section F.7. above.
 - k. **Conclusions** – Each report shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities that were conducted during the monitoring period.
3. **Storm Event Report** – In the event of a major storm event at the facility (defined as any storm that results in the site receiving more than 0.5 inches of precipitation within a 24-hour period), the Discharger shall submit a brief storm event report to the Regional Board within 48 hours of the cessation of precipitation. This report shall include a brief description of facility systems performance during the storm event, a tabulation of the amount of precipitation at the site, pertinent photographs, the identification of any deficiencies, and the date and type of corrective action that has, or will be, taken to correct these deficiencies if necessary.
4. **Annual Drainage Control System Maintenance Report** – Annually, by December 31, an annual Site Drainage Control and Maintenance Report shall be submitted. The drainage control system maintenance report shall include, but not be limited to, the following information:

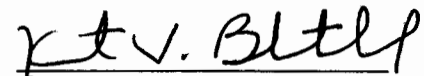
- a. For the previous 12 months, a summary of the adequacy and effectiveness of the drainage control system to collect and divert the calculated volume of precipitation and peak flows resulting from a 100-year, 24-hour storm.
 - b. Field records and results of drainage and erosion control system inspections performed in accordance with Sections F.1.c. above
 - c. A tabular summary of the new and existing drainage control structures including the types and completion dates of maintenance activities performed for each of these structures; and
 - d. An 11"x17" site map indicating the locations of the elements listed in Section G.3.c., above, and the flow direction of all site drainage.
 - e. A map depicting the results of the annual aerial or ground survey performed in accordance with Discharge Specification F.10. of the WDRs and Section F.2. of this MRP.
5. **Five-Year Evaluation Monitoring Report** – As described in Section C.1.b. above, every five years, the Discharger shall collect and analyze groundwater samples for all constituents listed on Table A and Table B and submit a report to the Regional Board containing the results of these activities. The results of the Five-Year Evaluation monitoring activities must be reported to the Regional Board within one month following the end of the Reporting Period. The last Five-Year evaluation was performed in 2016. Future Five-Year Monitoring Reports are due every five years subsequent to submittal of the previous Five-Year Monitoring Report submittal (in 2021, 2026, 2031, etc.). This report may be combined with a Semi-Annual or Annual water quality monitoring report as appropriate, and shall include, but not be limited to, the following:
- a. **Well Information** – For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used to remove stagnant water in the well before sampling, pursuant to Title 27, §20415(e)(12)(B);
 - b. **Other Monitored Media** – The report shall include a description of other monitoring activities that occurred during the monitoring period including monitoring of surface waters, subdrains, and seeps. A tabulated summary of analytical results from these monitoring activities shall also be included in the report.
 - c. **Groundwater Elevations and Contours** – For each monitoring point addressed by the report, a tabular summary and graphical presentation of all measured groundwater elevation data, and a groundwater elevation

contour map, showing the direction of groundwater flow under/around ESL based upon water level elevations taken for the monitoring period;

- d. **Sampling Information** – For each monitoring point addressed by the report, field sampling records showing the type of pump or other device used and its vertical placement for sampling, and a detailed description of the sampling procedures (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name(s) and qualifications of the person(s) taking the samples, and any other observations); and
- e. **Analytical Data and Results** – The report shall include a summary of all analytical monitoring results. Data shall be summarized and presented in a tabular format. Statistical and non-statistical analyses of the analytical data shall be presented. An evaluation and interpretation of the data analyses shall be also be included. A copy of the laboratory analytical results shall be included.
- f. **QA/QC Summary and Evaluation** – The report shall include a summary describing laboratory and field QA/QC activities performed as part of monitoring activities. The summary shall include a discussion of any water sampling and monitoring activities that deviated from the sampling and quality assurance plans.
- g. **Compliance Record Discussion** – A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the landfill's waste discharge requirements relating to water quality issues;
- h. **Summary of Changes** – A written summary of monitoring results and monitoring and control systems, indicating any changes made or observed since the previous annual report; and
- i. **Graphical Presentation** – Graphical presentation of Groundwater Analytical Data shall be completed in accordance with Title 27, §20415(e)(14) and shall include as necessary time-series concentration plots as described in Section D above;
- j. **Conclusions** – Each report shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities that were conducted during the monitoring period.

6. **Monitoring and Reporting Period for Five-Year Evaluation Report** – Every fifth year, continuing next with the Summer of 2021, the discharger shall sample all monitoring points for each monitored medium for all constituents listed on Table A and Table B. The discharger shall submit the reports and documents for this five-year monitoring event in accordance with the due dates specified in Table 3: Monitoring and Reporting Schedule of this MRP.
7. **Reporting Schedule** – The discharger shall submit the reports and documents in accordance with the deadlines specified in Table 3: Monitoring and Reporting Schedule of this MRP.
8. **Signature** – All reports shall be signed by a responsible officer or a duly authorized representative of the discharger and shall be submitted under penalty of perjury.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 16, 2016.



Kurt V. Berchtold
Executive Officer

TABLE 1: POINT OF COMPLIANCE WELLS	
	MW3-5
	MW-23
	MW-22
	MW2-R
	MW-06A
	MW-09
	MW3-2

TABLE 2: GROUNDWATER MONITORING WELLS	
Well ID Number	Well Classification
MW2-R	Point of Compliance Well; Detection Monitoring Well
MW-05	Corrective Action Well
MW-06A	Point of Compliance Well; Detection Monitoring Well
MW-08R	Detection Monitoring Well
MW-09	Point of Compliance Well; Corrective Action Well
MW-14	Corrective Action Well
MW-16	Corrective Action Well
MW-18	Corrective Action Well
MW-19	Corrective Action Well
MW-21	Corrective Action Well; Detection Monitoring Well
MW-22	Point of Compliance Well; Detection Monitoring Well
MW-23	Point of Compliance Well; Detection Monitoring Well
MW3-1	Detection Monitoring Well
MW3-2	Point of Compliance Well; Detection Monitoring Well
MW3-4	Expansion Area Well
MW3-5	Point of Compliance Well; Expansion Area Well
P-8	Evaluation Well for Corrective Action Well MW-05
P-12	Evaluation Well For Corrective Action Well MW-09

TABLE 3: MONITORING AND REPORTING SCHEDULE

TASK DESCRIPTION	MONITORING PERIOD	REPORT DUE DATE
Quarterly Groundwater Level Measurement	October 1 – December 31	April 30 of each year
	January 1 – March 31	
	April 1 – June 30	October 31 of each year
	July 1 – September 30	
Semi-Annual Water Quality	October 1 – March 31	April 30 of each year
	April – September 30	October 31 of each year
Landfill Leachate and Gas Condensate Monitoring	October 1 – October 31	April 30 of following year
April Retesting for Leachate and Gas Condensate	If required, April 1 – April 30	October 31 of each year
Drainage Control System Maintenance	By October 1 of each year	December 31 of each year
Aerial or Ground Survey and Topographic Map	By October 1 of each year	December 31 of each year
Annual Summary and General Site Monitoring	April 1 of previous year to March 31 of current year	April 30 of each year
Five-Year Monitoring Event (Table A and Table B Constituents)	July 1 – September 30, 2021	October 31, 2021
	January 1 – March 31, 2026	April 30, 2026

DRAFT TABLE A MONITORING CONSTITUENTS		
Inorganic Constituents	Supplemental Constituents	
Bicarbonate Alkalinity	Carbonate Alkalinity	Nitrate (as N)
Chloride	Total Alkalinity	Sulfate
Calcium	TDS	Iron
Magnesium	TOC	Manganese
Sodium	pH	
Potassium		
Volatile Organic Compounds		
Acetone	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	Trichloroethylene; Trichloroethene
Acrylonitrile	1,2-Dichloropropane;	Trichlorofluoromethane; CFC-11
Benzene	cis-1,3-Dichloropropene	1,2,3-Trichloropropane
Bromochloromethane	trans-1,3-Dichloropropene	Vinyl acetate
Bromodichloromethane	Ethylbenzene	Vinyl chloride
Bromoform; Tribromomethane	2-Hexanone; Methyl butyl ketone	Xylenes
Carbon disulfide	Methyl bromide; Bromomethane	Acetonitrile; Methyl cyanide
Carbon tetrachloride	Methyl chloride; Chloromethane	Acrolein
Chlorobenzene	Methylene bromide; Dibromomethane	Allyl chloride
Chloroethane; Ethyl chloride	Methylene chloride; Dichloromethane	Chloroprene
Chloroform; Trichloromethane	Methyl ethyl ketone; 2-Butanone	m-Dichlorobenzene; 1,3-Dichlorobenzene
Dibromochloromethane	Methyl iodide; Iodomethane	Dichlorodifluoromethane; CFC 12
1,2-Dibromo-3-chloropropane	4-Methyl-2-pentanone; Methyl isobutyl ketone	1,3-Dichloropropane
1,2-Dibromoethane	Styrene	2,2-Dichloropropane
o-Dichlorobenzene; 1,2-Dichlorobenzene	1,1,1,2-Tetrachloroethane	1,1-Dichloropropene
p-Dichlorobenzene; 1,4-Dichlorobenzene	1,1,2,2-Tetrachloroethane	Ethyl methacrylate
trans-1,4-Dichloro-2-butene	Tetrachloroethylene;	Isobutyl alcohol
1,1-Dichloroethane	Toluene	Methacrylonitrile
1,2-Dichloroethane	1,1,1-Trichloroethane	Methyl methacrylate
1,1-Dichloroethylene; 1,1-Dichloroethene	1,1,2-Trichloroethane	Propionitrile; Ethyl cyanide
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene		

DRAFT TABLE B MONITORING CONSTITUENTS

Inorganic Constituents

Arsenic	Nickel	Selenium
Barium	Lead	Thallium
Beryllium	Antimony	Tin
Cadmium	Vanadium	Mercury
Cobalt	Zinc	Cyanide
Chromium	Silver	Sulfide
Copper		

Organic Constituents

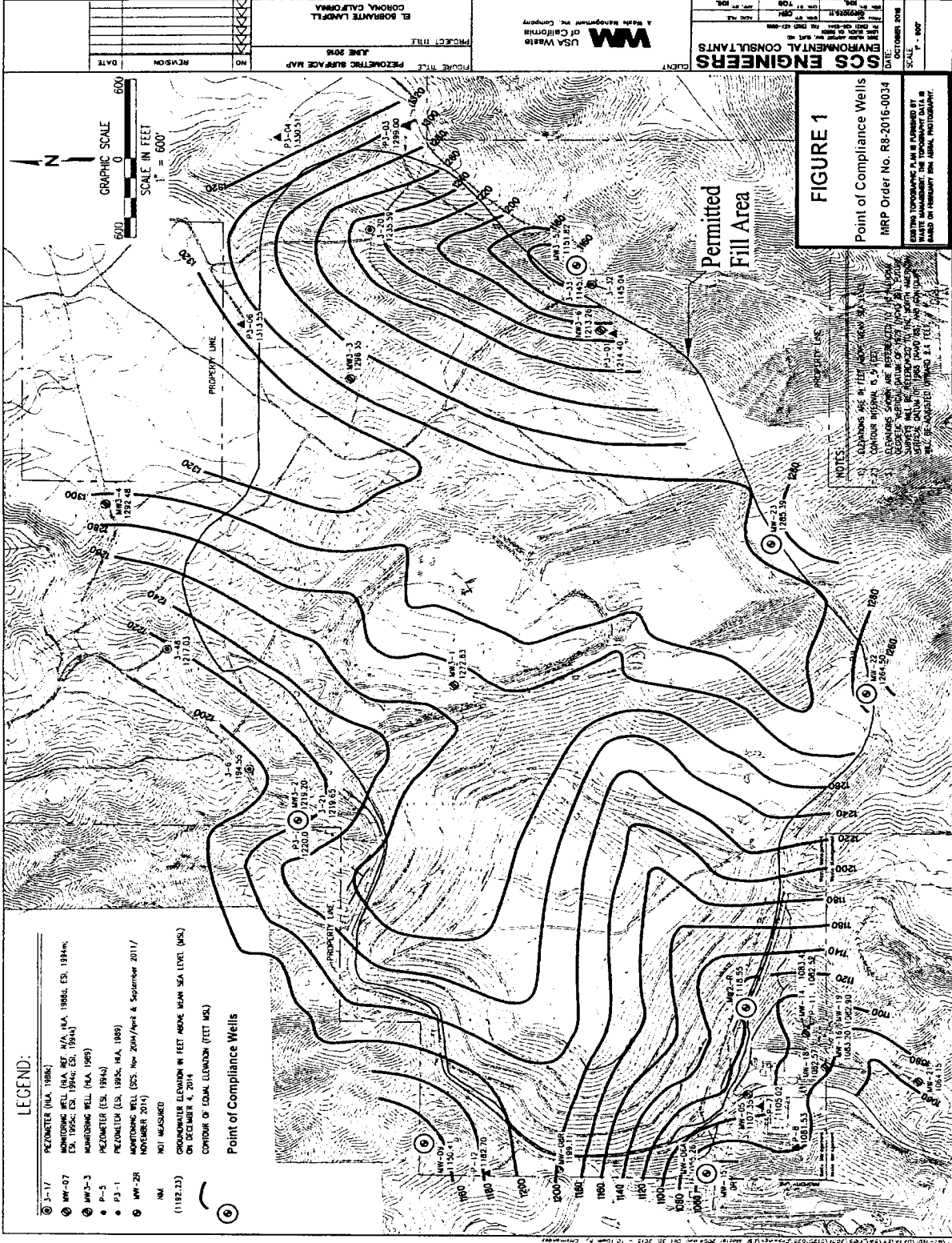
PCBs (40 CFR 258; Appendix II Aroclors)	TCDD (Dioxin) (For Five-Year Evaluation Events, groundwater samples do not need to be analyzed for TCDD unless it has been detected and confirmed in landfill -leachate or gas condensate samples)	
Chlorinated Herbicides		
2,4-Dichlorophenoxyacetic acid	Silvex; 2,4,5-TP	2,4,5-Trichlorophenoxyacetic acid
Organochlorine Pesticides		
Aldrin	4,4-DDT	Endrin aldehyde
alpha-BHC	Dieldrin	Heptachlor
beta-BHC	Endosulfan I	Heptachlor epoxide
delta-BHC	Endosulfan II	Kepone
gamma-BHC; Lindane	Endosulfan sulfate	Methoxychlor
4,4-DDD	Endrin	Toxaphene
4,4-DDE	Chlordane	

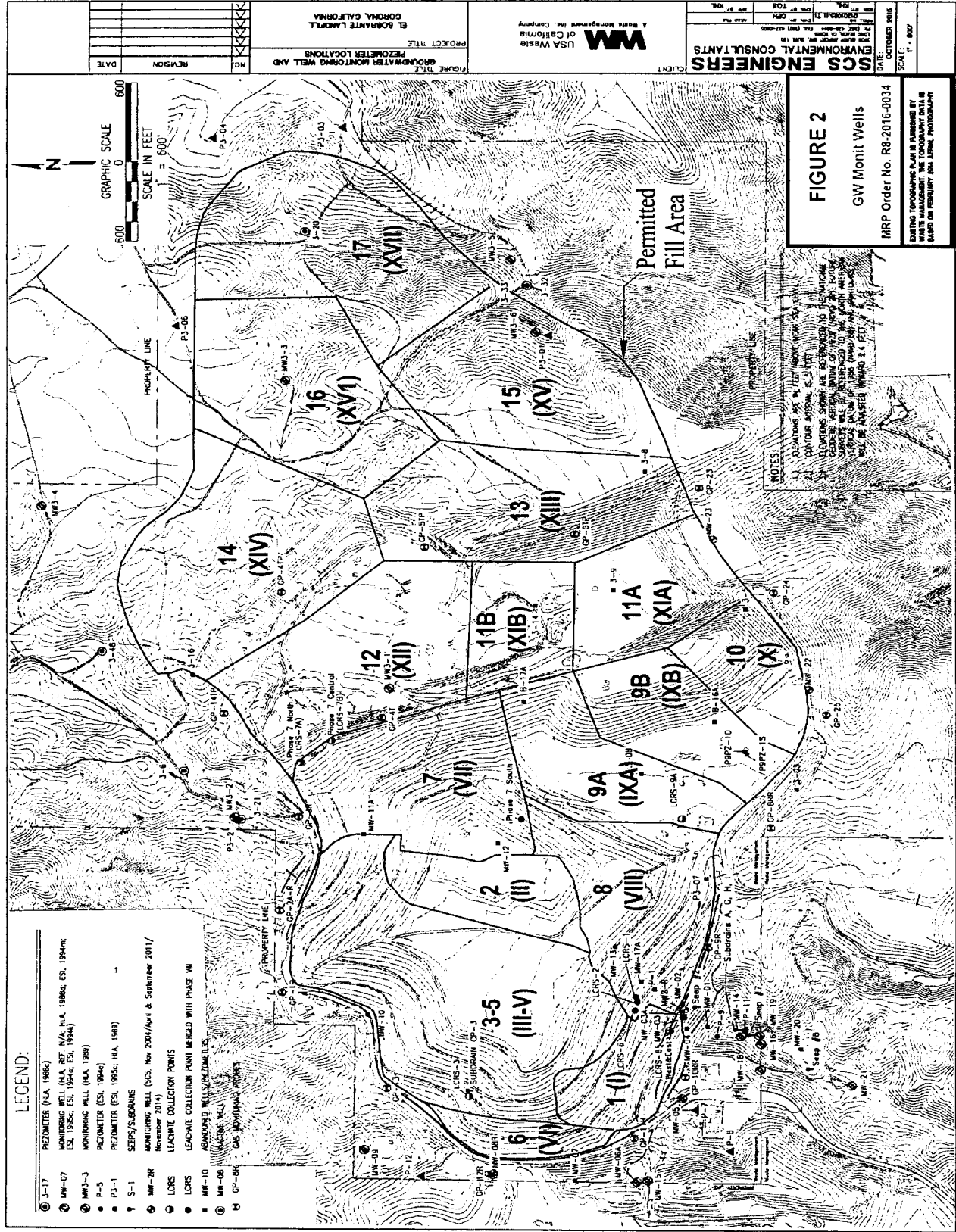
DRAFT TABLE B MONITORING CONSTITUENTS (cont.)

Organic Constituents (cont.)

Semi-Volatile Organic Compounds

Acenaphthene	Dimethoate	2-Nitroaniline
Acenaphthylene	4-Dimethylaminoazobenzene	3-Nitroaniline
Acetophenone	7,12-Dimethylbenz[a]anthracene	4-Nitroaniline
2-Acetylaminofluorene	3,3-Dimethylbenzidine; toluidine	Nitrobenzene
4-Aminobiphenyl	2,4-Dimethylphenol	2-Nitrophenol
Anthracene	Dimethyl phthalate	4-Nitrophenol
Benzo[a]anthracene	1,3-Dinitrobenzene	N-Nitrosodi-n-butylamine
Benzo[b] fluoranthene	4,6-Dinitro-2-methylphenol	N-Nitrosodiethylamine
Benzo[k] fluoranthene	2,4-Dinitrophenol	N-Nitrosodimethylamine
Benzo[ghi] perylene	2,4-Dinitrotoluene	N-Nitrosodiphenylamine
Benzo[a] pyrene	2,6-Dinitrotoluene	N-Nitroso-N-dipropylamine
Benzyl alcohol	Dinoseb	N-Nitrosomethylethylamine
Bis(2-chloroethoxy) methane	Di-n-octyl phthalate	N-Nitrosopiperidine
Bis(2-chloroethyl) ether	Diphenylamine	N-Nitrosopyrrolidine
2,2-oxybis(1-chloropropane)	Disulfoton	5-Nitro-o-toluidine
Bis(2-ethylhexyl) phthalate	Ethyl methanesulfonate	Parathion
4-Bromophenyl phenyl ether	Famphur	Pentachlorobenzene
Butyl benzyl phthalate	Fluoranthene	Pentachloronitrobenzene
4-Chloroaniline	Fluorene	Pentachlorophenol
Chlorobenzilate	Hexachlorobenzene	Phenacetin
4-Chloro-3-methylphenol	Hexachlorobutadiene	Phenanthrene
2-Chloronaphthalene	Hexachlorocyclopentadiene	Phenol
2-Chlorophenol	Hexachloropropene	4-Phenylenediamine
4-Chlorophenyl phenyl ether	Hexachloroethane	Phorate
Chrysene	Indeno (1,2,3-cd) pyrene	Pronamide
2-methylphenol	Isodrin	Pyrene
3-methylphenol	Isophorone	Safrole
4-methylphenol	Isosafrole	1,2,4,5-Tetrachlorobenzene
Diallate	Methapyrilene	2,3,4,6-Tetrachlorophenol
Dibenz [a,h] anthracene	3-Methylcholanthrene	o-Toluidine
Dibenzofuran	Methyl methanesulfonate	1,2,4-Trichlorobenzene
Di-n-butyl phthalate	2-Methylnaphthalene	2,4,5-Trichlorophenol
3,3-Dichlorobenzidine	Methyl parathion	2,4,6-Trichlorophenol
2,4-Dichlorophenol	Naphthalene	0,0,0-Triethyl phosphorothioate
2,6-Dichlorophenol	1,4-Naphthoquinone	1,3,5-Trinitrobenzene
Diethyl phthalate	1-Naphthylamine	
Thionazin	2-Naphthylamine	





NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

GENERAL PERMIT FOR
STORM WATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITIES

ORDER
NPDES NO. CAS000001

This Order was adopted by the State Water Resources Control Board on:	April 1, 2014
This Order shall become effective on:	July 1, 2015
This Order shall expire on:	June 30, 2020

IT IS HEREBY ORDERED that as of July 1, 2015 this Order supersedes Order 97-03-DWQ except for Order 97-03-DWQ's requirement to submit annual reports by July 1, 2015 and except for enforcement purposes. As of July 1, 2015, a Discharger shall comply with the requirements in this Order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder.

CERTIFICATION


I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order, including its fact sheet, attachments, and appendices is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on April 1, 2014.

AYE: Chair Felicia Marcus
Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore

NAY: None

ABSENT: Board Member Dorene D'Adamo

ABSTAIN: None



Jeanine Townsend
Clerk to the Board

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I. FINDINGS

A. General Findings

The State Water Resources Control Board (State Water Board) finds that:

1. The Federal Clean Water Act (Clean Water Act) prohibits certain discharges of storm water containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. (33 U.S.C. §§ 1311, 1342 (also referred to as Clean Water Act §§ 301, 402).) The United States Environmental Protection Agency (U.S. EPA) promulgates federal regulations to implement the Clean Water Act's mandate to control pollutants in storm water discharges. (40 C.F.R. § 122, et seq.) The NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges (NSWDs). The NPDES permit must also include additional requirements necessary to implement applicable water quality objectives or water quality standards (water quality standards, collectively).
2. On November 16, 1990, U.S. EPA promulgated Phase I storm water regulations in compliance with section 402(p) of the Clean Water Act. (55 Fed. Reg. 47990, codified at 40 C.F.R. § 122.26.) These regulations require operators of facilities subject to storm water permitting (Dischargers), that discharge storm water associated with industrial activity (industrial storm water discharges), to obtain an NPDES permit. Section 402(p)(3)(A) of the Clean Water Act also requires that permits for discharges associated with industrial activity include requirements necessary to meet water quality standards.
3. Phase II storm water regulations¹ require permitting for storm water discharges from facilities owned and operated by a municipality with a population of less than 100,000. The previous exemption from the Phase I permitting requirements under section 1068 of the Intermodal Surface Transportation Efficiency Act of 1991 was eliminated.
4. This Order (General Permit) is an NPDES General Permit issued in compliance with section 402 of the Clean Water Act and shall take effect on July 1, 2015, provided that the Regional Administrator of U.S. EPA has no objection. If the U.S. EPA Regional Administrator has an objection, this General Permit will not become effective until the objection is withdrawn.
5. This action to adopt an NPDES General Permit is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000, et seq.) in accordance with section 13389 of the Water Code. (See *County of*

¹ U.S. EPA. Final NPDES Phase II Rule. <<http://cfpub.epa.gov/npdes/stormwater/swfinal.cfm>>. [as of February 4, 2014]

Los Angeles v. California State Water Resources Control Bd. (2006) 143 Cal.App.4th 985.)

