

August 1, 2024

Mr. Josh Hufferd
San Diego Water Resources Control Board
2375 Northside Drive, Suite 100
San Diego, California 92108

**Subject: Comment – Tentative Order No. R9-2024-0003
Waste Discharge Requirements for Orange County Waste and
Recycling Prima Deshecha Zone 4 Landfill**

Dear Mr. Hufferd:

Geosyntec Consultants, Inc. (Geosyntec) appreciates this opportunity to comment on Tentative Order No. R9-2024-0003, Waste Discharge Requirements (WDRs) for Orange County Waste and Recycling Prima Deshecha Zone 4 Landfill. We have organized our comments into three categories: 1) Comments applicable to the entire document, 2) Comments applicable to the Order itself, and 3) Comments applicable to the Monitoring and Reporting Program (MRP) included as Attachment A. Each comment has a distinct number value for ease of reference.

COMMENTS APPLICABLE DOCUMENT-WIDE

1. **Inconsistent references to Industrial General Permit**

The document references “*Order No. 2014-0057-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Industrial Activities.*” on one or more occasion.

Suggested edit: Update references document-wide to “*National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order WQ 2014-0057-DWQ, as amended by Order WQ 2015-0122-DWQ and Order WQ 2018-0028-DWQ, NPDES No. CAS000001*” throughout the document.

COMMENTS APPLICABLE TO THE ORDER

2. **Requirements beyond the scope of the Construction General Permit**

Section F.1 of the WDRs require the Discharger to “*obtain coverage under the CGP for any construction activity described in [the] Order or its attachments, which results in a land disturbance of one or more acres.*” The WDRs include a reference to CGP

Section II.A *Traditional Construction Activities Subject to this General Permit*; however, section II.B of the CGP, *Traditional Construction Activities Not Subject to this General Permit*, more specifically Section II.B.7.a, states that landfill operations, as described by Standard Industrial Classification (SIC) code 4953, are subject to the Industrial General Permit and therefore are not subject to the CGP. Landfill operators typically only enroll under the CGP for initial construction and final closure of the landfill, not for any construction activity that disturbs one or more acres of land.

Suggested edits:

Order Section D – These specifications apply to the initial construction and all future lateral expansions approved by the San Diego Water Board. ~~In addition, the Discharger must obtain coverage under the CGP for stormwater discharges from any clearing, grubbing, and/or soil excavation activities that will result in a land disturbance of one or more acres, in accordance with Permits C.1.c above.~~ The Discharger must comply with the clearing, grubbing, soil excavation and soil stockpile specifications listed below to prepare the Landfill footprint for construction of containment structures, stormwater management features, and monitoring systems.

Order Section D.1.d – During initial construction and final closure, I install best management practices (BMPs) around stockpiled materials as specified in the stormwater pollution prevention plan (SWPPP) submitted in compliance with the CGP. For lateral expansions that do not require CGP coverage, install and document BMPs in accordance with the IGP.

Order Section E – These specifications apply to the initial construction and all future lateral expansions as approved by the San Diego Water Board. ~~In addition, the Discharger must obtain coverage under the CGP for stormwater discharges from any blasting activities that will result in a land disturbance of one or more acres, in accordance with Permits C.1.c above.~~ The Discharger must comply with the blasting and material management specifications listed below to prepare the Landfill footprint for construction of containment structures, stormwater management features, and monitoring systems.

Order Section F.1 – Construction General Permit for Stormwater. Obtain coverage under the CGP⁷ for ~~any~~the initial construction and final closure activities~~y~~ described in this Order ~~or~~and its attachments, ~~which results in a land disturbance of one or more acres~~ in accordance with **Permits C.1.c** above. ~~These types of construction projects at the Landfill may include clearing and grubbing, blasting, excavation, grading, waste and ancillary containment system construction, maintenance or access road construction, or lateral expansions of the Landfill, as proposed in the JTD.~~

Footnote 7 – CGP, Section II. ~~AB.7.a~~ *Traditional Construction Activities* Not Subject to this General Permit – Construction Activity that is subject to the Industrial General Permit.

3. **Clarification needed on reporting requirements for leachate data**

Order Section F.12.i states, “*The volume of leachate collected monthly must be reported and the quantities provided in each semiannual groundwater monitoring report in compliance with CCR title 27, section 20340(h). Leachate collection data must be reported in tabular format and any increasing or decreasing trend in the volumes of leachate generated during the semiannual reporting period noted in the report.*”

Please