6. State Water Board Order 97-03-DWQ is rescinded as of the effective date of this General Permit (July 1, 2015) except for Order 97-03-DWQ's requirement that annual reports be submitted by July 1, 2015 and except for enforcement purposes.
7. Effective July 1, 2015, the State Water Board and the Regional Water Quality Control Boards (Regional Water Boards) (Water Boards, collectively) will enforce the provisions herein.
8. This General Permit authorizes discharges of industrial storm water to waters of the United States, so long as those discharges comply with all requirements, provisions, limitations, and prohibitions in this General Permit.
9. Industrial activities covered under this General Permit are described in Attachment A.
10. The Fact Sheet for this Order is incorporated as findings of this General Permit.
11. Acronyms are defined in Attachment B and terms used in this General Permit are defined in Attachment C.
12. This General Permit regulates industrial storm water discharges and authorized NSWDS from specific categories of industrial facilities identified in Attachment A hereto, and industrial storm water discharges and authorized NSWDS from facilities designated by the Regional Water Boards to obtain coverage under this General Permit. This General Permit does not apply to industrial storm water discharges and NSWDS that are regulated by other individual or general NPDES permits
13. This General Permit does not preempt or supersede the authority of municipal agencies to prohibit, restrict, or control industrial storm water discharges and authorized NSWDS that may discharge to storm water conveyance systems or other watercourses within their jurisdictions as allowed by state and federal law.
14. All terms defined in the Clean Water Act, U.S. EPA regulations, and the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000, et seq.) will have the same definition in this General Permit unless otherwise stated.
15. Pursuant to 40 Code of Federal Regulations section 131.12 and State Water Board Resolution 68-16, which incorporates the requirements of 40 Code of Federal Regulations section 131.12 where applicable, the State Water Board finds that discharges in compliance with this General Permit will not result in the lowering of water quality to a level that does not achieve water quality objectives and protect beneficial uses. Any degradation of water quality from existing high quality water to a level that achieves water quality objectives and

protects beneficial uses is appropriate to support economic development. This General Permit's requirements constitute best practicable treatment or control for discharges of industrial storm water and authorized non-storm water discharges, and are therefore consistent with those provisions.

16. Compliance with any specific limits or requirements contained in this General Permit does not constitute compliance with any other applicable permits.
17. This General Permit requires that the Discharger certify and submit all Permit Registration Documents (PRDs) for Notice of Intent (NOI) and No Exposure Certification (NEC) coverage via the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) website. (See Attachment D for an example of the information required to be submitted in the PRDs via SMARTS.) All other documents required by this General Permit to be electronically certified and submitted via SMARTS can be submitted by the Discharger or by a designated Duly Authorized Representative on behalf of the Discharger. Electronic reporting is required to reduce the state's reliance on paper, to improve efficiency, and to make such General Permit documents more easily accessible to the public and the Water Boards.
18. All information provided to the Water Boards shall comply with the Homeland Security Act and all other federal law that concerns security in the United States, as applicable.

B. Industrial Activities Not Covered Under this General Permit

19. Discharges of storm water from areas on tribal lands are not covered under this General Permit. Storm water discharges from industrial facilities on tribal lands are regulated by a separate NPDES permit issued by U.S. EPA.
20. Discharges of storm water regulated under another individual or general NPDES permit adopted by the State Water Board or Regional Water Board are not covered under this General Permit, including the State Water Board NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.
21. Storm water discharges to combined sewer systems are not covered under this General Permit. These discharges must be covered by an individual permit. (40 C.F.R. § 122.26(a)(7).)
22. Conveyances that discharge storm water runoff combined with municipal sewage are not covered under this General Permit.
23. Discharges of storm water identified in Clean Water Act section 402(l) (33 U.S.C. § 1342(l)) are not covered under this General Permit.
24. Facilities otherwise subject to this General Permit but for which a valid Notice of Non-Applicability (NONA) has been certified and submitted via SMARTS, by the Entity are not covered under this General Permit. Entities (See Section XX.C.1 of this General Permit) who are claiming "No Discharge"

through the NONA shall meet the eligibility requirements and provide a No Discharge Technical Report in accordance with Section XX.C.

25. This General Permit does not authorize discharges of dredged or fill material regulated by the US Army Corps of Engineers under section 404 of the Clean Water Act and does not constitute a water quality certification under section 401 of the Clean Water Act.

C. Discharge Prohibitions

26. Pursuant to section 13243 of the Water Code, the State Water Board may specify certain conditions or areas where the discharge of waste, or certain types of waste, is prohibited.
27. With the exception of certain authorized NSWDS as defined in Section IV, this General Permit prohibits NSWDS. The State Water Board recognizes that certain NSWDS should be authorized because they are not generated by industrial activity, are not significant sources of pollutants when managed appropriately, and are generally unavoidable because they are related to safety or would occur regardless of industrial activity. Prohibited NSWDS may be authorized under other individual or general NPDES permits, or waste discharge requirements issued by the Water Boards.
28. Prohibited NSWDS are referred to as unauthorized NSWDS in this General Permit. Unauthorized NSWDS shall be either eliminated or permitted by a separate NPDES permit. Unauthorized NSWDS may contribute significant pollutant loads to receiving waters. Measures to control sources of unauthorized NSWDS such as spills, leakage, and dumping, must be addressed through the implementation of Best Management Practices (BMPs).
29. This General Permit incorporates discharge prohibitions contained in water quality control plans, as implemented by the Water Boards.
30. Direct discharges of waste, including industrial storm water discharges, to Areas of Special Biological Significance (ASBS) are prohibited unless the Discharger has applied for and the State Water Board has granted an exception to the State Water Board's 2009 Water Quality Control Plan for Ocean Waters of California as amended by State Water Board Resolution 2012-0056 (California Ocean Plan)² allowing the discharge.

² State Water Resources Control Board. Ocean Standards Web Page.

<http://www.waterboards.ca.gov/water_issues/programs/ocean/>. [as of February 4, 2014].

State Water Resources Control Board. Water Quality Control Plan for Ocean Waters of California 2009.

<http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/2009_cop_adoptedeffective_usepa.pdf>. [as of February 4, 2014].

State Water Resources Control Board. Resolution 2012-0056.

<http://www.swrcb.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0056.pdf>. [as of February 4, 2014].

D. Effluent Limitations

31. Section 301(b) of the Clean Water Act and 40 Code of Federal Regulations section require NPDES permits to include technology-based requirements at a minimum, and any more stringent effluent limitations necessary for receiving waters to meet applicable water quality standards. Clean Water Act section 402(p)(3)(A) requires that discharges of storm water runoff from industrial facilities comply with Clean Water Act section 301.
32. This General Permit requires control of pollutant discharges using BAT and BCT to reduce and prevent discharges of pollutants, and any more stringent effluent limitations necessary for receiving waters to meet applicable water quality standards.
33. It is not feasible for the State Water Board to establish numeric technology based effluent limitations for discharges authorized by this General Permit at this time. The rationale for this determination is discussed in detail in the Fact Sheet of this General Permit. Therefore, this General Permit requires Dischargers to implement minimum BMPs and applicable advanced BMPs as defined in Section X.H (collectively, BMPs) to comply with the requirements of this General Permit. This approach is consistent with U.S. EPA's 2008 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (2008 MSGP).
34. 40 Code of Federal Regulations section 122.44(d) requires that NPDES permits include Water Quality Based Effluent Limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality standards for receiving waters.
35. Where numeric water quality criteria have not been established, 40 Code of Federal Regulations section 122.44(d)(1)(vi) provides that WQBELs may be established using U.S. EPA criteria guidance under section 304(a) of the Clean Water Act, a proposed state criteria or policy interpreting narrative criteria supplemented with other relevant information, and/or an indicator parameter.
36. This General Permit requires Dischargers to implement BMPs when necessary, in order to support attainment of water quality standards. The use of BMPs to control or abate the discharge of pollutants is authorized by 40 Code of Federal Regulations section 122.44(k)(3) because numeric effluent limitations are infeasible and implementation of BMPs is reasonably necessary to achieve effluent limitations and water quality standards, and to carry out the purposes and intent of the Clean Water Act. (40 C.F.R. § 122.44(k)(4).)

E. Receiving Water Limitations

37. This General Permit requires compliance with receiving water limitations based on water quality standards. The primary receiving water limitation requires that industrial storm water discharges and authorized NSWDS not

cause or contribute to an exceedance of applicable water quality standards. Water quality standards apply to the quality of the receiving water, not the quality of the industrial storm water discharge. Therefore, compliance with the receiving water limitations generally cannot be determined solely by the effluent water quality characteristics. If any Discharger's storm water discharge causes or contributes to an exceedance of a water quality standard, that Discharger must implement additional BMPs or other control measures in order to attain compliance with the receiving water limitation. Compliance with water quality standards may, in some cases, require Dischargers to implement controls that are more protective than controls implemented solely to comply with the technology-based requirements in this General Permit.

F. Total Maximum Daily Loads (TMDLs)

38. TMDLs relate to the maximum amount of a pollutant that a water body can receive and still attain water quality standards. A TMDL is defined as the sum of the allowable loads of a single pollutant from all contributing point sources (the waste load allocations) and non-point sources (load allocations), plus the contribution from background sources. (40 C.F.R. § 130.2(i).) Discharges addressed by this General Permit are considered to be point source discharges, and therefore must comply with effluent limitations that are "consistent with the assumptions and requirements of any available waste load allocation for the discharge prepared by the state and approved by U.S. EPA pursuant to 40 Code of Federal Regulations section 130.7. (40 C.F.R. § 122.44 (d)(1)(vii).) In addition, Water Code section 13263, subdivision (a), requires that waste discharge requirements implement any relevant water quality control plans. Many TMDLs contained in water quality control plans include implementation requirements in addition to waste load allocations. Attachment E of this General Permit lists the watersheds with U.S. EPA-approved and U.S. EPA-established TMDLs that include requirements, including waste load allocations, for Dischargers covered by this General Permit.

39. The State Water Board recognizes that it is appropriate to develop TMDL-specific permit requirements derived from each TMDL's waste load allocation and implementation requirements, in order to provide clarity to Dischargers regarding their responsibilities for compliance with applicable TMDLs. The development of TMDL-specific permit requirements is subject to public noticing requirements and a corresponding public comment period. Due to the number and variety of Dischargers subject to a wide range of TMDLs, development of TMDL-specific permit requirements for each TMDL listed in Attachment E will severely delay the reissuance of this General Permit. Because most of the TMDLs were established by the Regional Water Boards, and because some of the waste load allocations and/or implementation requirements may be shared by multiple Dischargers, the development of TMDL-specific permit requirements is best coordinated at the Regional Water Board level.

40. State and Regional Water Board staff will develop proposed TMDL-specific permit requirements (including monitoring and reporting requirements) for each of the TMDLs listed in Attachment E. After conducting a 30-day public comment period, the Regional Water Boards will submit to the State Water Board proposed TMDL-specific permit requirements for adoption by the State Water Board into this General Permit by July 1, 2016. The Regional Water Boards may also include proposed TMDL-specific monitoring requirements for inclusion in this General Permit, or may issue Regional Water Board orders pursuant to Water Code section 13383 requiring TMDL-specific monitoring. The proposed TMDL-specific permit requirements shall have no force or effect until adopted, with or without modification, by the State Water Board. Consistent with the 2008 MSGP, Dischargers are not required to take any additional actions to comply with the TMDLs listed in Attachment E until the State Water Board reopens this General Permit and includes TMDL-specific permit requirements, unless notified otherwise by a Regional Water Board.
41. The Regional Water Boards shall submit to the State Water Board the following information for each of the TMDLs listed in Attachment E:
- a. Proposed TMDL-specific permit, monitoring and reporting requirements applicable to industrial storm water discharges and NSWDS authorized under this General Permit, including compliance schedules and deliverables consistent with the TMDLs. TMDL-specific permit requirements are not limited by the BAT/BCT technology-based standards;
 - b. An explanation of how the proposed TMDL-specific permit requirements, compliance schedules, and deliverables are consistent with the assumptions and requirements of any applicable waste load allocation and implement each TMDL; and,
 - c. Where a BMP-based approach is proposed, an explanation of how the proposed BMPs will be sufficient to implement applicable waste load allocations.
42. Upon receipt of the information described in Finding 40, and no later than July 1, 2016, the State Water Board will issue a public notice and conduct a public comment period for the reopening of this General Permit to amend Attachment E, the Fact Sheet, and other provisions as necessary for incorporation of TMDL-specific permit requirements into this General Permit. Attachment E may also be subsequently reopened during the term of this General Permit to incorporate additional TMDL-specific permit requirements.

G. Discharges Subject to the California Ocean Plan

43. On October 16, 2012 the State Water Board amended the California Ocean Plan. The amended California Ocean Plan requires industrial storm water dischargers with outfalls discharging to ocean waters to comply with the

California Ocean Plan's model monitoring provisions. These provisions require Dischargers to: (a) monitor runoff for specific parameters at all outfalls from two storm events per year, and collect at least one representative receiving water sample per year, (b) conduct specified toxicity monitoring at certain types of outfalls at a minimum of once per year, and (c) conduct marine sediment monitoring for toxicity under specific circumstances. The California Ocean Plan provides conditions under which some of the above monitoring provisions may be waived by the Water Boards.

44. This General Permit requires Dischargers with outfalls discharging to ocean waters that are subject to the model monitoring provisions of the California Ocean Plan to develop and implement a monitoring plan in compliance with those provisions and any additional monitoring requirements established pursuant to Water Code section 13383. Dischargers that have not developed and implemented a monitoring program in compliance with the California Ocean Plan's model monitoring provisions by July 1, 2015 (the effective date of this General Permit), or seven (7) days prior to commencing operations, whichever is later, are ineligible to obtain coverage under this General Permit.
45. The California Ocean Plan prohibits the direct discharge of waste to ASBS. ASBS are defined in California Ocean Plan as "those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable."
46. The California Ocean Plan authorizes the State Water Board to grant an exception to Ocean Plan provisions where the board determines that the exception will not compromise protection of ocean waters for beneficial uses and the public interest will be served.
47. On March 20, 2012, the State Water Board adopted Resolution 2012-0012 which contains exceptions to the California Ocean Plan for specific discharges of storm water and non-point sources. This resolution also contains the special protections that are to be implemented for those discharges to ASBS.
48. This General Permit requires Dischargers who have been granted an exception to the Ocean Plan authorizing the discharges to ASBS by the State Water Board to comply with the requirements contained in Section VIII.B of this General Permit.

H. Training

49. To improve compliance and maintain consistent implementation of this General Permit, Dischargers are required to designate a Qualified Industrial Storm Water Practitioner (QISP) for each facility the Discharger operates that has entered Level 1 status in the Exceedance Response Action (ERA) process as described in Section XII of this General Permit. A QISP may be assigned to more than one facility. In order to qualify as a QISP, a State

Water Board-sponsored or approved training course must be completed. A competency exam may be required by the State Water Board to demonstrate sufficient knowledge of the QISP course material.

50. A QISP must assist the Discharger in completing the Level 1 status and Level 2 status ERA requirements as specified in Section XII of this General Permit. A QISP is also responsible for assisting New Dischargers that will be discharging to an impaired water body with a 303(d) listed impairment, demonstrate eligibility for coverage through preparing the data and/or information required in Section VII.B.
51. A Compliance Group Leader, as defined in Section XIV of this General Order must complete a State Water Board sponsored or approved training program for Compliance Group Leaders.
52. All engineering work subject to the Professional Engineers Act (Bus. & Prof. Code § 6700, et seq.) and required by this General Permit shall be performed by a California licensed professional engineer.
53. California licensed professional civil, industrial, chemical, and mechanical engineers and geologists have licenses that have professional overlap with the topics of this General Permit. The California Department of Consumer Affairs, Board for Professional Engineers, Land Surveyors and Geologists (CBPELSG) provides the licensure and regulation of professional civil, industrial, chemical, and mechanical engineers and professional geologists in California. The State Water Board is developing a specialized self-guided State Water Board-sponsored registration and training program specifically for these CPBELSG licensed engineers and geologists in good standing with CBPELSG.

I. Storm Water Pollution Prevention Plan (SWPPP) Requirements

54. This General Permit requires the development of a site-specific SWPPP in accordance with Section X of this General Permit. The SWPPP must include the information needed to demonstrate compliance with the requirements of this General Permit. The SWPPP must be submitted electronically via SMARTS, and a copy be kept at the facility. SWPPP revisions shall be completed in accordance with Section X.B of this General Permit

J. Sampling, Visual Observations, Reporting and Record Keeping

55. This General Permit complies with 40 Code of Federal Regulations section 122.44(i), which establishes monitoring requirements that must be included in storm water permits. Under this General Permit, Dischargers are required to:
 - (a) conduct an Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) to identify areas of the facility contributing pollutants to industrial storm water discharges, (b) evaluate whether measures to reduce or prevent industrial pollutant loads identified in the Discharger's SWPPP are adequate and properly implemented in accordance with the terms of this

General Permit, and (c) determine whether additional control measures are needed.

56. This General Permit contains monitoring requirements that are necessary to determine whether pollutants are being discharged, and whether response actions are necessary. Data and information resulting from the monitoring will assist in Dischargers' evaluations of BMP effectiveness and compliance with this General Permit. Visual observations are one form of monitoring. This General Permit requires Dischargers to perform a variety of visual observations designed to identify pollutants in industrial storm water discharges and their sources. To comply with this General Permit Dischargers shall: (1) electronically self-report any violations via SMARTS, (2) comply with the Level 1 status and Level 2 status ERA requirements, when applicable, and (3) adequately address and respond to any Regional Water Board comments on the Discharger's compliance reports.

57. Dischargers that meet the requirements of the No Exposure Certification (NEC) Conditional Exclusion set forth in Section XVII of this General Permit are exempt from the SWPPP requirements, sampling requirements, and visual observation requirements in this General Permit.

K. Facilities Subject to Federal Storm Water Effluent Limitation Guidelines (ELGs)

58. U.S. EPA regulations at 40 Code of Federal Regulations Chapter I Subchapter N (Subchapter N) establish technology-based Effluent Limitation Guidelines and New Source Performance Standards (ELGs) for industrial storm water discharges from facilities in specific industrial categories. For these facilities, compliance with the BAT/BCT and ELG requirements constitutes compliance with technology-based requirements of this General Permit.

59. 40 Code of Federal Regulations section 122.44(i)(3) and (4) require storm water permits to require at least one Annual Evaluation and any monitoring requirements for applicable ELGs in Subchapter N. This General Permit requires Dischargers to comply with all applicable ELG requirements found in Subchapter N.

L. Sampling and Analysis Reduction

60. This General Permit reduces the number of qualifying sampling events required to be sampled each year when the Discharger demonstrates: (1) consistent compliance with this General Permit, (2) consistent effluent water quality sampling, and (3) analysis results that do not exceed numerical action levels.

M. Role of Numeric Action Levels (NALs) and Exceedance Response Actions (ERAs)

61. This General Permit incorporates a multiple objective performance measurement system that includes NALs, new comprehensive training requirements, Level 1 ERA Reports, Level 2 ERA Technical Reports, and Level 2 ERA Action Plans. Two objectives of the performance measurement system are to inform Dischargers, the public and the Water Boards on: (1) the overall pollutant control performance at any given facility, and (2) the overall performance of the industrial statewide storm water program. Additionally, the State Water Board expects that this information and assessment process will provide information necessary to determine the feasibility of numeric effluent limitations for industrial dischargers in the next reissuance of this General Permit, consistent with the State Water Board Storm Water Panel of Experts' June 2006 Recommendations.³
62. This General Permit contains annual and instantaneous maximum NALs. The annual NALs are established as the 2008 MSGP benchmark values, and are applicable for all parameters listed in Table 2. The instantaneous maximum NALs are calculated from a Water Board dataset, and are only applicable for Total Suspended Solids (TSS), Oil and Grease (O&G), and pH. An NAL exceedance is determined as follows:
- a. For annual NALs, an exceedance occurs when the average of all analytical results from all samples taken at a facility during a reporting year for a given parameter exceeds an annual NAL value listed in Table 2 of this General Permit; or,
 - b. For the instantaneous maximum NALs, an exceedance occurs when two or more analytical results from samples taken for any parameter within a reporting year exceed the instantaneous maximum NAL value (for Total Suspended Solids, and Oil and Grease), or are outside of the instantaneous maximum NAL range (for pH) listed in Table 2 of this General Permit. For the purposes of this General Permit, the reporting year is July 1 through June 30.
63. The NALs are not intended to serve as technology-based or water quality-based numeric effluent limitations. The NALs are not derived directly from either BAT/BCT requirements or receiving water objectives. NAL exceedances defined in this General Permit are not, in and of themselves, violations of this General Permit. A Discharger that does not fully comply with the Level 1 status and/or Level 2 status ERA requirements, when required by the terms of this General Permit, is in violation of this General Permit.
64. ERAs are designed to assist Dischargers in complying with this General Permit. Dischargers subject to ERAs must evaluate the effectiveness of their

³ State Water Board Storm Water Panel of Experts, The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (June 19, 2006) <http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/numeric/swpanel_final_report.pdf> [as of February 4, 2014].

BMPs being implemented to ensure they are adequate to achieve compliance with this General Permit.

65. U.S. EPA regulations at Subchapter N establish ELGs for storm water discharges from facilities in 11 industrial categories. Dischargers subject to these ELGs are required to comply with the applicable requirements.
66. Exceedances of the NALs that are attributable solely to pollutants originating from non-industrial pollutant sources (such as run-on from adjacent facilities, non-industrial portions of the Discharger's property, or aerial deposition) are not a violation of this General Permit because the NALs are designed to provide feedback on industrial sources of pollutants. Dischargers may submit a Non-Industrial Source Pollutant Demonstration as part of their Level 2 ERA Technical Report to demonstrate that the presence of a pollutant causing an NAL exceedance is attributable solely to pollutants originating from non-industrial pollutant sources.
67. A Discharger who has designed, installed, and implemented BMPs to reduce or prevent pollutants in industrial storm water discharges in compliance with this General Permit may submit an Industrial Activity BMPs Demonstration, as part of their Level 2 ERA Technical Report.
68. This General Permit establishes design storm standards for all treatment control BMPs. These design standards are directly based on the standards in State Water Board Order 2000-0011 regarding Standard Urban Storm Water Mitigation Plans (SUSMPs). These design standards are generally expected to be consistent with BAT/BCT, to be protective of water quality, and to be effective for most pollutants. The standards are intended to eliminate the need for most Dischargers to further treat/control industrial storm water discharges that are unlikely to contain pollutant loadings that exceed the NALs set forth in this General Permit.

N. Compliance Groups

69. Compliance Groups are groups of Dischargers (Compliance Group Participants) that share common types of pollutant sources and industrial activity characteristics. Compliance Groups provide an opportunity for the Compliance Group Participants to combine resources and develop consolidated Level 1 ERA Reports for Level 1 NAL exceedances and appropriate BMPs for implementation in response to Level 2 status ERA requirements that are representative of the entire Compliance Group. Compliance Groups also provide the Water Boards and the public with valuable information as to how industrial storm water discharges are affected by non-industrial background pollutant sources (including natural background) and geographic locations. When developing the next reissuance of this General Permit, the State Water Board expects to have a better understanding of the feasibility and benefits of sector-specific and watershed-based permitting alternatives, which may include technology- or water quality-based numeric effluent limitations. The effluent data, BMP performance data

and other information provided from Compliance Groups' consolidated reporting will further assist the State Water Board in addressing sector-specific and watershed-based permitting alternatives.

O. Conditional Exclusion – No Exposure Certification (NEC)

70. Pursuant to U.S. EPA Phase II regulations, all Dischargers subject to this General Permit may qualify for a conditional exclusion from specific requirements if they submit a NEC demonstrating that their facilities have no exposure of industrial activities and materials to storm water discharges.
71. This General Permit requires Dischargers who seek the NEC conditional exclusion to obtain coverage in accordance with Section XVII of this General Permit. Dischargers that meet the requirements of the NEC are exempt from the SWPPP, sampling requirements, and monitoring requirements in this General Permit.
72. Dischargers seeking NEC coverage are required to certify and submit the applicable permit registration documents. Annual inspections, re-certifications, and fees are required in subsequent years. Light industry facility Dischargers excluded from coverage under the previous permit (Order 97-03-DWQ) must obtain the appropriate coverage under this General Permit. Failure to comply with the Conditional Exclusion conditions listed in this General Permit may lead to enforcement for discharging without a permit pursuant to sections 13385 or 13399.25, et seq., of the Water Code. A Discharger with NEC coverage that anticipates a change (or changes) in circumstances that would lead to exposure should register for permit coverage prior to the anticipated changes.

P. Special Requirements for Facilities Handling Plastic Materials

73. Section 13367 of the Water Code requires facilities handling preproduction plastic to implement specific BMPs aimed at minimizing discharges of such materials. The definition of Plastic Materials for the purposes of this General Permit includes the following types of sources of Plastic Materials: virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust, and other types of preproduction plastics with the potential to discharge or migrate off-site.

Q. Regional Water Board Authorities

74. Regional Water Boards are primarily responsible for enforcement of this General Permit. This General Permit recognizes that Regional Water Boards have the authority to protect the beneficial uses of receiving waters and prevent degradation of water quality in their region. As such, Regional Water Boards may modify monitoring requirements and review, comment, approve or disapprove certain Discharger submittals required under this General Permit.

IT IS HEREBY ORDERED that all Dischargers subject to this General Permit shall comply with the following conditions and requirements.

II. RECEIVING GENERAL PERMIT COVERAGE

A. Certification

1. For Storm Water Multiple Application and Report Tracking System (SMARTS) electronic account management and security reasons, as well as enforceability of this General Permit, the Discharger's Legally Responsible Person (LRP) of an industrial facility seeking coverage under this General Permit shall certify and submit all Permit Registration Documents (PRDs) for Notice of Intent (NOI) or No Exposure Certification (NEC) coverage. All other documents shall be certified and submitted via SMARTS by the Discharger's (LRP) or by their Duly Authorized Representative in accordance with the Electronic Signature and Certification Requirements in Section XXI.K. All documents required by this General Permit that are certified and submitted via SMARTS shall be in accordance with Section XXI.K.
2. Hereinafter references to certifications and submittals by the Discharger refer to the Discharger's LRP and their Duly Authorized Representative.

B. Coverages

This General Permit includes requirements for two (2) types of permit coverage, NOI coverage and NEC coverage. State Water Board Order 97-03-DWQ (previous permit) remains in effect until July 1, 2015. When PRDs are certified and submitted and the annual fee is received, the State Water Board will assign the Discharger a Waste Discharger Identification (WDID) number.

1. General Permit Coverage (NOI Coverage)
 - a. Dischargers that discharge storm water associated with industrial activity to waters of the United States are required to meet all applicable requirements of this General Permit.
 - b. The Discharger shall register for coverage under this General Permit by certifying and submitting PRDs via SMARTS (<http://smarts.waterboards.ca.gov>), which consist of:
 - i. A completed NOI and signed certification statement;
 - ii. A copy of a current Site Map from the Storm Water Pollution Prevention Plan (SWPPP) in Section X.E;
 - iii. A SWPPP (see Section X); and,

- c. The Discharger shall pay the appropriate Annual Fee in accordance with California Code of Regulations, title 23, section 2200 et seq.⁴
2. General Permit Coverage (NEC Coverage)
 - a. Dischargers that certify their facility has no exposure of industrial activities or materials to storm water in accordance with Section XVII qualify for NEC coverage and are not required to comply with the SWPPP or monitoring requirements of this General Permit.
 - b. Dischargers who qualify for NEC coverage shall conduct one Annual Facility Comprehensive Compliance Evaluation (Annual Evaluation) as described in Section XV, pay an annual fee, and certify annually that their facilities continue to meet the NEC requirements.
 - c. The Discharger shall submit the following PRDs on or before October 1, 2015 for NEC coverage via SMARTS:
 - i. A completed NEC Form (Section XVII.F.1) and signed certification statement (Section XVII.H);
 - ii. A completed NEC Checklist (Section XVII.F.2); and
 - iii. A current Site Map consistent with requirements in Section X.E.;
 - d. The Discharger shall pay the appropriate annual fee in accordance with California Code of Regulations, title 23, section 2200 et seq.⁵
3. General PRD Requirements
 - a. Site Maps

Dischargers registering for NOI or NEC coverage shall prepare a site map(s) as part of their PRDs in accordance with Section X.E. A separate copy of the site map(s) is required to be in the SWPPP. If there is a significant change in the facility layout (e.g., new building, change in storage locations, boundary change, etc.) a revision to the site map is required and shall be certified and submitted via SMARTS.
 - b. A Discharger shall submit a single set of PRDs for coverage under this General Permit for multiple industrial activities occurring at the same facility.
 - c. Any information provided to the Water Boards by the Discharger shall comply with the Homeland Security Act and other federal law that

⁴ Annual fees must be mailed or sent electronically using the State Water Boards' Electronic Funds Transfer (EFT) system in SMARTS.

⁵ See footnote 4.

addresses security in the United States; any information that does not comply should not be submitted in the PRDs. The Discharger must provide justification to the Regional Water Board regarding redacted information within any submittal.

- d. Dischargers may redact trade secrets from information that is submitted via SMARTS. Dischargers who certify and submit redacted information via SMARTS must include a general description of the redacted information and the basis for the redaction in the version that is submitted via SMARTS. Dischargers must submit complete and un-redacted versions of the information that are clearly labeled "CONFIDENTIAL" to the Regional Water Board within 30 days of the submittal of the redacted information. All information labeled "CONFIDENTIAL" will be maintained by the Water Boards in a separate, confidential file.
4. Schedule for Submitting PRDs - Existing Dischargers Under the Previous Permit.
 - a. Existing Dischargers⁶ with coverage under the previous permit shall continue coverage under the previous permit until July 1, 2015. All waste discharge requirements and conditions of the previous permit are in effect until July 1, 2015.
 - b. Existing Dischargers with coverage under the previous permit shall register for NOI coverage by July 1, 2015 or for NEC coverage by October 1, 2015. Existing Dischargers previously listed in Category 10 (Light Industry) of the previous permit, and continue to have no exposure to industrial activities and materials, have until October 1, 2015 to register for NEC coverage.
 - c. Existing Dischargers with coverage under the previous permit, that do not register for NOI coverage by July 1, 2015, may have their permit coverage administratively terminated as soon as July 1, 2015.
 - d. Existing Dischargers with coverage under the previous permit that are eligible for NEC coverage but do not register for NEC coverage by October 1, 2015 may have their permit coverage administratively terminated as soon as October 1, 2015.
 - e. Existing Dischargers shall continue to comply with the SWPPP requirements in State Water Board Order 97-03-DWQ up to, but no later than, June 30, 2015.

⁶ Existing Dischargers are Dischargers with an active Notice of Intent (permit coverage) under the previous permit (97-03-DWQ) prior to the effective date of this General Permit.

- f. Existing Dischargers shall implement an updated SWPPP in accordance with Section X by July 1, 2015.
 - g. Existing Dischargers that submit a Notice of Termination (NOT) under the previous permit prior to July 1, 2015 and that receive NOT approval from the Regional Water Board are not subject to this General Permit unless they subsequently submitted new PRDs.
5. Schedule for Submitting PRDs - New Dischargers Obtaining Coverage On or After July 1, 2015
- New Dischargers registering for NOI coverage on or after July 1, 2015 shall certify and submit PRDs via SMARTS at least seven (7) days prior to commencement of industrial activities or on July 1, 2015, whichever comes later.
- a. New Dischargers registering for NEC coverage shall electronically certify and submit PRDs via SMARTS by October 1, 2015, or at least seven (7) days prior to commencement of industrial activities, whichever is later.

C. Termination and Changes to General Permit Coverage

1. Dischargers with NOI or NEC coverage shall request termination of coverage under this General Permit when either (a) operation of the facility has been transferred to another entity, (b) the facility has ceased operations, completed closure activities, and removed all industrial related pollutants, or (c) the facility's operations have changed and are no longer subject to the General Permit. Dischargers shall certify and submit a Notice of Termination via SMARTS. Until a valid NOT is received, the Discharger remains responsible for compliance with this General Permit and payment of accrued annual fees.
2. Whenever there is a change to the facility location, the Discharger shall certify and submit new PRDs via SMARTS. When ownership changes, the prior Discharger (seller) must inform the new Discharger (buyer) of the General Permit applications and regulatory coverage requirements. The new Discharger must certify and submit new PRDs via SMARTS to obtain coverage under this General Permit.
3. Dischargers with NOI coverage where the facility qualifies for NEC coverage in accordance with Section XVII of this General Permit, may register for NEC coverage via SMARTS. Such Dischargers are not required to submit an NOT to cancel NOI coverage.
4. Dischargers with NEC coverage, where changes in the facility and/or facility operations occur, which result in NOI coverage instead of NEC coverage, shall register for NOI coverage via SMARTS. Such Dischargers are not required to submit an NOT to cancel NEC coverage.

5. Dischargers shall provide additional information supporting an NOT, or revise their PRDs via SMARTS, upon request by the Regional Water Board.
6. Dischargers that are denied approval of a submitted NOT or registration for NEC coverage by the Regional Water Board, shall continue compliance with this General Permit under their existing NOI coverage.
7. New Dischargers (Dischargers with no previous NOI or NEC coverage) shall register for NOI coverage if the Regional Water Board denies NEC coverage.

D. Preparation Requirements

1. The following documents shall be certified and submitted by the Discharger via SMARTS:
 - a. Annual Reports (Section XVI) and SWPPPs (Section X);
 - b. NOTs;
 - c. Sampling Frequency Reduction Certification (Section XI.C.7);
 - d. Level 1 ERA Reports (Section XII.C) prepared by a QISP;
 - e. Level 2 ERA Technical Reports and Level 2 ERA Action Plans (Sections XII.D.1-2) prepared by a QISP; and,
 - f. SWPPPs for inactive mining operations as described in Section XIII, signed (wet signature and license number) by a California licensed professional engineer.
2. The following documents shall be signed (wet signature and license number) by a California licensed professional engineer:
 - a. Calculations for Dischargers subject to Subchapter N in accordance with Section XI.D;
 - b. Notice of Non-Applicability (NONA) Technical Reports described in Section XX.C for facilities that are engineered and constructed to have contained the maximum historic precipitation event (or series of events) using the precipitation data collected from the National Oceanic and Atmospheric Agency's website;
 - c. NONA Technical Reports described in Section XX.C for facilities located in basins or other physical locations that are not tributaries or hydrologically connected to waters of the United States; and,
 - d. SWPPPs for inactive mines described in Section XIII.

III. DISCHARGE PROHIBITIONS

- A. All discharges of storm water to waters of the United States are prohibited except as specifically authorized by this General Permit or another NPDES permit.
- B. Except for non-storm water discharges (NSWDs) authorized in Section IV, discharges of liquids or materials other than storm water, either directly or indirectly to waters of the United States, are prohibited unless authorized by another NPDES permit. Unauthorized NSWDs must be either eliminated or authorized by a separate NPDES permit.
- C. Industrial storm water discharges and authorized NSWDs that contain pollutants that cause or threaten to cause pollution, contamination, or nuisance as defined in section 13050 of the Water Code, are prohibited.
- D. Discharges that violate any discharge prohibitions contained in applicable Regional Water Board Water Quality Control Plans (Basin Plans), or statewide water quality control plans and policies are prohibited.
- E. Discharges to ASBS are prohibited in accordance with the California Ocean Plan, unless granted an exception by the State Water Board and in compliance with the Special Protections contained in Resolution 2012-0012.
- F. Industrial storm water discharges and NSWDs authorized by this General Permit that contain hazardous substances equal to or in excess of a reportable quantity listed in 40 Code of Federal Regulations sections 110.6, 117.21, or 302.6 are prohibited.

IV. AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- A. The following NSWDs are authorized provided they meet the conditions of Section IV.B:
 - 1. Fire-hydrant and fire prevention or response system flushing;
 - 2. Potable water sources including potable water related to the operation, maintenance, or testing of potable water systems;
 - 3. Drinking fountain water and atmospheric condensate including refrigeration, air conditioning, and compressor condensate;
 - 4. Irrigation drainage and landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with the manufacturer's label;
 - 5. Uncontaminated natural springs, groundwater, foundation drainage, footing drainage;

6. Seawater infiltration where the seawater is discharged back into the source:
and,
 7. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains).
- B.** The NSWDs identified in Section IV.A are authorized by this General Permit if the following conditions are met:
1. The authorized NSWDs are not in violation of any Regional Water Board Water Quality Control Plans (Basin Plans) or other requirements, or statewide water quality control plans or policies requirement;
 2. The authorized NSWDs are not in violation of any municipal agency ordinance or requirements;
 3. BMPs are included in the SWPPP and implemented to:
 - a. Reduce or prevent the contact of authorized NSWDs with materials or equipment that are potential sources of pollutants;
 - b. Reduce, to the extent practicable, the flow or volume of authorized NSWDs;
 - c. Ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standards;
and,
 - d. Reduce or prevent discharges of pollutants in authorized NSWDs in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.
 4. The Discharger conducts monthly visual observations (Section XI.A.1) of NSWDs and sources to ensure adequate BMP implementation and effectiveness; and,
 5. The Discharger reports and describes all authorized NSWDs in the Annual Report.
- C.** Firefighting related discharges are not subject to this General Permit and are not subject to the conditions of Section IV.B. These discharges, however, may be subject to Regional Water Board enforcement actions under other sections of the Water Code. Firefighting related discharges that are contained and are later discharged may be subject to municipal agency ordinances and/or Regional Water Board requirements.

V. EFFLUENT LIMITATIONS

- A.** Dischargers shall implement BMPs that comply with the BAT/BCT requirements of this General Permit to reduce or prevent discharges of pollutants in their storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.
- B.** Industrial storm water discharges from facilities subject to storm water ELGs in Subchapter N shall not exceed those storm water ELGs. The ELGs for industrial storm water discharges subject to Subchapter N are in Attachment F of this General Permit.
- C.** Dischargers located within a watershed for which a Total Maximum Daily Load (TMDL) has been approved by U.S. EPA, shall comply with any applicable TMDL-specific permit requirements that have been incorporated into this General Permit in accordance with Section VII.A. Attachment E contains a reference list of potential TMDLs that may apply to Dischargers subject to this General Permit.

VI. RECEIVING WATER LIMITATIONS

- A.** Dischargers shall ensure that industrial storm water discharges and authorized NSWDS do not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water.
- B.** Dischargers shall ensure that industrial storm water discharges and authorized NSWDS do not adversely affect human health or the environment.
- C.** Dischargers shall ensure that industrial storm water discharges and authorized NSWDS do not contain pollutants in quantities that threaten to cause pollution or a public nuisance.

VII. TOTAL MAXIMUM DAILY LOADS (TMDLs)

A. Implementation

1. The State Water Board shall reopen and amend this General Permit, including Attachment E, the Fact Sheet and other applicable Permit provisions as necessary, in order to incorporate TMDL-specific permit requirements, as described in Findings 38 through 42. Once this General Permit is amended, Dischargers shall comply with the incorporated TMDL-specific permit requirements in accordance with any specified compliance schedule(s). TMDL-specific compliance dates that exceed the term of this General Permit may be included for reference, and are enforceable in the event that this General Permit is administratively extended or reissued.
2. The State Water Board may, at its discretion, reopen this General Permit to add TMDL-specific permit requirements to Attachment E, or to incorporate new TMDLs adopted during the term of this General Permit that include requirements applicable to Dischargers covered by this General Permit.

- B.** New Dischargers applying for NOI coverage under this General Permit that will be discharging to a water body with a 303(d) listed impairment are ineligible for coverage unless the Discharger submits data and/or information, prepared by a QISP, demonstrating that:
1. The Discharger has eliminated all exposure to storm water of the pollutant(s) for which the water body is impaired, has documented the procedures taken to prevent exposure onsite, and has retained such documentation with the SWPPP at the facility;
 2. The pollutant for which the water body is impaired is not present at the Discharger's facility, and the Discharger has retained documentation of this finding with the SWPPP at the facility; or,
 3. The discharge of any listed pollutant will not cause or contribute to an exceedance of a water quality standard. This is demonstrated if: (1) the discharge complies with water quality standard at the point of discharge, or (2) if there are sufficient remaining waste load allocations in an approved TMDL and the discharge is controlled at least as stringently as similar discharges subject to that TMDL.

VIII. DISCHARGES SUBJECT TO THE CALIFORNIA OCEAN PLAN

A. Discharges to Ocean Waters

1. Dischargers with outfalls discharging to ocean waters that are subject to the model monitoring provisions of the California Ocean Plan shall develop and implement a monitoring plan in compliance with those provisions and any additional monitoring requirements established pursuant to Water Code section 13383. Dischargers who have not developed and implemented a monitoring program in compliance with the California Ocean Plan's model monitoring provisions by July 1, 2015, or seven (7) days prior to commencing of operations, whichever is later, are ineligible to obtain coverage under this General Permit.
2. Dischargers are ineligible for the methods and exceptions provided in Section XI.C of this General permit for any of the outfalls discharging to ocean waters subject to the model monitoring provisions of the California Ocean Plan.

B. Discharge Granted an Exceptions for Areas of Special Biological Significance (ASBS)

Dischargers who were granted an exception to the California Ocean Plan prohibition against direct discharges of waste to an ASBS pursuant to Resolution 2012-0012⁷ amended by Resolution 2012-0031⁸ shall comply with the conditions and requirements set forth in Attachment G of this General Permit. Any Discharger that applies for and is granted an exception to the California Ocean Plan prohibition after July 1, 2013 shall comply with the conditions and requirements set forth in the granted exception.

IX. TRAINING QUALIFICATIONS

A. General

1. A Qualified Industrial Storm Water Practitioner (QISP) is a person (either the Discharger or a person designated by the Discharger) who has completed a State Water Board-sponsored or approved QISP training course⁹, and has registered as a QISP via SMARTS. Upon completed registration the State Water Board will issue a QISP identification number.
2. The Executive Director of the State Water Board or an Executive Officer of a Regional Water Board may rescind any QISP's registration if it is found that the QISP has repeatedly demonstrated an inadequate level of performance in completing the QISP requirements in this General Permit. An individual whose QISP registration has been rescinded may request that the State Water Board review the rescission. Any request for review must be received by the State Water Board no later than 30 days of the date that the individual received written notice of the rescission.
3. Dischargers with Level 1 status shall:
 - a. Designate a person to be the facility's QISP and ensure that this person has attended and satisfactorily completed the State Water Board-sponsored or approved QISP training course.
 - b. Ensure that the facility's designated QISP provides sufficient training to the appropriate team members assigned to perform activities required by this General Permit.

⁷ State Water Resources Control Board. Resolution 2012-0012. <http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0012.pdf>. [as of February 4, 2014].

⁸ State Water Resources Control Board. Resolution 2012-0031. <http://www.swrcb.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0031.pdf>. [as of February 4, 2014].

⁹ A specialized self-guided State Water Board-sponsored registration and training program will be available as an option for CPBELSG licensed professional civil, mechanical, industrial, and chemical engineers and professional geologists by the effective date of this General Permit.

X. Storm Water Pollution Prevention Plan (SWPPP)**A. SWPPP Elements**

Dischargers shall develop and implement a site-specific SWPPP for each industrial facility covered by this General Permit that shall contain the following elements, as described further in this Section¹⁰:

1. Facility Name and Contact Information;
2. Site Map;
3. List of Industrial Materials;
4. Description of Potential Pollution Sources;
5. Assessment of Potential Pollutant Sources;
6. Minimum BMPs;
7. Advanced BMPs, if applicable;
8. Monitoring Implementation Plan;
9. Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation);
and,
10. Date that SWPPP was Initially Prepared and the Date of Each SWPPP Amendment, if Applicable.

B. SWPPP Implementation and Revisions

All Dischargers are required to implement their SWPPP by July 1, 2015 or upon commencement of industrial activity. The Discharger shall:

1. Revise their on-site SWPPP whenever necessary;
2. Certify and submit via SMARTS their SWPPP within 30 days whenever the SWPPP contains significant revision(s); and,
3. With the exception of significant revisions, the Discharger is not required to certify and submit via SMARTS their SWPPP revisions more than once every three (3) months in the reporting year.

¹⁰ Appendix 1 (SWPPP Checklist) of this General Permit is provided to assist the Discharger in including information required in the SWPPP. This checklist is not required to be used.

C. SWPPP Performance Standards

1. The Discharger shall ensure a SWPPP is prepared to:
 - a. Identify and evaluate all sources of pollutants that may affect the quality of industrial storm water discharges and authorized NSWDDs;
 - b. Identify and describe the minimum BMPs (Section X.H.1) and any advanced BMPs (Section X.H.2) implemented to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDDs. BMPs shall be selected to achieve compliance with this General Permit; and,
 - c. Identify and describe conditions or circumstances which may require future revisions to be made to the SWPPP.
2. The Discharger shall prepare a SWPPP in accordance with all applicable SWPPP requirements of this Section. A copy of the SWPPP shall be maintained at the facility.

D. Planning and Organization

1. Pollution Prevention Team

Each facility must have a Pollution Prevention Team established and responsible for assisting with the implementation of the requirements in this General Permit. The Discharger shall include in the SWPPP detailed information about its Pollution Prevention Team including:

- a. The positions within the facility organization (collectively, team members) who assist in implementing the SWPPP and conducting all monitoring requirements in this General Permit;
- b. The responsibilities, duties, and activities of each of the team members; and,
- c. The procedures to identify alternate team members to implement the SWPPP and conduct required monitoring when the regularly assigned team members are temporarily unavailable (due to vacation, illness, out of town business, or other absences).

2. Other Requirements and Existing Facility Plans

- a. The Discharger shall ensure its SWPPP is developed, implemented, and revised as necessary to be consistent with any applicable municipal, state, and federal requirements that pertain to the requirements in this General Permit.
- b. The Discharger may include in their SWPPP the specific elements of existing plans, procedures, or regulatory compliance documents that

contain storm water-related BMPs or otherwise relate to the requirements of this General Permit.

- c. The Discharger shall properly reference the original sources for any elements of existing plans, procedures, or regulatory compliance documents included as part of their SWPPP and shall maintain a copy of the documents at the facility as part of the SWPPP.
- d. The Discharger shall document in their SWPPP the facility's scheduled operating hours as defined in Attachment C. Scheduled facility operating hours that would be considered irregular (temporary, intermittent, seasonal, weather dependent, etc.) shall also be documented in the SWPPP.

E. Site Map

1. The Discharger shall prepare a site map that includes notes, legends, a north arrow, and other data as appropriate to ensure the map is clear, legible and understandable.
2. The Discharger may provide the required information on multiple site maps.
3. The Discharger shall include the following information on the site map:
 - a. The facility boundary, storm water drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the facility's industrial storm water discharges and authorized NSWDS;
 - b. Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations;
 - c. Locations and descriptions of structural control measures¹¹ that affect industrial storm water discharges, authorized NSWDS, and/or run-on;
 - d. Identification of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures;

¹¹ Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

- e. Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks (Section X.G.1.d) have occurred; and
- f. Areas of industrial activity subject to this General Permit. Identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources.

F. List of Industrial Materials

The Discharger shall ensure the SWPPP includes a list of industrial materials handled at the facility, and the locations where each material is stored, received, shipped, and handled, as well as the typical quantities and handling frequency.

G. Potential Pollutant Sources

1. Description of Potential Pollutant Sources

a. Industrial Processes

The Discharger shall ensure the SWPPP describes each industrial process including: manufacturing, cleaning, maintenance, recycling, disposal, and any other activities related to the process. The type, characteristics, and approximate quantity of industrial materials used in or resulting from the process shall be included. Areas protected by containment structures and the corresponding containment capacity shall be identified and described.

b. Material Handling and Storage Areas

The Discharger shall ensure the SWPPP describes each material handling and storage area, including: the type, characteristics, and quantity of industrial materials handled or stored; the shipping, receiving, and loading procedures; the spill or leak prevention and response procedures; and the areas protected by containment structures and the corresponding containment capacity.

c. Dust and Particulate Generating Activities

The Discharger shall ensure the SWPPP describes all industrial activities that generate a significant amount of dust or particulate that may be deposited within the facility boundaries. The SWPPP shall describe such industrial activities, including the discharge locations, the source type, and the characteristics of the dust or particulate pollutant.

d. Significant Spills and Leaks

The Discharger shall:

- i. Evaluate the facility for areas where spills and leaks can likely occur;
- ii. Ensure the SWPPP includes:
 - a) A list of any industrial materials that have spilled or leaked in significant quantities and have discharged from the facility's storm water conveyance system within the previous five-year period;
 - b) A list of any toxic chemicals identified in 40 Code of Federal Regulations section 302 that have been discharged from the facilities' storm water conveyance system as reported on U.S. EPA Form R, as well as oil and hazardous substances in excess of reportable quantities (40 C.F.R. §§ 110, 117, and 302) that have discharged from the facility's storm water conveyance system within the previous five-year period;
 - c) A list of any industrial materials that have spilled or leaked in significant quantities and had the potential to be discharged from the facility's storm water conveyance system within the previous five-year period; and,
- iii. Ensure that for each discharge or potential discharge listed above the SWPPP includes the location, characteristics, and approximate quantity of the materials spilled or leaked; approximate quantity of the materials discharged from the facility's storm water conveyance system; the cleanup or remedial actions that have occurred or are planned; the approximate remaining quantity of materials that have the potential to be discharged; and the preventive measures taken to ensure spills or leaks of the material do not reoccur.

e. NSWDS

The Discharger shall:

- i. Ensure the SWPPP includes an evaluation of the facility that identifies all NSWDS, sources, and drainage areas;
- ii. Ensure the SWPPP includes an evaluation of all drains (inlets and outlets) that identifies connections to the storm water conveyance system;
- iii. Ensure the SWPPP includes a description of how all unauthorized NSWDS have been eliminated; and,

- iv. Ensure all NSWDs are described in the SWPPP. This description shall include the source, quantity, frequency, and characteristics of the NSWDs, associated drainage area, and whether it is an authorized or unauthorized NSW in accordance with Section IV.

f. Erodible Surfaces

The Discharger shall ensure the SWPPP includes a description of the facility locations where soil erosion may be caused by industrial activity, contact with storm water, authorized and unauthorized NSWs, or run-on from areas surrounding the facility.

2. Assessment of Potential Pollutant Sources

- a. The Discharger shall ensure that the SWPPP includes a narrative assessment of all areas of industrial activity with potential industrial pollutant sources. At a minimum, the assessment shall include:
 - i. The areas of the facility with likely sources of pollutants in industrial storm water discharges and authorized NSWs;
 - ii. The pollutants likely to be present in industrial storm water discharges and authorized NSWs;
 - iii. The approximate quantity, physical characteristics (e.g., liquid, powder, solid, etc.), and locations of each industrial material handled, produced, stored, recycled, or disposed;
 - iv. The degree to which the pollutants associated with those materials may be exposed to, and mobilized by contact with, storm water;
 - v. The direct and indirect pathways by which pollutants may be exposed to storm water or authorized NSWs;
 - vi. All sampling, visual observation, and inspection records;
 - vii. The effectiveness of existing BMPs to reduce or prevent pollutants in industrial storm water discharges and authorized NSWs;
 - viii. The estimated effectiveness of implementing, to the extent feasible, minimum BMPs to reduce or prevent pollutants in industrial storm water discharges and authorized NSWs; and,
 - ix. The identification of the industrial pollutants related to the receiving waters with 303(d) listed impairments identified in Appendix 3 or approved TMDLs that may be causing or contributing to an exceedance of a water quality standard in the receiving waters.
- b. Based upon the assessment above, Dischargers shall identify in the SWPPP any areas of the facility where the minimum BMPs described in

subsection H.1 below will not adequately reduce or prevent pollutants in storm water discharges in compliance with Section V.A. Dischargers shall identify any advanced BMPs, as described in subsection H.2 below, for those areas.

- c. Based upon the assessment above, Dischargers shall identify any drainage areas with no exposure to industrial activities and materials in accordance with the definitions in Section XVII.
- d. Based upon the assessment above, Dischargers shall identify any additional parameters, beyond the required parameters in Section XI.B.6 that indicate the presence of pollutants in industrial storm water discharges.

H. Best Management Practices (BMPs)

1. Minimum BMPs

The Discharger shall, to the extent feasible, implement and maintain all of the following minimum BMPs to reduce or prevent pollutants in industrial storm water discharges.¹²

a. Good Housekeeping

The Discharger shall:

- i. Observe all outdoor areas associated with industrial activity; including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly;
- ii. Minimize or prevent material tracking;
- iii. Minimize dust generated from industrial materials or activities;
- iv. Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible;
- v. Cover all stored industrial materials that can be readily mobilized by contact with storm water;

¹² For the purposes of this General Permit, the requirement to implement BMPs “to the extent feasible” requires Dischargers to select, design, install and implement BMPs that reduce or prevent discharges of pollutants in their storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

- vi. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water;
 - vii. Prevent disposal of any rinse/wash waters or industrial materials into the storm water conveyance system;
 - viii. Minimize storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the facility; and,
 - ix. Minimize authorized NSWDS from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.
- b. Preventive Maintenance
- The Discharger shall:
- i. Identify all equipment and systems used outdoors that may spill or leak pollutants;
 - ii. Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks;
 - iii. Establish an appropriate schedule for maintenance of identified equipment and systems; and,
 - iv. Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.
- c. Spill and Leak Prevention and Response
- The Discharger shall:
- i. Establish procedures and/or controls to minimize spills and leaks;
 - ii. Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. Spilled or leaked industrial materials shall be cleaned promptly and disposed of properly;
 - iii. Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and,
 - iv. Identify and train appropriate spill and leak response personnel.
- d. Material Handling and Waste Management

The Discharger shall:

- i. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event;
 - ii. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water;
 - iii. Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
 - iv. Divert run-on and storm water generated from within the facility away from all stockpiled materials;
 - v. Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c); and,
 - vi. Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.
- e. Erosion and Sediment Controls

For each erodible surface facility location identified in the SWPPP (Section X.G.1.f), the Discharger shall:

- i. Implement effective wind erosion controls;
 - ii. Provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event;
 - iii. Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;
 - iv. Divert run-on and storm water generated from within the facility away from all erodible materials; and,
 - v. If sediment basins are implemented, ensure compliance with the design storm standards in Section X.H.6.
- f. Employee Training Program

The Discharger shall:

- i. Ensure that all team members implementing the various compliance activities of this General Permit are properly trained to implement the requirements of this General Permit, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations,

and monitoring activities. If a Discharger enters Level 1 status, appropriate team members shall be trained by a QISP;

- ii. Prepare or acquire appropriate training manuals or training materials;
 - iii. Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive;
 - iv. Provide a training schedule; and,
 - v. Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.
- g. Quality Assurance and Record Keeping

The Discharger shall:

- i. Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;
- ii. Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and
- iii. Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five (5) years (Section XXI.J.4).

2. Advanced BMPs

- a. In addition to the minimum BMPs described in Section X.H.1, the Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified in Section X.G.2.b, necessary to reduce or prevent discharges of pollutants in its storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.
- b. Advanced BMPs may include one or more of the following BMPs:

- i. Exposure Minimization BMPs

These include storm resistant shelters (either permanent or temporary) that prevent the contact of storm water with the identified industrial materials or area(s) of industrial activity.

- ii. Storm Water Containment and Discharge Reduction BMPs

These include BMPs that divert, infiltrate, reuse, contain, retain, or reduce the volume of storm water runoff. Dischargers are

encouraged to utilize BMPs that infiltrate or reuse storm water where feasible.

iii. Treatment Control BMPs

This is the implementation of one or more mechanical, chemical, biologic, or any other treatment technology that will meet the treatment design standard.

iv. Other Advanced BMPs

Any additional BMPs not described in subsections b.i through iii above that are necessary to meet the effluent limitations of this General Permit.

3. Temporary Suspension of Industrial Activities

For facilities that plan to temporarily suspend industrial activities for ten (10) or more consecutive calendar days during a reporting year, the Discharger may also suspend monitoring if it is infeasible to conduct monitoring while industrial activities are suspended (e.g., the facility is not staffed, or the facility is remote or inaccessible) and the facility has been stabilized. The Discharger shall include in the SWPPP the BMPs necessary to achieve compliance with this General Permit during the temporary suspension of the industrial activity. Once all necessary BMPs have been implemented to stabilize the facility, the Discharger is not required to:

- a. Perform monthly visual observations (Section XI.A.1.a.); or,
- b. Perform sampling and analysis (Section XI.B.) if it is infeasible to do so (e.g. facility is remotely located).

The Discharger shall upload via SMARTS (7) seven calendar days prior to the planned temporary suspension of industrial activities:

- a. SWPPP revisions specifically addressing the facility stabilization BMPs;
- b. The justification for why monitoring is infeasible at the facility during the period of temporary suspension of industrial activities;
- c. The date the facility is fully stabilized for temporary suspension of industrial activities; and,
- d. The projected date that industrial activities will resume at the facility.

Upon resumption of industrial activities at the facility, the Discharger shall, via SMARTS, confirm and/or update the date the facility's industrial activities have resumed. At this time, the Discharger is required to resume all compliance activities under this General Permit.

The Regional Water Boards may review the submitted information pertaining to the temporary suspension of industrial activities. Upon review, the Regional Water Board may request revisions or reject the Discharger's request to temporarily suspend monitoring.

4. BMP Descriptions

- a. The Discharger shall ensure that the SWPPP identifies each BMP being implemented at the facility, including:
 - i. The pollutant(s) that the BMP is designed to reduce or prevent in industrial storm water discharges;
 - ii. The frequency, time(s) of day, or conditions when the BMP is scheduled for implementation;
 - iii. The locations within each area of industrial activity or industrial pollutant source where the BMP shall be implemented;
 - iv. The individual and/or position responsible for implementing the BMP;
 - v. The procedures, including maintenance procedures, and/or instructions to implement the BMP effectively;
 - vi. The equipment and tools necessary to implement the BMP effectively; and,
 - vii. The BMPs that may require more frequent visual observations beyond the monthly visual observations as described in Section XI.A.1.
- b. The Discharger shall ensure that the SWPPP identifies and justifies each minimum BMP or applicable advanced BMP not being implemented at the facility because they do not reflect best industry practice considering technological availability and economic practicability and achievability.
- c. The Discharger shall identify any BMPs described in subsection a above that are implemented in lieu of any of the minimum or applicable advanced BMPs.

5. BMP Summary Table

The Discharger shall prepare a table summarizing each identified area of industrial activity, the associated industrial pollutant sources, the industrial pollutants, and the BMPs being implemented.

6. Design Storm Standards for Treatment Control BMPs

All new treatment control BMPs employed by the Discharger to comply with Section X.H.2 Advanced BMPs and new sediment basins installed after the effective date of this order shall be designed to comply with design storm standards in this Section, except as provided in an Industrial Activity BMP Demonstration (Section XII.D.2.a). A Factor of Safety shall be incorporated into the design of all treatment control BMPs to ensure that storm water is sufficiently treated throughout the life of the treatment control BMPs. The design storm standards for treatment control BMPs are as follows:

- a. Volume-based BMPs: The Discharger, at a minimum, shall calculate¹³ the volume to be treated using one of the following methods:
 - i. The volume of runoff produced from an 85th percentile 24-hour storm event, as determined from local, historical rainfall records;
 - ii. The volume of runoff produced by the 85th percentile 24-hour storm event, determined as the maximized capture runoff volume for the facility, from the formula recommended in the Water Environment Federation's Manual of Practice;¹⁴ or,
 - iii. The volume of annual runoff required to achieve 80% or more treatment, determined in accordance with the methodology set forth in the latest edition of California Stormwater Best Management Practices Handbook¹⁵, using local, historical rainfall records.
- b. Flow-based BMPs: The Discharger shall calculate the flow needed to be treated using one of the following methods:
 - i. The maximum flow rate of runoff produced from a rainfall intensity of at least 0.2 inches per hour for each hour of a storm event;
 - ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from local historical rainfall records, multiplied by a factor of two; or,
 - iii. The maximum flow rate of runoff, as determined using local historical rainfall records, that achieves approximately the same reduction in total pollutant loads as would be achieved by treatment of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

¹³ All hydrologic calculations shall be certified by a California licensed professional engineer in accordance with the Professional Engineers Act (Bus. & Prof. Code § 6700, et seq).

¹⁴ Water Environment Federation (WEF). Manual of Practice No. 23/ ASCE Manual of Practice No. 87, cited in chapter 5 (1998 Edition) and Cited in Chapter 3 (2012 Edition) .

¹⁵ California Stormwater Quality Association. Stormwater Best Management Practice New Development and Redevelopment Handbook. < <http://www.casqa.org/> >. [as of July 3, 2013].

I. MONITORING IMPLEMENTATION PLAN

The Discharger shall prepare a Monitoring Implementation Plan in accordance with the requirements of this General Permit. The Monitoring Implementation Plan shall be included in the SWPPP and shall include the following items:

1. An identification of team members assigned to conduct the monitoring requirements;
2. A description of the following in accordance with Attachment H:
 - a. Discharge locations;
 - b. Visual observation procedures; and,
 - c. Visual observation response procedures related to monthly visual observations and sampling event visual observations.
3. Justifications for any of the following that are applicable to the facility:
 - a. Alternative discharge locations in accordance with Section XI.C.3;
 - b. Representative Sampling Reduction in accordance with Section XI.C.4; or,
 - c. Qualified Combined Samples in accordance with Section XI.C.5.
4. Procedures for field instrument calibration instructions, including calibration intervals specified by the manufacturer; and,
5. An example Chain of Custody form used when handling and shipping water quality samples to the lab.

XI. MONITORING

A. Visual Observations

1. Monthly Visual Observations
 - a. At least once per calendar month, the Discharger shall visually observe each drainage area for the following:
 - i. The presence or indications of prior, current, or potential unauthorized NSWDS and their sources;
 - ii. Authorized NSWDS, sources, and associated BMPs to ensure compliance with Section IV.B.3; and,

- iii. Outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential source of industrial pollutants.
- b. The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and on days without precipitation.
- c. The Discharger shall provide an explanation in the Annual Report for uncompleted monthly visual observations.

2. Sampling Event Visual Observations

Sampling event visual observations shall be conducted at the same time sampling occurs at a discharge location. At each discharge location where a sample is obtained, the Discharger shall observe the discharge of storm water associated with industrial activity.

- a. The Discharger shall ensure that visual observations of storm water discharged from containment sources (e.g. secondary containment or storage ponds) are conducted at the time that the discharge is sampled.
- b. Any Discharger employing volume-based or flow-based treatment BMPs shall sample any bypass that occurs while the visual observations and sampling of storm water discharges are conducted.
- c. The Discharger shall visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and source(s) of any discharged pollutants.
- d. In the event that a discharge location is not visually observed during the sampling event, the Discharger shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.
- e. The Discharger shall provide an explanation in the Annual Report for uncompleted sampling event visual observations.

3. Visual Observation Records

The Discharger shall maintain records of all visual observations. Records shall include the date, approximate time, locations observed, presence and probable source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional SWPPP revisions necessary in response to the visual observations.

4. The Discharger shall revise BMPs as necessary when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

B. Sampling and Analysis

1. A Qualifying Storm Event (QSE) is a precipitation event that:
 - a. Produces a discharge for at least one drainage area; and,
 - b. Is preceded by 48 hours with no discharge from any drainage area.
2. The Discharger shall collect and analyze storm water samples from two (2) QSEs within the first half of each reporting year (July 1 to December 31), and two (2) QSEs within the second half of each reporting year (January 1 to June 30).
3. Compliance Group Participants are only required to collect and analyze storm water samples from one (1) QSE within the first half of each reporting year (July 1 to December 31) and one (1) QSE within the second half of the reporting year (January 1 to June 30).
4. Except as provided in Section XI.C.4 (Representative Sampling Reduction), samples shall be collected from each drainage area at all discharge locations. The samples must be:
 - a. Representative of storm water associated with industrial activities and any commingled authorized NSWDS; or,
 - b. Associated with the discharge of contained storm water.
5. Samples from each discharge location shall be collected within four (4) hours of:
 - a. The start of the discharge; or,
 - b. The start of facility operations if the QSE occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours). Sample collection is required during scheduled facility operating hours and when sampling conditions are safe in accordance with Section XI.C.6.a.ii.
6. The Discharger shall analyze all collected samples for the following parameters:
 - a. Total suspended solids (TSS) and oil and grease (O&G);
 - b. pH (see Section XI.C.2);

- c. Additional parameters identified by the Discharger on a facility-specific basis that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment (Section X.G.2). These additional parameters may be modified (added or removed) in accordance with any updated SWPPP pollutant source assessment;
 - d. Additional applicable parameters listed in Table 1 below. These parameters are dependent on the facility Standard Industrial Classification (SIC) code(s);
 - e. Additional applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs based on the assessment in Section X.G.2.a.ix. Test methods with lower detection limits may be necessary when discharging to receiving waters with 303(d) listed impairments or TMDLs;
 - f. Additional parameters required by the Regional Water Board. The Discharger shall contact its Regional Water Board to determine appropriate analytical test methods for parameters not listed in Table 2 below. These analytical test methods will be added to SMARTS; and
 - g. For discharges subject to Subchapter N, additional parameters specifically required by Subchapter N. If the discharge is subject to ELGs, the Dischargers shall contact the Regional Water Board to determine appropriate analytical methods for parameters not listed in Table 2 below.
7. The Discharger shall select corresponding NALs, analytical test methods,, and reporting units from the list provided in Table 2 below. SMARTS will be updated over time to add additional acceptable analytical test methods. Dischargers may propose an analytical test method for any parameter or pollutant that does not have an analytical test method specified in Table 2 or in SMARTS. Dischargers may also propose analytical test methods with substantially similar or more stringent method detection limits than existing approved analytical test methods. Upon approval, the analytical test method will be added to SMARTS.
 8. The Discharger shall ensure that the collection, preservation and handling of all storm water samples are in accordance with Attachment H, Storm Water Sample Collection and Handling Instructions.
 9. Samples from different discharge locations shall not be combined or composited except as allowed in Section XI.C.5 (Qualified Combined Samples).
 10. The Discharger shall ensure that all laboratory analyses are conducted according to test procedures under 40 Code of Federal Regulations part 136, including the observation of holding times, unless other test procedures have been specified in this General Permit or by the Regional Water Board.

11. Sampling Analysis Reporting

- a. The Discharger shall submit all sampling and analytical results for all individual or Qualified Combined Samples via SMARTS within 30 days of obtaining all results for each sampling event.
- b. The Discharger shall provide the method detection limit when an analytical result from samples taken is reported by the laboratory as a "non-detect" or less than the method detection limit. A value of zero shall not be reported.
- c. The Discharger shall provide the analytical result from samples taken that is reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit.

Reported analytical results will be averaged automatically by SMARTS. For any calculations required by this General Permit, SMARTS will assign a value of zero (0) for all results less than the minimum level as reported by the laboratory.

TABLE 1: Additional Analytical Parameters

SIC code	SIC code Description	Parameters*
102X	Copper Ores	COD; N+N
12XX	Coal Mines	Al; Fe
144X	Sand and Gravel	N+N
207X	Fats and Oils	BOD; COD; N+N
2421	Sawmills & Planning Mills	COD; Zn
2426	Hardwood Dimension	COD
2429	Special Product Sawmills	COD
243X	Millwork, Veneer, Plywood	COD
244X	Wood Containers	COD
245X	Wood Buildings & Mobile Homes	COD
2491	Wood Preserving	As; Cu
2493	Reconstituted Wood Products	COD
263X	Paperboard Mills	COD
281X	Industrial Inorganic Chemicals	Al; Fe; N+N
282X	Plastic Materials, Synthetics	Zn
284X	Soaps, Detergents, Cosmetics	N+N; Zn
287X	Fertilizers, Pesticides, etc.	Fe; N+N; Pb; Zn; P
301X	Tires, Inner Tubes	Zn
302X	Rubber and Plastic Footwear	Zn
305X	Rubber & Plastic Sealers & Hoses	Zn
306X	Misc. Fabricated Rubber Products	Zn
325X	Structural Clay Products	Al
326X	Pottery & Related Products	Al
3297	Non-Clay Refractories	Al
327X	Concrete, Gypsum, Plaster Products (Except 3274)	Fe
3295	Minerals & Earths	Fe
331X	Steel Works, Blast Furnaces, Rolling and Finishing Mills	Al; Zn
332X	Iron and Steel Foundries	Al; Cu; Fe; Zn
335X	Metal Rolling, Drawing, Extruding	Cu; Zn

336X	Nonferrous Foundries (Castings)	Cu; Zn
34XX	Fabricated Metal Products (Except 3479)	Zn; N+N; Fe; Al
3479	Coating and Engraving	Zn; N+N
4953	Hazardous Waste Facilities	NH ₃ ; Mg; COD; As; Cn; Pb; HG; Se; Ag
44XX	Water Transportation	Al; Fe; Pb; Zn
45XX	Air Transportation Facilities ¹⁶	BOD; COD; NH ₃
4911	Steam Electric Power Generating Facilities	Fe
4953	Landfills and Land Application Facilities	Fe
5015	Dismantling or Wrecking Yards	Fe; Pb; Al
5093	Scrap and Waste Materials (not including source-separated recycling)	Fe; Pb; Al; Zn; COD

*Table 1 Parameter Reference	
Ag – Silver	Mg – Magnesium
Al – Aluminum	N+N - Nitrate & Nitrite Nitrogen
As – Arsenic	NH – Ammonia
BOD – Biochemical Oxygen Demand	Ni – Nickel
Cd - Cadmium	P – Phosphorus
Cn – Cyanide	Se – Selenium
COD – Chemical Oxygen Demand	TSS – Total Suspended Solids
Cu – Copper	Zn – Zinc
Fe – Iron	Pb – Lead
Hg – Mercury	

¹⁶ Only airports (SIC 4512-4581) where a single Discharger, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, are required to monitor these parameters for those outfalls that collect runoff from areas where deicing activities occur.

TABLE 2: Parameter NAL Values, Test Methods, and Reporting Units

PARAMETER	TEST METHOD	REPORTING UNITS	ANNUAL NAL	INSTANTANEOUS MAXIMUM NAL
pH*	See Section XI.C.2	pH units	N/A	Less than 6.0 Greater than 9.0
Suspended Solids (TSS)*, Total	SM 2540-D	mg/L	100	400
Oil & Grease (O&G)*, Total	EPA 1664A	mg/L	15	25
Zinc, Total (H)	EPA 200.8	mg/L	0.26**	
Copper, Total (H)	EPA 200.8	mg/L	0.0332**	
Cyanide, Total	SM 4500–CN C, D, or E	mg/L	0.022	
Lead, Total (H)	EPA 200.8	mg/L	0.262**	
Chemical Oxygen Demand (COD)	SM 5220C	mg/L	120	
Aluminum, Total	EPA 200.8	mg/L	0.75	
Iron, Total	EPA 200.7	mg/L	1.0	
Nitrate + Nitrite Nitrogen	SM 4500-NO3- E	mg/L as N	0.68	
Total Phosphorus	SM 4500-P B+E	mg/L as P	2.0	
Ammonia (as N)	SM 4500-NH3 B+ C or E	mg/L	2.14	
Magnesium, total	EPA 200.7	mg/L	0.064	
Arsenic, Total (c)	EPA 200.8	mg/L	0.15	
Cadmium, Total (H)	EPA 200.8	mg/L	0.0053**	
Nickel, Total (H)	EPA 200.8	mg/l	1.02**	
Mercury, Total	EPA 245.1	mg/L	0.0014	
Selenium, Total	EPA 200.8	mg/L	0.005	
Silver, Total (H)	EPA 200.8	mg/L	0.0183**	
Biochemical Oxygen Demand (BOD)	SM 5210B	mg/L	30	

SM – Standard Methods for the Examination of Water and Wastewater, 18th edition

EPA – U.S. EPA test methods

(H) – Hardness dependent

* Minimum parameters required by this General Permit

**The NAL is the highest value used by U.S. EPA based on their hardness table in the 2008 MSGP.

C. Methods and Exceptions

1. The Discharger shall comply with the monitoring methods in this General Permit and Attachment H.
2. pH Methods
 - a. Dischargers that are not subject to Subchapter N ELGs mandating pH analysis related to acidic or alkaline sources and have never entered Level 1 status for pH, are eligible to screen for pH using wide range litmus pH paper or other equivalent pH test kits. The pH screen shall be performed as soon as practicable, but no later than 15 minutes after the sample is collected.
 - b. Dischargers subject to Subchapter N ELGs shall either analyze samples for pH using methods in accordance with 40 Code of Federal Regulations 136 for testing storm water or use a calibrated portable instrument for pH.
 - c. Dischargers that enter Level 1 status (see Section XII.C) for pH shall, in the subsequent reporting years, analyze for pH using methods in accordance with 40 Code of Federal Regulations 136 or use a calibrated portable instrument for pH.
 - d. Dischargers using a calibrated portable instrument for pH shall ensure that all field measurements are conducted in accordance with the accompanying manufacturer's instructions.
3. Alternative Discharge Locations
 - a. The Discharger is required to identify, when practicable, alternative discharge locations for any discharge locations identified in accordance with Section XI.B.4 if the facility's discharge locations are:
 - i. Affected by storm water run-on from surrounding areas that cannot be controlled; and/or,
 - ii. Difficult to observe or sample (e.g. submerged discharge outlets, dangerous discharge location accessibility).
 - b. The Discharger shall submit and certify via SMARTS any alternative discharge location or revisions to the alternative discharge locations in the Monitoring Implementation Plan.
4. Representative Sampling Reduction
 - a. The Discharger may reduce the number of locations to be sampled in each drainage area (e.g., roofs with multiple downspouts, loading/unloading areas with multiple storm drains) if the industrial

activities, BMPs, and physical characteristics (grade, surface materials, etc.) of the drainage area for each location to be sampled are substantially similar to one another. To qualify for the Representative Sampling Reduction, the Discharger shall provide a Representative Sampling Reduction justification in the Monitoring Implementation Plan section of the SWPPP.

- b. The Representative Sampling Reduction justification shall include:
 - i. Identification and description of each drainage area and corresponding discharge location(s);
 - ii. A description of the industrial activities that occur throughout the drainage area;
 - iii. A description of the BMPs implemented in the drainage area;
 - iv. A description of the physical characteristics of the drainage area;
 - v. A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar; and,
 - vi. An identification of the discharge location(s) selected for representative sampling, and rationale demonstrating that the selected location(s) to be sampled are representative of the discharge from the entire drainage area.
- c. A Discharger that satisfies the conditions of subsection 4.b.i through v above shall submit and certify via SMARTS the revisions to the Monitoring Implementation Plan that includes the Representative Sampling Reduction justification.
- d. Upon submittal of the Representative Sampling Reduction justification, the Discharger may reduce the number of locations to be sampled in accordance with the Representative Sampling Reduction justification. The Regional Water Board may reject the Representative Sampling Reduction justification and/or request additional supporting documentation. In such instances, the Discharger is ineligible for the Representative Sampling Reduction until the Regional Water Board approves the Representative Sampling Reduction justification.

5. Qualified Combined Samples

- a. The Discharger may authorize an analytical laboratory to combine samples of equal volume from as many as four (4) discharge locations if the industrial activities, BMPs, and physical characteristics (grade, surface materials, etc.) within each of the drainage areas are substantially similar to one another.

- b. The Qualified Combined Samples justification shall include:
 - i. Identification and description of each drainage area and corresponding discharge locations;
 - ii. A description of the BMPs implemented in the drainage area;
 - iii. A description of the industrial activities that occur throughout the drainage area;
 - iv. A description of the physical characteristics of the drainage area; and,
 - v. A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar.
 - c. A Discharger that satisfies the conditions of subsection 5.b.i through iv above shall submit and certify via SMARTS the revisions to the Monitoring Implementation Plan that includes the Qualified Combined Samples justification.
 - d. Upon submittal of the Qualified Combined Samples justification revisions in the Monitoring Implementation Plan, the Discharger may authorize the lab to combine samples of equal volume from as many as four (4) drainage areas. The Regional Water Board may reject the Qualified Combined Samples justification and/or request additional supporting documentation. In such instances, the Discharger is ineligible for the Qualified Combined Samples justification until the Regional Water Board approves the Qualified Combined Samples justification.
 - e. Regional Water Board approval is necessary to combine samples from more than four (4) discharge locations.
6. Sample Collection and Visual Observation Exceptions
- a. Sample collection and visual observations are not required under the following conditions:
 - i. During dangerous weather conditions such as flooding or electrical storms; or,
 - ii. Outside of scheduled facility operating hours. The Discharger is not precluded from collecting samples or conducting visual observations outside of scheduled facility operating hours.
 - b. In the event that samples are not collected, or visual observations are not conducted in accordance with Section XI.B.5 due to these exceptions, an explanation shall be included in the Annual Report.

- c. Sample collection is not required for drainage areas with no exposure to industrial activities and materials in accordance with the definitions in Section XVII.
7. Sampling Frequency Reduction Certification
 - a. Dischargers are eligible to reduce the number of QSEs sampled each reporting year in accordance with the following requirements:
 - i. Results from four (4) consecutive QSEs that were sampled (QSEs may be from different reporting years) did not exceed any NALs as defined in Section XII.A; and
 - ii. The Discharger is in full compliance with the requirements of this General Permit and has updated, certified and submitted via SMARTS all documents, data, and reports required by this General Permit during the time period in which samples were collected.
 - b. The Regional Water Board may notify a Discharger that it may not reduce the number of QSEs sampled each reporting year if the Discharger is subject to an enforcement action.
 - c. An eligible Discharger shall certify via SMARTS that it meets the conditions in subsection 7.a above.
 - d. Upon Sampling Frequency Reduction certification, the Discharger shall collect and analyze samples from one (1) QSE within the first half of each reporting year (July 1 to December 31), and one (1) QSE within the second half of each reporting year (January 1 to June 30). All other monitoring, sampling, and reporting requirements remain in effect.
 - e. Dischargers who participate in a Compliance Group and certify a Sampling Frequency Reduction are only required to collect and analyze storm water samples from one (1) QSE within each reporting year.
 - f. A Discharger may reduce sampling per the Sampling Frequency Reduction certification unless notified by the Regional Water Board that: (1) the Sampling Frequency Reduction certification has been rejected or (2) additional supporting documentation must be submitted. In such instances, a Discharger is ineligible for the Sampling Frequency Reduction until the Regional Water Board provides Sampling Frequency Reduction certification approval. Revised Sampling Frequency Reduction certifications shall be certified and submitted via SMARTS by the Discharger.
 - g. A Discharger loses its Sampling Frequency Reduction certification if an NAL exceedance occurs (Section XII.A).

D. Facilities Subject to Federal Storm Water Effluent Limitation Guidelines (ELGs)

1. In addition to the other requirements in this General Permit, Dischargers with facilities subject to storm water ELGs in Subchapter N shall:
 - a. Collect and analyze samples from QSEs for each regulated pollutant specified in the appropriate category in Subchapter N as specified in Section XI.B;
 - b. For Dischargers with facilities subject to 40 Code of Federal Regulations parts 419¹⁷ and 443¹⁸, estimate or calculate the volume of industrial storm water discharges from each drainage area subject to the ELGs and the mass of each regulated pollutant as defined in parts 419 and 443; and,
 - c. Ensure that the volume/mass estimates or calculations required in subsection b are completed by a California licensed professional engineer.
2. Dischargers subject to Subchapter N shall submit the information in Section XI.D.1.a through c in their Annual Report.
3. Dischargers with facilities subject to storm water ELGs in Subchapter N are ineligible for the Representative Sampling Reduction in Section XI.C.4.

XII. EXCEEDANCE RESPONSE ACTIONS (ERAs)

A. NALs and NAL Exceedances

The Discharger shall perform sampling, analysis and reporting in accordance with the requirements of this General Permit and shall compare the results to the two types of NAL values in Table 2 to determine whether either type of NAL has been exceeded for each applicable parameter. The two types of potential NAL exceedances are as follows:

1. Annual NAL exceedance: The Discharger shall determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire facility for the reporting year (i.e., all "effluent" data). The Discharger shall compare the average concentration for each parameter to the corresponding annual NAL values in Table 2. For Dischargers using composite sampling or flow-weighted measurements in accordance with standard practices, the average concentrations shall be calculated in accordance with the U.S. EPA's NPDES Storm Water

¹⁷ Part 419 - Petroleum refining point source category

¹⁸ Part 443 - Effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources for the paving and roofing materials (tars and asphalt) point source category

Sampling Guidance Document.¹⁹ An annual NAL exceedance occurs when the average of all the analytical results for a parameter from samples taken within a reporting year exceeds the annual NAL value for that parameter listed in Table 2; and,

2. Instantaneous maximum NAL exceedance: The Discharger shall compare all sampling and analytical results from each distinct sample (individual or combined as authorized by XI.C.5) to the corresponding instantaneous maximum NAL values in Table 2. An instantaneous maximum NAL exceedance occurs when two (2) or more analytical results from samples taken for any single parameter within a reporting year exceed the instantaneous maximum NAL value (for TSS and O&G) or are outside of the instantaneous maximum NAL range for pH.

B. Baseline Status

At the beginning of a Discharger's NOI Coverage, all Dischargers have Baseline status for all parameters.

C. Level 1 Status

A Discharger's Baseline status for any given parameter shall change to Level 1 status if sampling results indicate an NAL exceedance for that same parameter. Level 1 status will commence on July 1 following the reporting year during which the exceedance(s) occurred.²⁰

1. Level 1 ERA Evaluation

- a. By October 1 following commencement of Level 1 status for any parameter with sampling results indicating an NAL exceedance, the Discharger shall:
 - b. Complete an evaluation, with the assistance of a QISP, of the industrial pollutant sources at the facility that are or may be related to the NAL exceedance(s); and,
 - c. Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL exceedances and to comply with the requirements of this General Permit. Although the evaluation may focus on the drainage areas where the NAL exceedance(s) occurred, all drainage areas shall be evaluated.

2. Level 1 ERA Report

¹⁹ U.S. EPA. NPDES Storm Water Sampling Guidance Document. <<http://www.epa.gov/npdes/pubs/owm0093.pdf>>. [as of February 4, 2014]

²⁰ For all sampling results reported before June 30th of the preceding reporting year. If sample results indicating an NAL exceedance are submitted after June 30th, the Discharger will change status once those results have been reported.

- a. Based upon the above evaluation, the Discharger shall, as soon as practicable but no later than January 1 following commencement of Level 1 status :
 - i. Revise the SWPPP as necessary and implement any additional BMPs identified in the evaluation;
 - ii. Certify and submit via SMARTS a Level 1 ERA Report prepared by a QISP that includes the following:
 - 1) A summary of the Level 1 ERA Evaluation required in subsection C.1 above; and,
 - 2) A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL.
 - iii. Certify and submit via SMARTS the QISP's identification number, name, and contact information (telephone number, e-mail address).
 - b. A Discharger's Level 1 status for a parameter will return to Baseline status once a Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs that were sampled subsequent to BMP implementation indicate no additional NAL exceedances for that parameter.
3. NAL Exceedances Prior to Implementation of Level 1 Status BMPs.

Prior to the implementation of an additional BMP identified in the Level 1 ERA Evaluation or October 1, whichever comes first, sampling results for any parameter(s) being addressed by that additional BMP will not be included in the calculations of annual average or instantaneous NAL exceedances in SMARTS.

D. Level 2 Status

A Discharger's Level 1 status for any given parameter shall change to Level 2 status if sampling results indicate an NAL exceedance for that same parameter while the Discharger is in Level 1. Level 2 status will commence on July 1 following the reporting year during which the NAL exceedance(s) occurred.²¹

1. Level 2 ERA Action Plan

²¹ For all sampling results reported before June 30th of the preceding reporting year. If sample results indicating an NAL exceedance are submitted after June 30th, the Discharger will change status upon the date those results have been reported into SMARTS.

- a. Dischargers with Level 2 status shall certify and submit via SMARTS a Level 2 ERA Action Plan prepared by a QISP that addresses each new Level 2 NAL exceedance by January 1 following the reporting year during which the NAL exceedance(s) occurred. For each new Level 2 NAL exceedance, the Level 2 Action Plan will identify which of the demonstrations in subsection D.2.a through c the Discharger has selected to perform. A new Level 2 NAL exceedance is any Level 2 NAL exceedance for 1) a new parameter in any drainage area, or 2) the same parameter that is being addressed in an existing Level 2 ERA Action Plan in a different drainage area.
- b. The Discharger shall certify and submit via SMARTS the QISP's identification number, name, and contact information (telephone number, e-mail address) if this information has changed since previous certifications.
- c. The Level 2 ERA Action Plan shall at a minimum address the drainage areas with corresponding Level 2 NAL exceedances.
- d. All elements of the Level 2 ERA Action Plan shall be implemented as soon as practicable and completed no later than 1 year after submitting the Level 2 ERA Action Plan.
- e. The Level 2 ERA Action Plan shall include a schedule and a detailed description of the tasks required to complete the Discharger's selected demonstration(s) as described below in Section D.2.a through c.

2. Level 2 ERA Technical Report

On January 1 of the reporting year following the submittal of the Level 2 ERA Action Plan, a Discharger with Level 2 status shall certify and submit a Level 2 ERA Technical Report prepared by a QISP that includes one or more of the following demonstrations:

a. Industrial Activity BMPs Demonstration

This shall include the following requirements, as applicable:

- i. Shall include a description of the industrial pollutant sources and corresponding industrial pollutants that are or may be related to the NAL exceedance(s);
- ii. Shall include an evaluation of all pollutant sources associated with industrial activity that are or may be related to the NAL exceedance(s);
- iii. Where all of the Discharger's implemented BMPs, including additional BMPs identified in the Level 2 ERA Action Plan, achieve

compliance with the effluent limitations of this General Permit and are expected to eliminate future NAL exceedance(s), the Discharger shall provide a description and analysis of all implemented BMPs;

- iv. In cases where all of the Discharger's implemented BMPs, including additional BMPs identified in the Level 2 ERA Action Plan, achieve compliance with the effluent limitations of this General Permit but are not expected to eliminate future NAL exceedance(s), the Discharger shall provide, in addition to a description and analysis of all implemented BMPs:
 - 1) An evaluation of any additional BMPs that would reduce or prevent NAL exceedances;
 - 2) Estimated costs of the additional BMPs evaluated; and,
 - 3) An analysis describing the basis for the selection of BMPs implemented in lieu of the additional BMPs evaluated but not implemented.
 - v. The description and analysis of BMPs required in subsection a.iii above shall specifically address the drainage areas where the NAL exceedance(s) responsible for the Discharger's Level 2 status occurred, although any additional Level 2 ERA Action Plan BMPs may be implemented for all drainage areas; and,
 - vi. If an alternative design storm standard for treatment control BMPs (in lieu of the design storm standard for treatment control BMPs in Section X.H.6 in this General Permit) will achieve compliance with the effluent limitations of this General Permit, the Discharger shall provide an analysis describing the basis for the selection of the alternative design storm standard.
- b. Non-Industrial Pollutant Source Demonstration

This shall include:

- i. A statement that the Discharger has determined that the exceedance of the NAL is attributable solely to the presence of non-industrial pollutant sources. (The pollutant may also be present due to industrial activities, in which case the Discharger must demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance.) The sources shall be identified as either run-on from adjacent properties, aerial deposition from man-made sources, or as generated by on-site non-industrial sources;

- ii. A statement that the Discharger has identified and evaluated all potential pollutant sources that may have commingled with storm water associated with the Discharger's industrial activity and may be contributing to the NAL exceedance;
 - iii. A description of any on-site industrial pollutant sources and corresponding industrial pollutants that are contributing to the NAL exceedance;
 - iv. An assessment of the relative contributions of the pollutant from (1) storm water run-on to the facility from adjacent properties or non-industrial portions of the Discharger's property or from aerial deposition and (2) the storm water associated with the Discharger's industrial activity;
 - v. A summary of all existing BMPs for that parameter; and,
 - vi. An evaluation of all on-site/off-site analytical monitoring data demonstrating that the NAL exceedances are caused by pollutants in storm water run-on to the facility from adjacent properties or non-industrial portions of the Discharger's property or from aerial deposition.
- c. Natural Background Pollutant Source Demonstration

This shall include:

- i. A statement that the Discharger has determined that the NAL exceedance is attributable solely to the presence of the pollutant in the natural background that has not been disturbed by industrial activities. (The pollutant may also be present due to industrial activities, in which case the Discharger must demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance);
- ii. A summary of all data previously collected by the Discharger, or other identified data collectors, that describes the levels of natural background pollutants in the storm water discharge;
- iii. A summary of any research and published literature that relates the pollutants evaluated at the facility as part of the Natural Background Source Demonstration;
- iv. Map showing the reference site location in relation to facility along with available land cover information;
- v. Reference site and test site elevation;

- vi. Available geology and soil information for reference and test sites;
- vii. Photographs showing site vegetation;
- viii. Site reconnaissance survey data regarding presence of roads, outfalls, or other human-made structures; and,
- ix. Records from relevant state or federal agencies indicating no known mining, forestry, or other human activities upstream of the proposed reference site.

3. Level 2 ERA Technical Report Submittal

- a. The Discharger shall certify and submit via SMARTS the Level 2 ERA Technical Report described in Section D.2 above.
- b. The State Water Board and Regional Boards (Water Boards) may review the submitted Level 2 ERA Technical Reports. Upon review of a Level 2 ERA Technical Report, the Water Boards may reject the Level 2 ERA Technical Report and direct the Discharger to take further action(s) to comply with this General Permit.
- c. Dischargers with Level 2 status who have submitted the Level 2 ERA Technical Report are only required to annually update the Level 2 ERA Technical Report based upon additional NAL exceedances of the same parameter and same drainage area (if the original Level 2 ERA Technical Report contained an Industrial Activity BMP Demonstration and the implemented BMPs were expected to eliminate future NAL exceedances in accordance with Section XII.D.2.a.ii), facility operational changes, pollutant source(s) changes, and/or information that becomes available via compliance activities (monthly visual observations, sampling results, annual evaluation, etc.). The Level 2 ERA Technical Report shall be prepared by a QISP and be certified and submitted via SMARTS by the Discharger with each Annual Report. If there are no changes prompting an update of the Level 2 ERA Technical Report, as specified above, the Discharger will provide this certification in the Annual Report that there have been no changes warranting re-submittal of the Level 2 ERA Technical Report.
- d. Dischargers are not precluded from submitting a Level 2 ERA Action Plan or ERA Technical Report prior to entering Level 2 status if information is available to adequately prepare the report and perform the demonstrations described above. A Discharger who chooses to submit a Level 2 ERA Action Plan or ERA Technical Report prior to entering Level 2 status will automatically be placed in Level 2 in accordance to the Level 2 ERA schedule.

4. Eligibility for Returning to Baseline Status

- a. Dischargers with Level 2 status who submit an Industrial Activity BMPs Demonstration in accordance with subsection 2.a.i through iii above and have implemented BMPs to prevent future NAL exceedance(s) for the Level 2 parameter(s) shall return to baseline status for that parameter, if results from four (4) subsequent consecutive QSEs sampled indicate no additional NAL exceedance(s) for that parameter(s). If future NAL exceedances occur for the same parameter(s), the Discharger's Baseline status will return to Level 2 status on July 1 in the subsequent reporting year during which the NAL exceedance(s) occurred. These Dischargers shall update the Level 2 ERA Technical Report as required above in Section D.3.c.
- b. Dischargers are ineligible to return to baseline status if they submit any of the following:
 - i. A industrial activity BMP demonstration in accordance with subsection 2.a.iv above;
 - ii. An non-industrial pollutant source demonstration; or,
 - iii. A natural background pollutant source demonstration.

5. Level 2 ERA Implementation Extension

- a. Dischargers that need additional time to submit the Level 2 ERA Technical Report shall be automatically granted a single time extension for up to six (6) months upon submitting the following items into SMARTS, as applicable:
 - i. Reasons for the time extension;
 - ii. A revised Level 2 ERA Action Plan including a schedule and a detailed description of the necessary tasks still to be performed to complete the Level 2 ERA Technical Report; and
 - iii. A description of any additional temporary BMPs that will be implemented while permanent BMPs are being constructed.
- b. The Regional Water Boards will review Level 2 ERA Implementation Extensions for completeness and adequacy. Requests for extensions that total more than six (6) months are not granted unless approved in writing by the Water Boards. The Water Boards may (1) reject or revise the time allowed to complete Level 2 ERA Implementation Extensions, (2) identify additional tasks necessary to complete the Level 2 ERA Technical Report, and/or (3) require the Discharger to implement additional temporary BMPs.

XIII. INACTIVE MINING OPERATION CERTIFICATION

- A.** Inactive mining operations are defined in Part 3 of Attachment A of this General Permit. The Discharger may, in lieu of complying with the General Permit requirements described in subsection B below, certify and submit via SMARTS that their inactive mining operation meets the following conditions:
1. The Discharger has determined and justified in the SWPPP that it is impracticable to implement the monitoring requirements in this General Permit for the inactive mining operation;
 2. A SWPPP has been signed (wet signature and license number) by a California licensed professional engineer and is being implemented in accordance with the requirements of this General Permit; and,
 3. The facility is in compliance with this General Permit, except as provided in subsection B below.
- B.** The Discharger who has certified and submitted that they meet the conditions in subsection A above, are not subject to the following General Permit requirements:
1. Monitoring Implementation Plan in Section X.I;
 2. Monitoring Requirements in Section XI;
 3. Exceedance Response Actions (ERAs) in Section XII; and,
 4. Annual Report Requirements in Section XVI.
- C.** Inactive Mining Operation Certification Submittal Schedule
1. The Discharger shall certify and submit via SMARTS NOI coverage PRDs listed in Section II.B.1 and meet the conditions in subsection A above.
 2. The Discharger shall annually inspect the inactive mining site and certify via SMARTS no later than July 15th of each reporting year, that their inactive mining operation continues to meet the conditions in subsection A above.
 3. The Discharger shall have a California licensed professional engineer review and update the SWPPP if there are changes to their inactive mining operation or additional BMPs are needed to comply with this General Permit. Any significant updates to the SWPPP shall be signed (wet signature and license number) by a California license professional engineer.
 4. The Discharger shall certify and submit via SMARTS any significantly revised SWPPP within 30 days of the revision(s).

XIV. COMPLIANCE GROUPS AND COMPLIANCE GROUP LEADERS

A. Compliance Group Qualification Requirements

1. Any group of Dischargers of the same industry type or any QISP representing Dischargers of the same industry type may form a Compliance Group. A Compliance Group shall consist of Dischargers that operate facilities with similar types of industrial activities, pollutant sources, and pollutant characteristics (e.g., scrap metals recyclers would join a different group than paper recyclers, truck vehicle maintenance facilities would join a different group than airplane vehicle maintenance facilities, etc.). A Discharger participating in a Compliance Group is termed a Compliance Group Participant. Participation in a Compliance Group is not required. Compliance Groups may be formed at any time.
2. Each Compliance Group shall have a Compliance Group Leader.
3. To establish a Compliance Group, the Compliance Group Leader shall register as a Compliance Group Leader via SMARTS. The registration shall include documentation demonstrating compliance with the Compliance Group qualification requirements above and a list of the Compliance Group Participants.
4. Each Compliance Group Participant shall register as a member of an established Compliance Group via SMARTS.
5. The Executive Director of the State Water Board may review Compliance Group registrations and/or activities for compliance with the requirements of this General Permit. The Executive Director may reject the Compliance Group, the Compliance Group Leader, or individual Compliance Group Participants within the Compliance Group.

B. Compliance Group Leader Responsibilities

1. A Compliance Group Leader must complete a State Water Board sponsored or approved training program for Compliance Group Leaders.
2. The Compliance Group Leader shall assist Compliance Group Participants with all compliance activities required by this General Permit.
3. A Compliance Group Leader shall prepare a Consolidated Level 1 ERA Report for all Compliance Group Participants with Level 1 status for the same parameter. Compliance Group Participants who certify and submit these Consolidated Level 1 ERA Reports are subject to the same provisions as individual Dischargers with Level 1 status, as described in Section XII.C. A Consolidated Level 1 ERA Report is equivalent to a Level 1 ERA Report.

4. The Compliance Group Leader shall update the Consolidated Level 1 ERA Report as needed to address additional Compliance Group Participants with ERA Level 1 status.
5. A Compliance Group Leader shall prepare a Level 2 ERA Action Plan specific to each Compliance Group Participant with Level 2 status. Compliance Group Participants who certify and submit these Level 2 ERA Action Plans are subject to the same provisions as individual Dischargers with Level 2 status, as described in Section XII.D.
6. A Compliance Group Leader shall prepare a Level 2 ERA Technical Report specific to each Compliance Group Participant with Level 2 status. Compliance Group Participants who certify and submit these Level 2 ERA Technical Reports are subject to the same provisions as individual Dischargers with Level 2 status, as described in Section XII.D.
7. The Compliance Group Leader shall inspect all the facilities of the Compliance Group Participants that have entered Level 2 status prior to preparing the individual Level 2 ERA Technical Report.
8. The Compliance Group Leader shall revise the Consolidated Level 1 ERA Report, individual Level 2 ERA Action Plans, or individual Level 2 Technical Reports in accordance with any comments received from the Water Boards.
9. The Compliance Group Leader shall inspect all the facilities of the Compliance Group Participants at a minimum of once per reporting year (July 1 to June 30).

C. Compliance Group Participant Responsibilities

1. Each Compliance Group Participant is responsible for permit compliance for the Compliance Group Participant's facility and for ensuring that the Compliance Group Leader's activities related to the Compliance Group Participant's facility comply with this General Permit.
2. Compliance Group Participants with Level 1 status shall certify and submit via SMARTS the Consolidated Level 1 ERA Report. The Compliance Group Participants shall certify that they have reviewed the Consolidated Level 1 ERA Report and have implemented any required additional BMPs. Alternatively, the Compliance Group Participant may submit an individual Level 1 ERA Report in accordance with the provisions in Section XII.C.2.
3. Compliance Group Participants with Level 2 status shall certify and submit via SMARTS their individual Level 2 ERA Action Plan and Technical Report prepared by their Compliance Group Leader. Each Compliance Group Participant shall certify that they have reviewed the Level 2 ERA Action Plan and Technical Report and will implement any required additional BMPs.

4. Compliance Group Participants can at any time discontinue their participation in their associated Compliance Group via SMARTS. Upon discontinuation, the former Compliance Group Participant is immediately subject to the sampling and analysis requirements described in Section XI.B.2.

XV. ANNUAL COMPREHENSIVE FACILITY COMPLIANCE EVALUATION (ANNUAL EVALUATION)

The Discharger shall conduct one Annual Evaluation for each reporting year (July 1 to June 30). If the Discharger conducts an Annual Evaluation fewer than eight (8) months, or more than sixteen (16) months, after it conducts the previous Annual Evaluation, it shall document the justification for doing so. The Discharger shall revise the SWPPP, as appropriate, and implement the revisions within 90 days of the Annual Evaluation. At a minimum, Annual Evaluations shall consist of:

- A. A review of all sampling, visual observation, and inspection records conducted during the previous reporting year;
- B. An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the storm water conveyance system;
- C. An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section XVII;
- D. An inspection of equipment needed to implement the BMPs;
- E. An inspection of any BMPs;
- F. A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial storm water discharges and authorized NSWDDs; and,
- G. An assessment of any other factors needed to comply with the requirements in Section XVI.B.

XVI. ANNUAL REPORT

- A. The Discharger shall certify and submit via SMARTS an Annual Report no later than July 15th following each reporting year using the standardized format and checklists in SMARTS.
- B. The Discharger shall include in the Annual Report:
 1. A Compliance Checklist that indicates whether a Discharger complies with, and has addressed all applicable requirements of this General Permit;

2. An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist;
3. An identification, including page numbers and/or sections, of all revisions made to the SWPPP within the reporting year; and,
4. The date(s) of the Annual Evaluation.

XVII. CONDITIONAL EXCLUSION - NO EXPOSURE CERTIFICATION (NEC)

A. Discharges composed entirely of storm water that has not been exposed to industrial activity are not industrial storm water discharges. Dischargers are conditionally excluded from complying with the SWPPP and monitoring requirements of this General Permit if all of the following conditions are met:

1. There is no exposure of Industrial Materials and Activities to rain, snow, snowmelt, and/or runoff;
2. All unauthorized NSWDS have been eliminated and all authorized NSWDS meet the conditions of Section IV;
3. The Discharger has certified and submitted via SMARTS PRDs for NEC coverage pursuant to the instructions in Section II.B.2; and,
4. The Discharger has satisfied all other requirements of this Section.

B. NEC Specific Definitions

1. No Exposure - all Industrial Materials and Activities are protected by a Storm-Resistant Shelter to prevent all exposure to rain, snow, snowmelt, and/or runoff.
2. Industrial Materials and Activities - includes, but is not limited to, industrial material handling activities or equipment, machinery, raw materials, intermediate products, by-products, final products, and waste products.
3. Material Handling Activities - includes the storage, loading and unloading, transportation, or conveyance of any industrial raw material, intermediate product, final product, or waste product.
4. Sealed - banded or otherwise secured, and without operational taps or valves.
5. Storm-Resistant Shelters - includes completely roofed and walled buildings or structures. Also includes structures with only a top cover supported by permanent supports but with no side coverings, provided material within the structure is not subject to wind dispersion (sawdust, powders, etc.), or track-out, and there is no storm water discharged from within the structure that comes into contact with any materials.

C. NEC Qualifications

To qualify for an NEC, a Discharger shall:

1. Except as provided in subsection D below, provide a Storm-Resistant Shelter to protect Industrial Materials and Activities from exposure to rain, snow, snowmelt, run-on, and runoff;
2. Inspect and evaluate the facility annually to determine that storm water exposed to industrial materials or equipment has not and will not be discharged to waters of the United States. Evaluation records shall be maintained for five (5) years in accordance with Section XXI.J.4;
3. Register for NEC coverage by certifying that there are no discharges of storm water contaminated by exposure to Industrial Materials and Activities from areas of the facility subject to this General Permit, and certify that all unauthorized NSWDS have been eliminated and all authorized NSWDS meet the conditions of Section IV (Authorized NSWDS). NEC coverage and annual renewal requires payment of an annual fee in accordance with California Code of Regulations, title 23, section 2200 et seq.; and,
4. Submit PRDs for NEC coverage shall be prepared and submitted in accordance with the:
 - a. Certification requirements in Section XXI.K; and,
 - b. Submittal schedule in accordance with Section II.B.2.

D. NEC Industrial Materials and Activities - Storm-Resistant Shelter Not Required

To qualify for NEC coverage, a Storm-Resistant Shelter is not required for the following:

1. Drums, barrels, tanks, and similar containers that are tightly Sealed, provided those containers are not deteriorated, do not contain residual industrial materials on the outside surfaces, and do not leak;
2. Adequately maintained vehicles used in material handling;
3. Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt);
4. Any Industrial Materials and Activities that are protected by a temporary shelter for a period of no more than ninety (90) days due to facility construction or remodeling; and,
5. Any Industrial Materials and Activities that are protected within a secondary containment structure that will not discharge storm water to waters of the United States.

E. NEC Limitations

1. NEC coverage is available on a facility-wide basis only, not for individual outfalls. If a facility has industrial storm water discharges from one or more drainage areas that require NOI coverage, Dischargers shall register for NOI coverage for the entire facility through SMARTS in accordance with Section II.B.2. Any drainage areas on that facility that would otherwise qualify for NEC coverage may be specially addressed in the facility SWPPP by including an NEC Checklist and a certification statement demonstrating that those drainage areas of the facility have been evaluated; and that none of the Industrial Materials or Activities listed in subsection C above are, or will be in the foreseeable future, exposed to precipitation.
2. If circumstances change and Industrial Materials and Activities become exposed to rain, snow, snowmelt, and/or runoff, the conditions for this exclusion shall no longer apply. In such cases, the Discharger may be subject to enforcement for discharging without a permit. A Discharger with NEC coverage that anticipates changes in circumstances should register for NOI coverage at least seven (7) days before anticipated exposure.
3. The Regional Water Board may deny NEC coverage and require NOI coverage upon determining that:
 - a. Storm water is exposed to Industrial Materials and Activities; and/or
 - b. The discharge has a reasonable potential to cause or contribute to an exceedance of an applicable water quality standards.

F. NEC Permit Registration Documents Required for Initial NEC Coverage

A Discharger shall submit via SMARTS the following PRDs for NEC coverage to document the applicability of the conditional exclusion:

1. The NEC form, which includes:
 - a. The legal name, postal address, telephone number, and e-mail address of the Discharger;
 - b. The facility business name and physical mailing address, the county name, and a description of the facility location if the facility does not have a physical mailing address; and,
 - c. Certification by the Discharger that all PRDs submitted are correct and true and the conditions of no exposure have been met.
2. An NEC Checklist prepared by the Discharger demonstrating that the facility has been evaluated; and that none of the following industrial materials or activities are, or will be in the foreseeable future, exposed to precipitation:

- a. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed;
- b. Materials or residuals on the ground or in storm water inlets from spills/leaks;
- c. Materials or products from past industrial activity;
- d. Material handling equipment (except adequately maintained vehicles);
- e. Materials or products during loading/unloading or transporting activities;
- f. Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants);
- g. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
- h. Materials or products handled/stored on roads or railways owned or maintained by the Discharger;
- i. Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);
- j. Application or disposal of processed wastewater (unless already covered by an NPDES permit); and,
- k. Particulate matter or visible deposits of residuals from roof stacks/vents evident in the storm water outflow.

3. Site Map (see Section X.E).

G. Requirements for Annual NEC Coverage Recertification

By October 1 of each reporting year beginning in 2015, any Discharger who has previously registered for NEC coverage shall either submit and certify an NEC demonstrating that the facility has been evaluated, and that none of the Industrial Materials or Activities listed above are, or will be in the foreseeable future, exposed to precipitation, or apply for NOI coverage.

H. NEC Certification Statement

All NEC certifications and re-certifications shall include the following certification statement:

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of 'no exposure' and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities

or materials from the industrial facility identified in this document (except as allowed in subsection C above). I understand that I am obligated to submit a no exposure certification form annually to the State Water Board and, if requested, to the operator of the local Municipal Separate Storm Sewer System (MS4) into which this facility discharges (where applicable). I understand that I must allow the Water Board staff, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

XVIII. SPECIAL REQUIREMENTS - PLASTIC MATERIALS

- A.** Facilities covered under this General Permit that handle Plastic Materials are required to implement BMPs to eliminate discharges of plastic in storm water in addition to the other requirements of this General Permit that are applicable to all other Industrial Materials and Activities. Plastic Materials are virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust, and other similar types of preproduction plastics with the potential to discharge or migrate off-site. Any Dischargers' facility handling Plastic Materials will be referred to as Plastics Facilities in this General Permit. Any Plastics Facility covered under this General Permit that manufactures, transports, stores, or consumes these materials shall submit information to the State Water Board in their PRDs, including the type and form of plastics, and which BMPs are implemented at the facility to prevent illicit discharges. Pursuant to Water Code section 13367, Plastics Facilities are subject to mandatory, minimum BMPs.
1. At a minimum, Plastics Facilities shall implement and include in the SWPPP:
 - a. Containment systems at each on-site storm drain discharge location down gradient of areas containing plastic material. The containment system shall be designed to trap all particles retained by a 1mm mesh screen, with a treatment capacity of no less than the peak flow rate from a one-year, one-hour storm.
 - b. When a containment system is infeasible, or poses the potential to cause an illicit discharge, the facility may propose a technically feasible

alternative BMP or suite of BMPs. The alternative BMPs shall be designed to achieve the same or better performance standard as a 1mm mesh screen with a treatment capacity of the peak flow rate from a one-year, one-hour storm. Alternative BMPs shall be submitted to the Regional Water Board for approval.

- c. Plastics Facilities shall use durable sealed containers designed not to rupture under typical loading and unloading activities at all points of plastic transfer and storage.
 - d. Plastics Facilities shall use capture devices as a form of secondary containment during transfers, loading, or unloading Plastic Materials. Examples of capture devices for secondary containment include, but are not limited to catch pans, tarps, berms or any other device that collects errant material.
 - e. Plastics Facilities shall have a vacuum or vacuum-type system for quick cleanup of fugitive plastic material available for employees.
 - f. Pursuant to Water Code section 13367(e)(1), Plastics Facilities that handle Plastic Materials smaller than 1mm in size shall develop a containment system designed to trap the smallest plastic material handled at the facility with a treatment capacity of at least the peak flow rate from a one-year, one-hour storm, or develop a feasible alternative BMP or suite of BMPs that are designed to achieve a similar or better performance standard that shall be submitted to the Regional Water Board for approval.
2. Plastics Facilities are exempt from the Water Code requirement to install a containment system under section 13367 of the Water Code if they meet one of the following requirements that are determined to be equal to, or exceed the performance requirements of a containment system:
- a. The Discharger has certified and submitted via SMARTS a valid No Exposure Certification (NEC) in accordance with Section XVII; or
 - b. Plastics Facilities are exempt from installing a containment system, if the following suite of eight (8) BMPs is implemented. This combination of BMPs is considered to reduce or prevent the discharge of plastics at a performance level equivalent to or better than the 1mm mesh and flow standard in Water Code section 13367(e)(1).
 - i. Plastics Facilities shall annually train employees handling Plastic Materials. Training shall include environmental hazards of plastic discharges, employee responsibility for corrective actions to prevent errant Plastic Materials, and standard procedures for containing, cleaning, and disposing of errant Plastic Materials.

- ii. Plastics Facilities shall immediately fix any Plastic Materials containers that are punctured or leaking and shall clean up any errant material in a timely manner.
- iii. Plastics Facilities shall manage outdoor waste disposal of Plastic Materials in a manner that prevents the materials from leaking from waste disposal containers or during waste hauling.
- iv. Plastics Facilities that operate outdoor conveyance systems for Plastic Materials shall maintain the system in good operating condition. The system shall be sealed or filtered in such a way as to prevent the escape of materials when in operation. When not in operation, all connection points shall be sealed, capped, or filtered so as to not allow material to escape. Employees operating the conveyance system shall be trained how to operate in a manner that prevents the loss of materials such as secondary containment, immediate spill response, and checks to ensure the system is empty during connection changes.
- v. Plastics Facilities that maintain outdoor storage of Plastic Materials shall do so in a durable, permanent structure that prevents exposure to weather that could cause the material to migrate or discharge in storm water.
- vi. Plastics Facilities shall maintain a schedule for regular housekeeping and routine inspection for errant Plastic Materials. The Plastics Facility shall ensure that their employees follow the schedule.
- vii. PRDs shall include the housekeeping and routine inspection schedule, spill response and prevention procedures, and employee training materials regarding plastic material handling.
- viii. Plastics Facilities shall correct any deficiencies in the employment of the above BMPs that result in errant Plastic Materials that may discharge or migrate off-site in a timely manner. Any Plastic Materials that are discharged or that migrate off-site constitute an illicit discharge in violation of this General Permit.

XIX. REGIONAL WATER BOARD AUTHORITIES

- A.** The Regional Water Boards may review a Discharger’s PRDs for NOI or NEC coverage and administratively reject General Permit coverage if the PRDs are deemed incomplete. The Regional Water Boards may take actions that include rescinding General Permit coverage, requiring a Discharger to revise and re-submit their PRDs (certified and submitted by the Discharger) within a specified time period, requiring the Discharger to apply for different General Permit coverage or a different individual or general permit, or taking no action.
- B.** The Regional Water Boards have the authority to enforce the provisions and requirements of this General Permit. This includes, but is not limited to,

reviewing SWPPPs, Monitoring Implementation Plans, ERA Reports, and Annual Reports, conducting compliance inspections, and taking enforcement actions.

- C. As appropriate, the Regional Water Boards may issue NPDES storm water general or individual permits to a Discharger, categories of Dischargers, or Dischargers within a watershed or geographic area. Upon issuance of such NPDES permits, this General Permit shall no longer regulate the affected Discharger(s).
- D. The Regional Water Boards may require a Discharger to revise its SWPPP, ERA Reports, or monitoring programs to achieve compliance with this General Permit. In this case, the Discharger shall implement these revisions in accordance with a schedule provided by the Regional Water Board.
- E. The Regional Water Boards may approve requests from a Discharger to include co-located, but discontinuous, industrial activities within the same facility under a single NOI or NEC coverage.
- F. Consistent with 40 Code of Federal Regulations section 122.26(a)(9)(i)(D), the Regional Water Boards may require any discharge that is not regulated by this General Permit, that is determined to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States, to be covered under this General Permit as appropriate. Upon designation, the Discharger responsible for the discharge shall obtain coverage under this General Permit.
- G. The Regional Water Boards may review a Discharger's Inactive Mining Operation Certification and reject it at any time if the Regional Water Board determines that access to the facility for monitoring purposes is practicable or that the facility is not in compliance with the applicable requirements of this General Permit.
- H. All Regional Water Board actions that modify a Discharger's obligations under this General Permit must be in writing and should also be submitted in SMARTS.

XX. SPECIAL CONDITIONS

A. Reopener Clause

This General Permit may be reopened and amended to incorporate TMDL-related provisions. This General Permit may also be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, water quality control plans or water quality control policies, receipt of U.S. EPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations sections 122.62, 122.63, 122.64, and 124.5.

B. Water Quality Based Corrective Actions

1. Upon determination by the Discharger or written notification by the Regional Water Board that industrial storm water discharges and/or authorized NSWDS contain pollutants that are in violation of Receiving Water Limitations (Section VI), the Discharger shall:
 - a. Conduct a facility evaluation to identify pollutant source(s) within the facility that are associated with industrial activity and whether the BMPs described in the SWPPP have been properly implemented;
 - b. Assess the facility's SWPPP and its implementation to determine whether additional BMPs or SWPPP implementation measures are necessary to reduce or prevent pollutants in industrial storm water discharges to meet the Receiving Water Limitations (Section VI); and,
 - c. Certify and submit via SMARTS documentation based upon the above facility evaluation and assessment that:
 - i. Additional BMPs and/or SWPPP implementation measures have been identified and included in the SWPPP to meet the Receiving Water Limitations (Section VI); or
 - ii. No additional BMPs or SWPPP implementation measures are required to reduce or prevent pollutants in industrial storm water discharges to meet the Receiving Water Limitations (Section VI).
2. The Regional Water Board may reject the Dischargers water quality based corrective actions and/or request additional supporting documentation.

C. Requirements for Dischargers Claiming “No Discharge” through the Notice of Non-Applicability (NONA)

1. For the purpose of the NONA, the Entity (Entities) is referring to the person(s) defined in section 13399.30 of the Water Code.
2. Entities who are claiming “No Discharge” through the NONA shall meet the following eligibility requirements:
 - a. The facility is engineered and constructed to have contained the maximum historic precipitation event (or series of events) using the precipitation data collected from the National Oceanic and Atmospheric Agency's website (or other nearby precipitation data available from other government agencies) so that there will be no discharge of industrial storm water to waters of the United States; or,
 - b. The facility is located in basins or other physical locations that are not hydrologically connected to waters of the United States.
3. When claiming the “No Discharge” option, Entities shall submit and certify via SMARTS both the NONA and a No Discharge Technical Report. The No

Discharge Technical Report shall demonstrate the facility meets the eligibility requirements described above.

4. The No Discharge Technical Report shall be signed (wet signature and license number) by a California licensed professional engineer.

XXI. STANDARD CONDITIONS

A. Duty to Comply

Dischargers shall comply with all standard conditions in this General Permit. Permit noncompliance constitutes a violation of the Clean Water Act and the Water Code and is grounds for enforcement action and/or removal from General Permit coverage.

Dischargers shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions.

B. Duty to Reapply

Dischargers that wish to continue an activity regulated under this General Permit after the expiration date of this General Permit shall apply for and obtain authorization from the Water Boards as required by the new general permit once it is issued.

C. General Permit Actions

1. This General Permit may be modified, revoked and reissued, or terminated for cause. Submittal of a request by the Discharger for General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.
2. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

D. Need to Halt or Reduce Activity Not a Defense

In an enforcement action, it shall not be a defense for a Discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

E. Duty to Mitigate

Dischargers shall take all responsible steps to reduce or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

F. Proper Operation and Maintenance

Dischargers shall at all times properly operate and maintain any facilities and systems of treatment and control (and related equipment and apparatuses) which are installed or used by the Discharger to achieve compliance with the conditions of this General Permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a Discharger when necessary to achieve compliance with the conditions of this General Permit.

G. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges. It also does not authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of federal, state, or local laws and regulations.

H. Duty to Provide Information

Upon request by the relevant agency, Dischargers shall provide information to determine compliance with this General Permit to the Water Boards, U.S. EPA, or local Municipal Separate Storm Sewer System (MS4) within a reasonable time. Dischargers shall also furnish, upon request by the relevant agency, copies of records that are required to be kept by this General Permit.

I. Inspection and Entry

Dischargers shall allow the Water Boards, U.S. EPA, and local MS4 (including any authorized contractor acting as their representative), to:

1. Enter upon the premises at reasonable times where a regulated industrial activity is being conducted or where records are kept under the conditions of this General Permit;
2. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;
3. Inspect the facility at reasonable times; and,
4. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

J. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. If Dischargers monitor any pollutant more frequently than required, the results of such monitoring shall be included in the calculation and reporting of the data submitted.
3. Records of monitoring information shall include:
 - a. The date, exact location, and time of sampling or measurement;
 - b. The date(s) analyses were performed;
 - c. The individual(s) that performed the analyses;
 - d. The analytical techniques or methods used; and,
 - e. The results of such analyses.
4. Dischargers shall retain, for a period of at least five (5) years, either a paper or electronic copy of all storm water monitoring information, records, data, and reports required by this General Permit. Copies shall be available for review by the Water Board's staff at the facility during scheduled facility operating hours.
5. Upon written request by U.S. EPA or the local MS4, Dischargers shall provide paper or electronic copies of Annual Reports or other requested records to the Water Boards, U.S. EPA, or local MS4 within ten (10) days from receipt of the request.

K. Electronic Signature and Certification Requirements

1. All Permit Registration Documents (PRDs) for NOI and NEC coverage shall be certified and submitted via SMARTS by the Discharger's Legally Responsible Person (LRP). All other documents may be certified and submitted via SMARTS by the LRP or by their designated Duly Authorized Representative.
2. When a new LRP or Duly Authorized Representative is designated, the Discharger shall ensure that the appropriate revisions are made via SMARTS. In unexpected or emergency situations, it may be necessary for the Discharger to directly contact the State Water Board's Storm Water Section to register for SMARTS account access in order to designate a new LRP.
3. Documents certified and submitted via SMARTS by an unauthorized or ineligible LRP or Duly Authorized Representative are invalid.

4. LRP eligibility is as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function; or
 - ii. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. This includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA).
5. Duly Authorized Representative eligibility is as follows:
 - a. The Discharger must authorize via SMARTS any person designated as a Duly Authorized Representative;
 - b. The authorization shall specify that a person designated as a Duly Authorized Representative has responsibility for the overall operation of the regulated facility or activity, such as a person that is a manager, operator, superintendent, or another position of equivalent responsibility, or is an individual who has overall responsibility for environmental matters for the company; and,
 - c. The authorization must be current (it has been updated to reflect a different individual or position) prior to any report submittals, certifications, or records certified by the Duly Authorized Representative.

L. Certification

Any person signing, certifying, and submitting documents under Section XXI.K above shall make the following certification:

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

M. Anticipated Noncompliance

Dischargers shall give advance notice to the Regional Water Board and local MS4 of any planned changes in the industrial activity that may result in noncompliance with this General Permit.

N. Penalties for Falsification of Reports

Clean Water Act section 309(c)(4) provides that any person that knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years or by both.

O. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the initiation of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties to which the Discharger is or may be subject to under section 311 of the Clean Water Act.

P. Severability

The provisions of this General Permit are severable; if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

Q. Penalties for Violations of Permit Conditions

1. Clean Water Act section 309 provides significant penalties for any person that violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act or any permit condition or limitation implementing any such section in a permit issued under section 402. Any

person that violates any permit condition of this General Permit is subject to a civil penalty not to exceed \$37,500²² per calendar day of such violation, as well as any other appropriate sanction provided by section 309 of the Clean Water Act.

2. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which may be greater than penalties under the Clean Water Act.

R. Transfers

Coverage under this General Permit is non-transferrable. When operation of the facility has been transferred to another entity, or a facility is relocated, new PRDs for NOI and NEC coverage must be certified and submitted via SMARTS prior to the transfer, or at least seven (7) days prior to the first day of operations for a relocated facility.

S. Continuation of Expired General Permit

If this General Permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 Code of Federal Regulations 122.6 and remain in full force and effect.

²² May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act.

Attachment 3 to Declaration of David Meyer

**Petition for Variance Before the SCAQMD Hearing Board
(Case No. 5139-3)**

USA Waste of California, Inc. dba El Sobrante Landfill



engineers | scientists | innovators

LEACHATE AND GAS CONDENSATE RECIRCULATION WORK PLAN

El Sobrante Landfill Riverside County, California

Prepared for

USA Waste of California
10910 Dawson Canyon Road
Corona, California 92883

Prepared by

Geosyntec Consultants, Inc.
13400 Sabre Springs Pkwy., Suite 135
San Diego, California 92128

Project SC0481

June 2, 2023

Revised June 29, 2023

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Keaton Botelho, P.E.
Principal



Project Number: SC0481

June 29, 2023

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Attachment B: ESL Leachate Collection and Removal System Plan

Attachment C: ESL Landfill Gas Condensate Collection System Plan

Attachment D: ESL Analytical Results for Leachate

Attachment E: ESL Analytical Results for Landfill Gas Condensate

Attachment F: Leachate/Condensate Recirculation Rate Determination

1 BACKGROUND AND PURPOSE

The El Sobrante Landfill (ESL), owned and operated by USA Waste of California, Inc. (USA Waste), is an existing permitted Class III landfill facility located in Riverside County, California (Figure 1) which receives Municipal Solid Waste (MSW). The ESL has been in operation since 1986 and currently operates under Waste Discharge Requirements (WDR) Order No. R8-2016-0034.

In accordance with California Code of Regulations, Title 27, Section 20200(d) (27 CCR §20200(d)), application of liquids to wastes in a Class III landfill shall be allowed if the moisture holding capacity of the landfill is not exceeded as a result of the addition of liquids (e.g., leachate, landfill gas condensate). Additionally, 27 CCR §20939(a)(4) and WDRs Discharge Specifications Section A. 5-Liquids Usage, include requirements for discharge of leachate and recirculation of condensate generated from landfill gas control systems into the landfill. Therefore, the ESL is proposing to implement a leachate and landfill gas condensate recirculation program.

This work plan has been prepared to describe the proposed leachate and landfill gas condensate surface application at the working face and for dust control purposes, demonstrate compliance with the above-mentioned regulations, and for submittal to the California Regional Water Quality Control Board (RWQCB) for approval prior to implementation.

2 SITE DESCRIPTION

The ESL is an existing permitted Class III landfill facility which receives MSW and is located at 10910 Dawson Canyon Road in Corona California (Figure 1). The ESL has been in operation since 1986 with an initial permitted footprint and waste capacity of 160 acres and 9 million tons of solid waste, respectively. The ESL currently operates under Waste Discharge Requirements (WDR) Order No. R8-2016-0034 with the following characteristics:

- A design capacity of approximately 210 million cubic yards (mcy)¹ (gross airspace);
- A permitted maximum disposal rate of 70,000 tons per week (tpw)²; waste material used for daily cover or beneficial use are not counted towards the daily disposal tonnage limit;
- A landfill footprint of approximately 468 acres;
- A final elevation of 1,832 feet above mean sea level; and
- Hours of operation of 24 hours per day, 7 days per week, excluding holidays.

The ESL has been designed and is being developed in phases. As of May 2023, Phases 1 through 13A have been developed and Phases 13B through 17 are planned for future construction (Attachment A).

2.1 Liner Systems

Due to the ESL being developed in phases, the design of the liner system varies as regulatory requirements have changed over time. The ESL liner design can be summarized as follows [Geosyntec, 2023]:

- Phase 1 and Phase 2: were constructed in 1986 and 1987 on excavated bedrock with an inherent permeability of 1×10^{-6} centimeters per second or less. A clay liner was constructed on the west slope of Phase 1 to meet the then required permeability requirements;
- Phase 3-Stage 1: was constructed with a clay liner;
- Phase 3 (subsequent stages) and Phase 4: were constructed in 1993 through 2000 with composite liner systems designed to meet or exceed the federal and state landfill requirements contained in California Federal Regulations (CFR), Title 40, Section 258 (Subtitle D). The composite liner system in the Phases 3-3B/4-1 and 4-2A areas consists of 2 feet of compacted clay overlain by a high-density polyethylene (HDPE) geomembrane and a leachate collection and removal system (LCRS) drainage layer. The composite liner in the Phase 4-2B area consists of a geosynthetic clay liner (GCL) overlain by a HDPE geomembrane and a LCRS layer. Phase 5 is a vertical expansion above the previous phases; and

¹ Landfill capacity of 210 mcy includes liner and final cover. Capacity for waste placement is approximately 205 mcy.

² Permitted peak daily tonnage is 16,054 tons per day (tpd).

- Phase 6 through Phase 13A, and future phases are being constructed with composite liner systems designed to meet or exceed Subtitle D requirements as described in Section 2.2.

2.2 Landfill Design

Landfill design for Phase 6 through Phase 13A, and future phases includes the following components which are discussed in detail in the ESL Joint Technical Document [Geosyntec, 2023]:

- Composite bottom liner comprised of (from bottom to top): prepared subgrade, low permeability soil; flexible membrane liner (FML), geosynthetic clay liner (GCL), FML, cushion fabric, LCRS drainage layer, filter fabric, and operations layer;
- Side slope liner comprised of (from bottom to top): prepared subgrade, FML, GCL, FML, geocomposite drainage layer, and operations layer;
- LCRS;
- Final cover comprised of (from bottom to top): foundation layer and vegetative soil layer/evapotranspirative cover; and
- Landfill gas control/recovery system includes a network of horizontal and/or vertical collection wells, laterals, header lines, landfill gas flares, and/or landfill gas beneficial use plant/station; and landfill gas condensate sumps (See Section 3).

3 LEACHATE AND CONDENSATE COLLECTION

This section describes the ESL leachate and gas condensate collection systems and discusses corresponding volume and analytical data.

3.1 Leachate Collection and Removal System

The LCRS system generally includes a blanket drainage layer above the bottom liner system and a system of dendritic pipes; lateral collector pipes and header pipes sloped to downgradient LCRS sumps. The ESL LCRS for Phase 3 through Phase 12 includes the following (Attachment B):

- Leachate collection sumps. As of May 2023, leachate is removed from the following locations: northern portion of Phase 4-Stage 2 by LCRS-3; Phase 8 by LCRS-8; Phase 9 by LCRS-9 Phase 11 by LCRS-11; and Phase 12 by LCRS-12; and
- Leachate pumps located at each sump will pump collected leachate through a discharge line to a storage facility.

3.2 Leachate Collection Volumes

Leachate volumes for the ESL since April 2018 are summarized in Table 1 [SCS 2019, 2020, 2021, 2022, 2023].

Table 1: Summary of Leachate Volumes

Monitoring Period	Total Annual Volume (gal)	Average Daily Volume (gal/day)
April 2018 – March 2019	1,699,596	4,656
April 2019 – March 2020	2,514,235	6,888
April 2020 – March 2021	3,011,616	8,251
April 2021 – March 2022	4,500,530	12,330
April 2022 – March 2023	3,934,269	10,779

Average daily leachate generation volumes will be compared to maximum liquid application rate, which is estimated to inhibit exceedance of the moisture holding capacity of the landfill due to liquid addition (Section 4.2).

3.3 Gas Condensate Collection System

As landfill gas is collected, water and other vapors in the gas condense in the system and are typically collected at and removed from low elevation locations along the landfill gas collection system. The ESL landfill gas condensate collection system includes the following (Attachment C):

- Landfill gas condensate sumps located along the landfill gas buried HDPE header lines located under the edge of the perimeter access road. As of May 2023, four (4) condensate sumps are operational namely CS-1, CS-2, CS-3, and CS-5; and
- Condensate pumps located at each sump will pump collected condensate through a discharge line to a storage facility.

Development of future phases at ESL may include additional landfill gas condensate sumps and pumps.

3.4 Gas Condensate Collection Volumes

Landfill gas condensate volumes for the ESL since April 2018 are summarized in Table 2 [SCS 2019, 2020, 2021, 2022, 2023].

Table 2: Summary of Landfill Gas Condensate Volumes

Monitoring Period	Total Annual Volume (gal)	Average Daily Volume (gal/day)
April 2018 – March 2019	1,081,674	2,963
April 2019 – March 2020	1,891,424	5,182
April 2020 – March 2021	1,374,103	3,765
April 2021 – March 2022	1,854,859	5,082
April 2022 – March 2023	1,925,698	5,276

Average daily gas condensate generation volumes will be compared to maximum liquid application rate, which is estimated to inhibit exceedance of the moisture holding capacity of the landfill due to liquid addition (Section 4.2).

3.5 Leachate and Gas Condensate Analytical Data

Analytical results for the ESL leachate from 2003 and through 2022 and landfill gas condensate collected from 2001 through 2022 are presented in Attachment D and Attachment E, respectively [SCS 2023]. Leachate and landfill gas condensate analytical data can be used to evaluate the potential impacts of liquid recirculation on the detected analytes and their concentration with respect to reporting limits and the ESL constituent of concern parameter list (COC) as discussed in Section 5.

4 LEACHATE AND CONDENSATE RECIRCULATION

In accordance with the requirements of 27 CCR §20939(a)(4) and WDRs Discharge Specifications Section A. 5-Liquids Usage, leachate and condensate generated from landfill gas control systems can be recirculated into the landfill if the following conditions are met:

- The landfill has a liner and a properly operating LCRS;
- The analysis of the liquid (i.e. leachate and condensate) indicates that such recirculation into the landfill will not harm the public health and safety or the environment; and
- The leachate and condensate discharge has been approved by the RWQCB.

As described in Section 2, the ESL design includes a composite bottom liner and a properly operated LCRS. Also, this work plan will only be implemented following RWQCB approval. This section describes the leachate and condensate surface application methods and restriction for the ESL.

4.1 Leachate and Condensate Surface Application Methods

The primary approach is for condensate to be recirculated at the active face; however, leachate may be also discharged at the working face and used as dust control depending on the odorous nature of the liquids. Leachate and landfill gas condensate at the ESL are collected at sump locations and pumped into storage tank(s). This section describes methods for surface application of liquids at the working face of lined portions of the landfill or for dust control along access roads located within the landfill liner footprint.

4.1.1 Application at the Working Face

Using this method, leachate and condensate will be pumped from the storage tank into a tanker truck for even application to the working face(s) of active disposal area(s). The leachate and condensate may be applied utilizing manually operated hoses connected to the truck, gravity bars or similar methods that allow for even application. Alternatively, a shallow depression may be created where the liquids are unloaded into the working face. The incoming wastes will then be worked through this area to condition them. The depression will be moved every day to prevent the development of wet spots.

Liquid application at the working face shall be conducted at all times under the authority of the landfill manager or the designated person in charge of working face operations. All personnel directly involved in condensate application should:

1. Wear appropriate personnel protective equipment (PPE) at minimum Level D with gloves and safety glasses; and
2. Be appropriately trained for this activity.

Liquid application activities shall be performed in an appropriate manner to minimize interference with daily operation of the working face and such that personnel contact with condensate is prevented. Liquid application activities should also be performed so as not to conflict with any activities required under the facility operations plan (e.g., application of daily cover).

It is recommended that leachate and condensate application at the working face be limited to areas with a minimum of 50 feet of waste in place and a horizontal separation of at least 200 feet from exterior side slopes. Ponding or runoff at the working face is not anticipated; however, in the event the working face is sloped toward an exterior side slope of the landfill, a temporary waste or soil berm approximately 3 feet high should be constructed to contain condensate impacted runoff. Temporary waste berms should be leveled, compacted, and covered at the end of the day. When a temporary waste berm is not constructed, daily cover material or soil may be utilized at the downslope portion to prevent runoff.

When leachate and condensate are applied to active disposal areas, weather conditions must be favorable to prevent potential drifting of condensate aerosols or runoff into the stormwater collection system. Leachate and condensate application shall not be conducted when: (i) the wind speed is greater than 15 miles per hour (MPH) average over 15 minutes or the instantaneous wind speed exceeds 25 MPH, (ii) it is raining, or (iii) within 12 hours of a significant rainfall event (defined as any storm that results in the site receiving more than 0.5 inches of precipitation within a 24-hour period).

4.1.2 Dust Control for Access Roads

Using this method, leachate and condensate will be pumped from the storage tank(s) into tanker truck(s) and will be applied for dust control on access roads within lined areas of the landfill and cover soils in active landfill areas. The operational procedures recommended for this method of condensate application, as well as limits and restrictions on application, are similar to that for application at the working face (Section 4.1.1).

4.2 Leachate and Condensate Application Restrictions

Leachate and condensate surface application at the ESL shall be performed in accordance with the following restrictions:

- **Thickness of Waste:** No leachate or condensate application should be allowed in new cells with less than 50 feet of waste in place.
- **Application rate:** The maximum average daily volume of leachate and condensate generated at the ESL (17,600 gal) can be applied over a minimum area of approximately 10,750 ft² without exceeding the moisture holding capacity of the MSW at the ESL. This corresponds to an application rate of 1.6 gal/ft² (See Attachment F). The 10,750 ft² area represents the minimum area required to recirculate all of the condensate and leachate generated daily (17,600 gal) without storage to prevent exceeding the moisture holding capacity of the MSW. Operationally, smaller volumes of liquids may be recirculated into smaller working face areas at the application rate of 1.6 gal/ft². For example, if one 4,000-gal load of liquid was recirculated into the working face of the landfill, it should be distributed cumulatively over a minimum area of 2,500 ft², approximately 50 ft by 50 ft. Alternatively, the liquids could be applied over several smaller areas that total 2,500 ft². Using this example, approximately twelve 15 ft x 15 ft areas would meet the recirculation requirements. Actual areas for recirculation will be determined based on daily operations

but will comply with the 1.6 gal/ft² application rate and other restrictions listed in this section.

- Proximity to External Side Slopes: No leachate or condensate application should be allowed in areas with a horizontal separation of less than 200 feet from exterior side slopes.
- Weather Conditions: When leachate or condensate are applied, weather conditions must be favorable to prevent potential drifting of liquid aerosols or runoff into the stormwater collection system. Leachate and condensate application shall not be conducted when: (i) the wind speed is greater than 15 miles per hour (MPH) average over 15 minutes or the instantaneous wind speed exceeds 25 MPH, (ii) it is raining, or (iii) within 12 hours of a significant rainfall event (defined as any storm that results in the site receiving more than 0.5 inches of precipitation within a 24-hour period).

4.3 Leachate and Condensate Recirculation Monitoring

Leachate and condensate surface application at the ESL may increase the rate of leachate generation and/or landfill gas production. Nevertheless, these impacts are expected to be minimized by following the leachate and condensate application methods and restrictions described in Section 4.1 and Section 4.2, respectively.

Existing requirements for the ESL operation include monitoring activities for the leachate control system, landfill gas control system, as well as leachate and gas condensate volume measurement, and sampling and analytical laboratory testing [Geosyntec, 2023]. The results of these monitoring activities may be used to evaluate the potential impact of the leachate and condensate application on the performance of these systems, as applicable.

4.4 Condensate Recirculation Reporting

The method, volume, and location of the recirculated leachate and condensate, and the weather conditions including temperature, wind speed and precipitation shall be recorded in a daily log for each day liquids are applied to the landfill.

A copy of each daily log completed should be maintained at the ESL office and used for periodic reporting on the progress of condensate surface application activities.

5 POTENTIAL EFFECTS OF CONDENSATE RECIRCULATION

Recirculation of leachate and condensate, as described in this workplan, is not expected to impact the performance of the landfill to protect public health and safety or the environment because the areas to receive recirculated leachate and condensate are lined and have a properly operating LCRS and existing monitoring systems to evaluate landfill performance. Therefore, liquids that are recirculated following the application methods and restrictions described in Section 4.1 and Section 4.2, respectively, will either be stored within the MSW, evaporated, or infiltrate through the waste mass and collected and removed by the LCRS. The procedures outlined in this work plan are provided to mitigate the development of high hydraulic heads that may impact the stability of the ESL.

The potential impact of liquid recirculation on the ESL performance can be evaluated based on data from current monitoring requirements as follows:

- Landfill gas composition and generation rate: can be monitored by evaluating total flow (standard cubic feet per minute, scfm) and composition (methane, carbon dioxide, oxygen, and nitrogen) of LFG;
- Leachate generation rate: can be monitored by evaluating total flow;
- Landfill gas extraction system operation: can be evaluated based on increased presence of liquids in gas extraction wells, landfill gas emission increase or exceedances;
- Thermal responses: can be evaluated for increase in landfill temperatures in the landfill gas extraction system;
- LCRS operation: can be evaluated for increased liquid generation and pumping frequency required to maintain twelve inches of head on the liner system.
- Slope stability: landfill slope stability can be evaluated based on waste mass settlement data as measured by surveyed elevation data, and by the results of cover integrity inspections which report areas of slope failure, differential settlement, fissuring or erosion.

Additionally, leachate and landfill gas condensate analytical results can be evaluated to determine if detected analytes with concentrations above reporting limits are included in the ESL COC parameter list, which is based on historic condensate and leachate detections [SCS, 2023].

6 SUMMARY AND CONCLUSIONS

This work plan describes the proposed methods, restrictions, monitoring and reporting requirements for leachate and landfill gas condensate surface application at the working face and for dust control purposes for the ESL.

The proposed leachate and condensate recirculation work plan was prepared in general accordance with 27 CCR §20200 and §20939(a)(4), and WDRs Discharge Specifications Section A. 5-Liquids Usage and shall gain RWQCB approval prior to implementation.

Leachate and condensate surface application at the ESL may increase the rate of leachate generation and/or landfill gas production. Nevertheless, these impacts are expected to be minimized by following the leachate and condensate application methods and restrictions described in Section 4.1 and Section 4.2, respectively. Furthermore, following the procedures outlined in this work plan will mitigate the development of high hydraulic heads that may impact the stability of the ESL.

Existing requirements for the ESL operation include monitoring activities for the leachate control system, landfill gas control system, as well as leachate and gas condensate volume measurement, and sampling and analytical laboratory testing [Geosyntec, 2023]. The results of these monitoring activities may be used to evaluate the potential impact of the leachate and condensate application on the performance of these systems, as applicable.

7 REFERENCES

Geosyntec Consultants, Inc. 2023. *Joint Technical Document El Sobrante Landfill Riverside County, California*. June.

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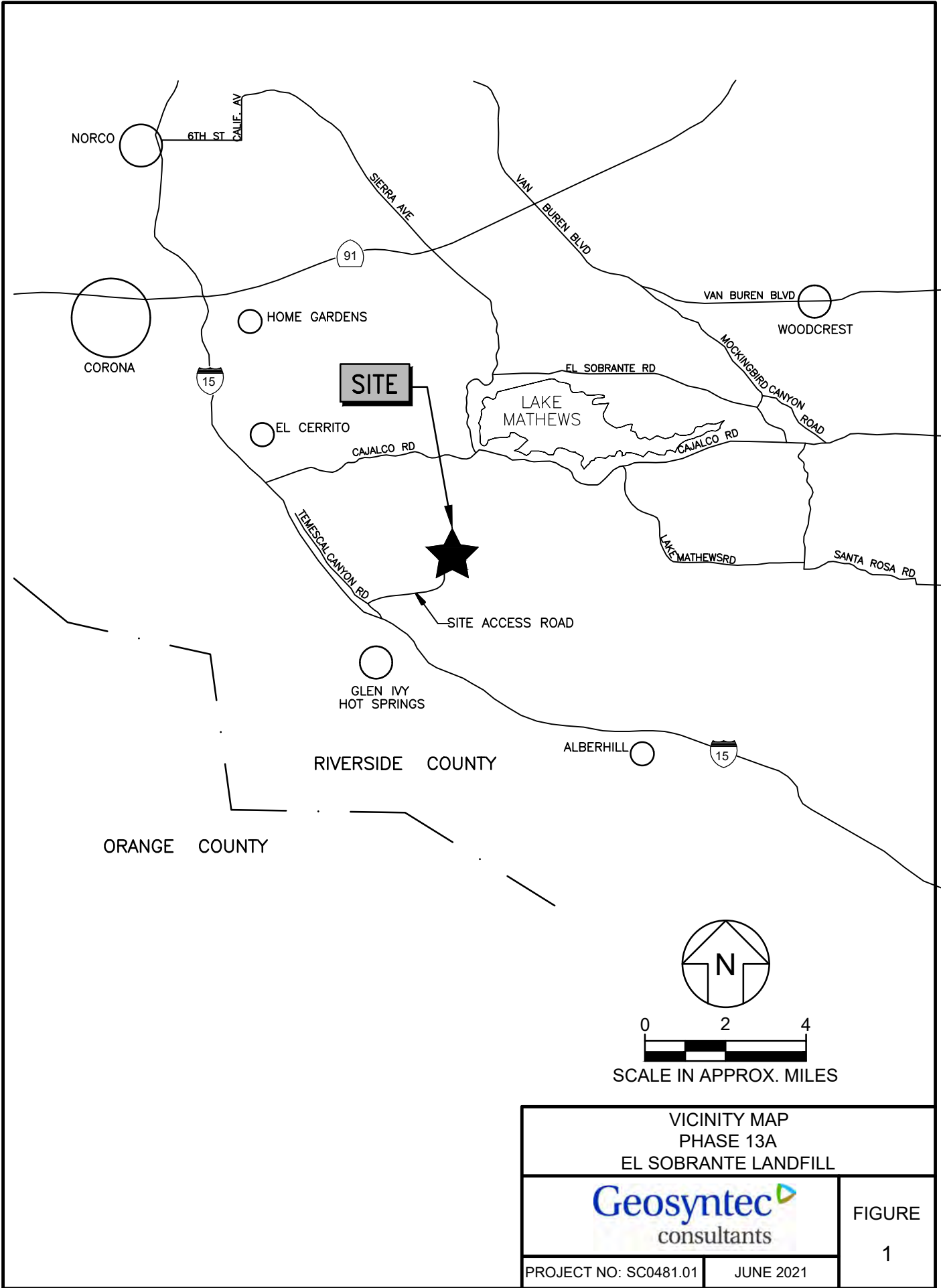
SCS Engineers. 2020. *Fall 2019-Winter 2020 Semiannual Groundwater Monitoring Report And Annual Reporting Requirements, El Sobrante Landfill Corona, California*. April.

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SCS Engineers. 2023. *Fall 2022-Winter 2023 Semiannual Groundwater Monitoring Report And Annual Reporting Requirements, El Sobrante Landfill Corona, California*. April.

FIGURES



VICINITY MAP PHASE 13A EL SOBRANTE LANDFILL		FIGURE 1
		
PROJECT NO: SC0481.01	JUNE 2021	

ATTACHMENT A

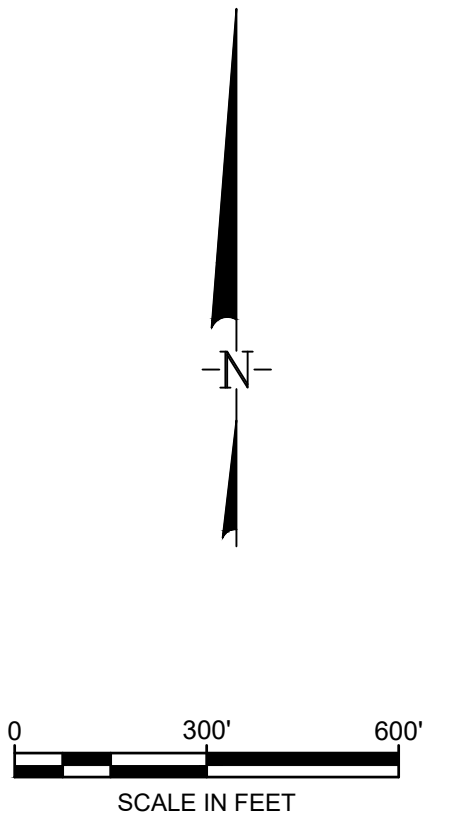
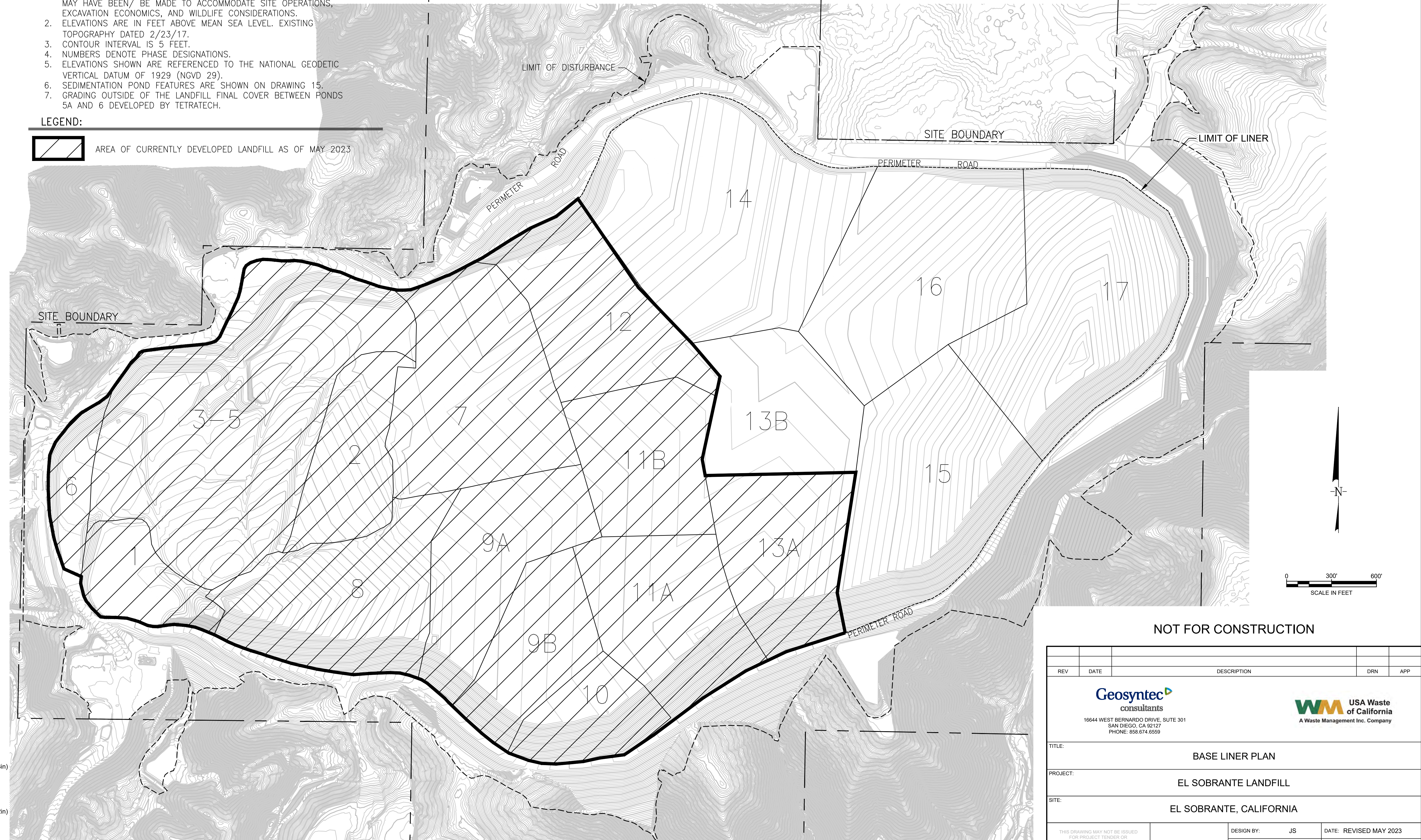
ESL Base Liner Plan

NOTES:



1. IN ACCORDANCE WITH SECTION 3.2.5, MINOR REVISIONS TO PHASING MAY HAVE BEEN/ BE MADE TO ACCOMMODATE SITE OPERATIONS, EXCAVATION ECONOMICS, AND WILDLIFE CONSIDERATIONS.
2. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL. EXISTING TOPOGRAPHY DATED 2/23/17.
3. CONTOUR INTERVAL IS 5 FEET.
4. NUMBERS DENOTE PHASE DESIGNATIONS.
5. ELEVATIONS SHOWN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
6. SEDIMENTATION POND FEATURES ARE SHOWN ON DRAWING 15.
7. GRADING OUTSIDE OF THE LANDFILL FINAL COVER BETWEEN PONDS 5A AND 6 DEVELOPED BY TETRATECH.

LEGEND:

 AREA OF CURRENTLY DEVELOPED LANDFILL AS OF MAY 2023



NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
 				
TITLE: BASE LINER PLAN				
PROJECT: EL SOBRANTE LANDFILL				
SITE: EL SOBRANTE, CALIFORNIA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: JS	DATE: REVISED MAY 2023	
		DRAWN BY: MC	PROJECT NO.: SC0481	
		CHECKED BY: JS	FILE: SC0481.04-C06.dwg	
		REVIEWED BY: GC	DRAWING NO.:	
		APPROVED BY: JS	6 OF 16	

C:\geopw\4807\dms1728\SC0481.04-C06.dwg Last Edited by: ADominguez on 5/22/2023 5:15 PM

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")



ATTACHMENT B
ESL Leachate Collection and Removal System
Plan

LEGEND:

- LEACHATE COLLECTOR
- LEACHATE DISCHARGE LINE
- LEACHATE HEADER
- LIQUIDS STORAGE TANK
- LCRS SUMP
- DIRECTION OF LEACHATE FLOW



NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
 				
TITLE: LEACHATE COLLECTION AND REMOVAL SYSTEM				
PROJECT: EL SOBRANTE LANDFILL				
SITE: EL SOBRANTE, CALIFORNIA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: JS	DATE: REVISED MAY 2023	
		DRAWN BY: MC	PROJECT NO.: SC0481	
		CHECKED BY: JS	FILE: SC0481.04-C09.dwg	
		REVIEWED BY: GC	DRAWING NO.:	
		APPROVED BY: JS	9 OF 16	

NOTES:

1. IN ACCORDANCE WITH SECTION 3.2.5, MINOR REVISIONS TO PHASING MAY HAVE BEEN/ BE MADE TO ACCOMMODATE SITE OPERATIONS, EXCAVATION ECONOMICS, AND WILDLIFE CONSIDERATIONS.
2. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL. EXISTING TOPOGRAPHY DATED 2/11/13.
3. CONTOUR INTERVAL IS 5 FEET.
4. NUMBERS DENOTE PHASE DESIGNATIONS.
5. ELEVATIONS SHOWN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
6. GRADING OUTSIDE OF THE LANDFILL FINAL COVER BETWEEN PONDS 5A AND 6 DEVELOPED BY TETRATECH.

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

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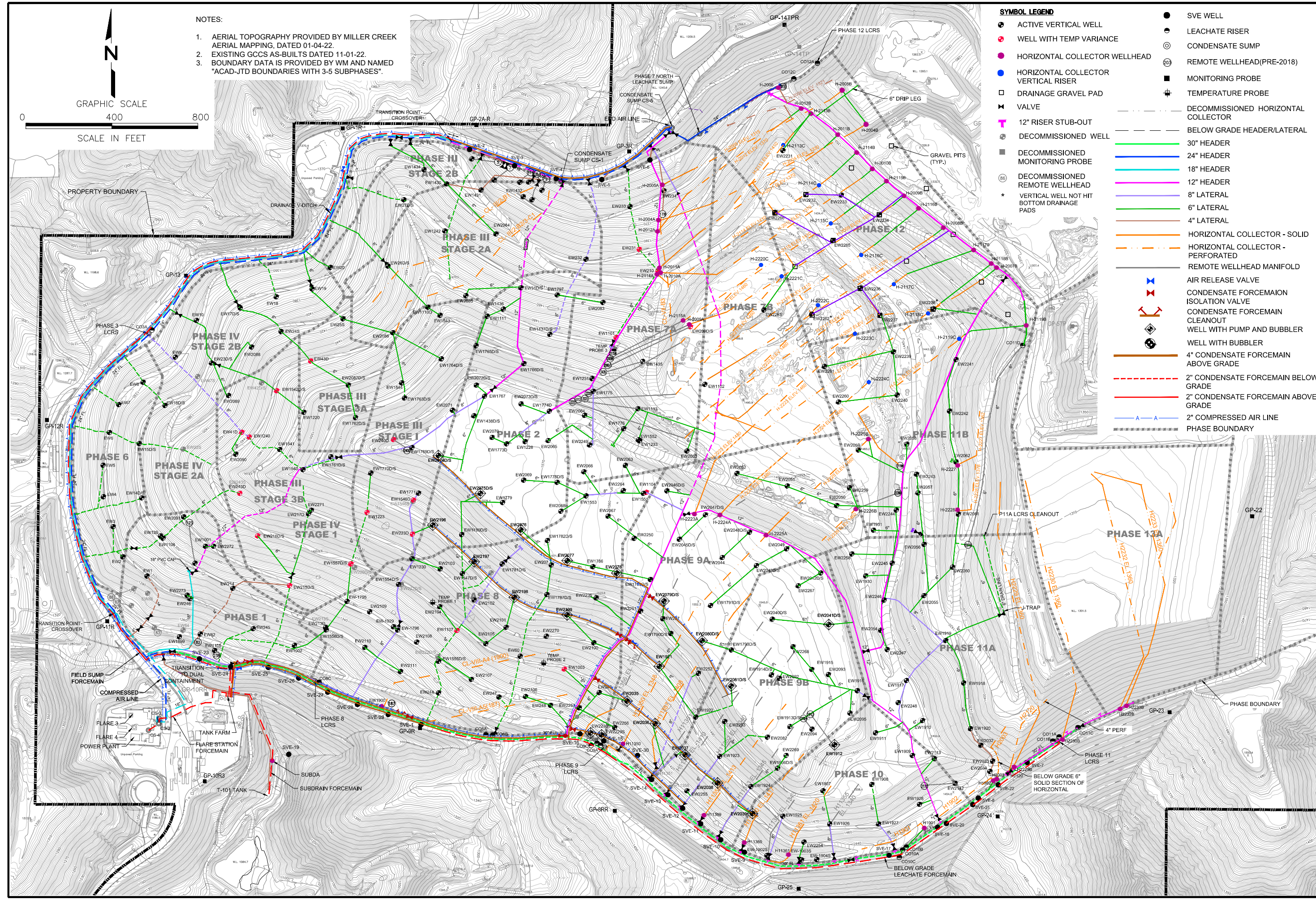
ATTACHMENT C
ESL Landfill Gas Condensate Collection System
Plan

- NOTES:
1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING, DATED 01-04-22.
 2. EXISTING GCCS AS-BUILTS DATED 11-01-22.
 3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD-JTD BOUNDARIES WITH 3-5 SUBPHASES".

GRAPHIC SCALE
0 400 800
SCALE IN FEET

SYMBOL LEGEND

- SVE WELL
- ACTIVE VERTICAL WELL
- WELL WITH TEMP VARIANCE
- HORIZONTAL COLLECTOR WELLHEAD
- HORIZONTAL COLLECTOR VERTICAL RISER
- DRAINAGE GRAVEL PAD
- ✂ VALVE
- ✂ 12" RISER STUB-OUT
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- DECOMMISSIONED REMOTE WELLHEAD
- * VERTICAL WELL NOT HIT BOTTOM DRAINAGE PADS
- LEACHATE RISER
- CONDENSATE SUMP
- REMOTE WELLHEAD(PRE-2018)
- MONITORING PROBE
- ✂ TEMPERATURE PROBE
- DECOMMISSIONED HORIZONTAL COLLECTOR
- BELOW GRADE HEADER/LATERAL
- 30" HEADER
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- REMOTE WELLHEAD MANIFOLD
- ✂ AIR RELEASE VALVE
- ✂ CONDENSATE FORCEMAIN ISOLATION VALVE
- ✂ CONDENSATE FORCEMAIN CLEANOUT
- ✂ WELL WITH PUMP AND BUBBLER
- ✂ WELL WITH BUBBLER
- 4" CONDENSATE FORCEMAIN ABOVE GRADE
- 2" CONDENSATE FORCEMAIN BELOW GRADE
- 2" CONDENSATE FORCEMAIN ABOVE GRADE
- 2" COMPRESSED AIR LINE
- PHASE BOUNDARY



DATE	REVISION	NO.

SHEET TITLE: EL SOBRANTE LANDFILL GCCS PLAN
PROJECT TITLE: EL SOBRANTE LANDFILL
10910 DAWSON CANYON ROAD
CORONA, CALIFORNIA 91719-5020



SCS ENGINEERS ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH: (562) 426-9544 FAX: (562) 427-0805

DATE: 11-01-22
SCALE: 1" = 400'
DRAWING NO. 2 of 3

ATTACHMENT D
ESL Analytical Results for Leachate


ATTACHMENT E
ESL Analytical Results for Landfill Gas
Condensate

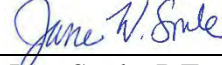
ATTACHMENT F
Leachate/Condensate Recirculation Rate
Determination

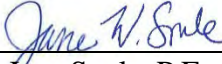
COMPUTATION COVER SHEET


Client: WM Project: El Sobrante Landfill Project/ Proposal No.: SC0481J
Task No. 01


Title of Computations **LEACHATE/CONDENSATE RECIRCULATION RATE DETERMINATION**

Computations by: Signature  6/28/23
Printed Name Keaton Botelho, P.E. Date
Title Principal Engineer

Assumptions and Procedures Checked by: (peer reviewer) Signature  6/28/23
Printed Name Jane Soule, P.E. Date
Title Senior Consultant

Computations Checked by: Signature  6/28/23
Printed Name Jane Soule, P.E. Date
Title Senior Consultant

Computations backchecked by: (originator) Signature  6/28/23
Printed Name Keaton Botelho, P.E. Date
Title Principal Engineer

Approved by: (pm or designate) Signature  6/28/23
Printed Name Keaton Botelho, P.E. Date
Title Principal Engineer

Approval notes: _____

Revisions (number and initial all revisions)

No.	Sheet	Date	By	Checked by	Approval
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Written by: K. Botelho Date: 6/28/23 Reviewed by: J. Soule Date: 6/28/23
Client: WM Project: El Sobrante LF Project No.: SC0481J Task No.: 01

**LEACHATE/CONDENSATE RECIRCULATION RATE DETERMINATION
EL SOBRANTE LANDFILL
CORONA, CALIFORNIA**

PURPOSE

The purpose of this evaluation is to determine the application rate of leachate and condensate to be recirculated into the working face of the El Sobrante Landfill (ESL) to demonstrate the moisture holding capacity of the municipal solid waste (MSW) is not exceeded in accordance with California Code of Regulation, Title 27, Section 20200(d).

ANALYSIS

The moisture holding capacity of MSW is defined as the difference between the moisture content at field capacity, θ_{FC} , and the moisture content at the wilting point (Attachment A)

Where:

Field capacity, θ_{FC} , is defined as the residual volumetric water content after a prolonged period of gravity drainage; and

Wilting point is defined as the lowest volumetric water content that can be achieved by moisture removal via plant transpiration. (Attachment A).

Therefore, the moisture holding capacity of the MSW will not be exceeded if the field capacity, θ_{FC} , is not exceeded.

To evaluate the maximum application rate of leachate and condensate without exceeding the moisture holding capacity of the MSW, the following inputs and assumptions were used;

- Maximum average daily volume leachate and condensate which is equal to approximately 12,300 gallons for leachate and 5,300 gallons for condensate (Table 1 and Table 2, respectively). Therefore, the total maximum average daily volume of liquids available for recirculation is approximately 17,600 gallons (2,353 ft³);

Written by: K. Botelho Date: 6/28/23 Reviewed by: J. Soule Date: 6/28/23
 Client: WM Project: El Sobrante LF Project No.: SC0481J Task 01
 No.:

- Influence depth of one foot to limit the moisture holding capacity to the top one foot of waste where liquids are being recirculated;
- A field capacity, θ_{FC} , of 0.292 volume/volume¹, (Attachment A); and
- A reduction factor of 0.75 applied to the field capacity for conservatism.

Using these inputs, the maximum daily area and corresponding application rate for recirculating leachate and condensate is calculated as follows:

$$\left(0.292 \frac{vol}{vol}\right) (0.75) = \frac{2,353 ft^3}{V_{max}}$$

$$V_{max} = \frac{2,353 ft^3}{\left(0.292 \frac{vol}{vol}\right) (0.75)} = 10,750 ft^3$$

$$A_{max} = \frac{10,750 ft^3}{1 ft} = 10,750 ft^2$$

Therefore, the application rate can be calculated as:

$$\text{Application Rate} = 17,600 \text{ gal} / 10,750 \text{ ft}^2 = 1.6 \text{ gal/ft}^2$$

CONCLUSION

The maximum average daily volume of leachate and condensate generated at the ESL can be applied over an area of approximately 10,750 ft² without exceeding the moisture holding capacity of the MSW at the ESL. This corresponds to an application rate of 1.6 gal/ft².

REFERENCES

¹ Value for field capacity is taken from Schroeder et al., 1994b and is the same value used in the HELP model, consistent with other liquid modeling for the landfill. A summary of values for porosity, field capacity, wilting point, and hydraulic conductivity for various waste materials is presented in Table 6.9 in Attachment A.

Written by: **K. Botelho** Date: **6/28/23** Reviewed by: **J. Soule** Date: **6/28/23**
Client: **WM** Project: **El Sobrante LF** Project No.: **SC0481J** Task **01**
No.:

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Qian, X., Koerner, R.M., and Gray, D.H. (2002), “*Geotechnical Aspects of Landfill Design and Construction*,” Prentice-Hall Inc.: Upper Saddle River, New Jersey.

Schroeder, P.R., Dozier, T.S., Zappi, P.A., McEnore, B.M., Sjostrom, J.W., and Peyton, R.L., (1994b) “The hydrological Evaluation of Landfill Performance (HELP) Model, Engineering Documentation for Version 3.” EPA/600/R-94/168b, Risk Reduction Engineering Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH, September.

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US EPA (2020). Hydrologic Evaluation of Landfill Performance: HELP 4.0 User Manual, EPA/600/B-20/219, January 2020.

Attachment A
Excerpts from Qian, et al. (2002)

TABLE 6.6 Summary of Hydraulic Conductivity of Municipal Solid Waste

Source	Unit Weight		Hydraulic Conductivity (cm/sec)	Method
	lb/ft ³	kN/m ³		
Fungaroli et al. (1979)	7 to 26 milled waste	1.1 to 4.1 milled waste	1.0×10^{-3} to 2.0×10^{-2}	Lysimeter determination
Schroder et al. (1984a, b)	—	—	2.0×10^{-4}	Estimated based on summary
Oweis and Khera (1986)	41 (estimated)	6.4 (estimated)	Order of 10^{-3}	Estimated based on field data
Landva and Clark (1990)	64 to 92	10.1 to 14.5	1.0×10^{-3} to 4.0×10^{-2}	Test pits
Oweis et al. (1990)	41	6.4	1.0×10^{-3}	Pumping tests
Oweis et al. (1990)	60 to 90 (estimated)	9.4 to 14.1 (estimated)	1.5×10^{-4}	Falling head field test
Oweis et al. (1990)	40 to 60 (estimated)	6.3 to 9.4 (estimated)	1.1×10^{-3}	Test pit
Qian (1994)	—	—	9.2×10^{-4} to 1.1×10^{-3}	Estimated based on field data
Schroder et al. (1994a, b)	—	—	1.0×10^{-3}	Estimated based on summary

literature. The average hydraulic conductivity of municipal solid waste in landfills is approximately 1.0×10^{-3} cm/sec. The hydraulic conductivities of other types of waste are listed in Table 6.7 for comparison.

* 6.6 FIELD CAPACITY AND WILTING POINT OF MUNICIPAL SOLID WASTE

Field capacity (θ_{FC}) is defined as the residual volumetric water content after a prolonged period of gravity drainage. It is an important parameter in bioreactor landfill technology (Chapter 15) for it signifies the amount of moisture that can be absorbed into, and surrounding, each waste particle. MSW at field capacity represents the target moisture state for optimal waste degradation. Wilting point is defined as the lowest volumetric water content that can be achieved by moisture removal via plant transpiration. The difference between the moisture content at field capacity and the wilting point is the moisture-holding capacity or available water content of a soil or waste. The

TABLE 6.7 Hydraulic Conductivities of Different Waste Materials (Schroder et al., 1994a & 1994b)

Waste Material	Hydraulic Conductivity (cm/sec)	Reference
Stabilized Incinerator Fly Ash	8.8×10^{-5}	Poran and Ahtchi-Ali (1989)
High-Density Pulverized Fly Ash	2.5×10^{-5}	Swain (1979)
Electroplating Sludge	1.6×10^{-5}	Bartos and Palermo (1977)
Nickel/Cadmium Battery Sludge	3.5×10^{-6}	Bartos and Palermo (1977)
Inorganic Pigment Sludge	5.0×10^{-6}	Bartos and Palermo (1977)
Brine Sludge—Chlorine Production	8.2×10^{-5}	Bartos and Palermo (1977)
Calcium Fluoride Sludge	3.2×10^{-5}	Bartos and Palermo (1977)
High Ash Papermill Sludge	1.4×10^{-6}	Perry and Schultz (1977)

Attachment A ; Pg. 1 of 2

TABLE 6.9 Summary of Porosity, Field Capacity, Wilting Point, and Hydraulic Conductivity for Various Waste Materials (Schroeder et al., 1994b)

Waste Material	Porosity	Volumetric Field Capacity	Volumetric Wilting Point	Hydraulic Conductivity (cm/sec)
*Municipal Solid Waste	0.671	0.292	0.077	1.0×10^{-3}
Municipal Solid Waste with Channeling	0.168	0.073	0.019	1.0×10^{-3}
High-Density Electric Plant Coal Fly Ash*	0.541	0.187	0.047	5.0×10^{-5}
High-Density Electric Plant Coal Bottom Ash*	0.578	0.076	0.025	4.1×10^{-3}
High-Density Municipal Solid Waste Incinerator Fly Ash**	0.450	0.116	0.049	1.0×10^{-2}
High-Density Fine Copper Slag**	0.375	0.055	0.020	4.1×10^{-2}

*All values, except hydraulic conductivity, are at maximum dry density. Hydraulic conductivity was determined in-situ.

**All values are at maximum dry density. Hydraulic conductivity was determined by laboratory methods.

(Qian and Guo, 1998). Holmes (1983) reported findings from an analysis of samples obtained from nineteen landfills. Field capacity was observed to decline with age of the landfill due to degradation of organic fractions in the waste. Field capacity also decreased with increasing density of the waste due to the collapse of void spaces available for moisture migration and retention. Other researchers have observed a significant decrease in moisture retention in baled waste (Hentrich et al., 1979). Conversely to these decreasing trends in field capacity, Fungaroli and Steiner (1979) also found that as mean particle size of the waste decreases, field capacity increases. Also Hentrich et al. (1979) reported that shredding of waste increases the field capacity of the waste. Thus, the creation of finer particle sizes increases the specific surface area and the field capacity. These irregularities in field capacity will be addressed further in Chapter 15 on Bioreactor Landfills.

6.7 SHEAR STRENGTH OF MUNICIPAL SOLID WASTE

Solid waste is a particulate material and its behavior resembles that of soils in many ways. Like soils, the strength of municipal solid waste appears to increase with increasing normal load applied on the waste. However, due to its high organic content and fibrous nature, municipal solid waste behaves more like a fibrous peat than a typical soil (Howland and Landva, 1992). Factors believed to affect the strength properties of municipal solid waste include the following (Fassett et al., 1994):

- (i) The organic and fiber content in the waste;
- (ii) The age of the waste placed in the landfills, and the extent to which it has decomposed; and
- (iii) The mode of placement (i.e. the compaction effort, lift thickness, and amount and type of daily cover).

COMPRESSIBILITY

EFFECTS OF SETTLING

VOLUME OF SETTLEMENT

Attachment 4 to Declaration of David Meyer

**Petition for Variance Before the SCAQMD Hearing Board
(Case No. 5139-3)**

USA Waste of California, Inc. dba El Sobrante Landfill



Santa Ana Regional Water Quality Control Board

September 24, 2024

Mr. Cody Cowgill, Site Engineer
 El Sobrante Landfill
Ccowgill@wm.com
 Waste Management
 10910 Dawson Canyon Road
 Corona, CA 92883

**APPROVAL OF OFFSITE DISPOSAL PLAN FOR SITE WASTE LIQUIDS
 EL SOBRANTE LANDFILL, RIVERSIDE COUNTY
 GEOTRACKER GLOBAL ID: L10009663094**

Dear Mr. Cowgill,

We are in receipt of your final Offsite Disposal Plan for Site Liquids for El Sobrante Landfill (Plan), submitted via email on September 16, 2023 and your follow-up email, dated September 18, 2024. The Plan contains your proposal for transport and offsite disposal of waste liquids generated at El Sobrante Landfill (ESL) in accordance with Discharge Specification A.5.c of Order R8-2016-0034. The follow-up email clarified issues contained in the Plan.

As stated in the Plan, three different waste liquids are generated at ESL. These are landfill leachate, landfill gas condensate, and subdrain liquids. These three waste liquids are routed through pipelines at the landfill to the Tank Farm near the ESL site entrance and commingled in several large storage tanks. Currently, the waste liquids are pumped from the Tank Farm tanks to a storage tank on the top deck of ESL. The waste liquids are then transported by waste liquid trucks from the top deck storage tank to the ESL active disposal area for discharge and recirculation.

As indicated in the Plan, expansion Phase 13B is currently under construction and is expected to be completed soon (end of November 2024), after which time Waste Management (WM) plans to begin disposal operations in the new Phase 13B waste cell. As required in the current waste liquid disposal plan, dated June 2, 2023, there must be at least 50 vertical feet of solid waste above the bottom liner system and 200 horizontal feet from exterior side slopes to allow disposal of liquid wastes in the active waste disposal area. Considering that it will take many weeks to accumulate more than 50 vertical feet of solid waste in the new Phase 13B cell, WM proposes in the Plan to dispose of the waste liquids offsite.

The Plan states that commingled waste liquids will be transferred from the Tank Farm storage tanks to individual 5,000 gallon tanker trucks for transport offsite to centralized waste treatment facilities (CWTs) located in southern California for disposal. At this time, Waste Management (WM) staff have identified and contacted two CWT facilities, which are willing to accept the ESL waste liquids. These two facilities are the Avalon Clean CWT facility in Gardena, California and

KRISTINE MURRAY, CHAIR | JAYNE JOY, EXECUTIVE OFFICER

the East Valley Remediation facility in Mecca, California. These two CWTs have established and provided criteria for acceptance of waste liquids. Testing of ESL waste liquids indicates that levels of constituents in the liquids are below the two respective CWT criteria and below California Code of Regulations Title 22 hazardous waste levels.

Each truck load of waste liquid will be manifested and transported in accordance with all California and federal transportation requirements. Load manifests will state the type of liquid, its origin, and volume. In addition, WM will test the waste liquids monthly for VOCs and SVOCs and annually for pH, metals (including Hg), PFAS, Total Oil & Grease, and COD.

Under regular operating and climatic conditions, approximately 70,000 – 120,000 gallons per day of commingled leachate, gas condensate, and subdrain liquids are produced each day at ESL. Based on these estimates, WM will transfer waste liquids to approximately 14 to 24 tanker trucks each day for transport and disposal at CWTs.

The Plan further states that a written summary of offsite waste liquid disposal activities performed during each reporting period will be provided in ESL semi-annual monitoring reports. In addition, these reports will include tables indicating daily liquid volumes transported, the destination of each load, monthly total volumes transported, and a separate table summarizing the results of the monthly and annual analytical tests of site waste liquids.

Based upon our review, we find that the proposed Plan for offsite disposal of waste liquids generated at El Sobrante meets the requirements of Title 27 and the Water Board's WDRs, Order R8-2016-0034. In accordance with Discharge Specification A.5.c of Order R8-2016-0034, we hereby approve your offsite waste liquids disposal plan provided that the project is implemented as described in the Plan.

For any questions regarding this project, please contact William Rice at (951) 782-4459 or William.Rice@waterboards.ca.gov.

Sincerely,

Cindy Li  Digitally signed by Cindy Li
Date: 2024.09.24 15:44:29
-07'00'

Cindy Li, PhD, PG
Supervisor, Land Disposal and DoD Program Section

cc: David Meyer, Waste Management (Dmeyer9@wm.com)
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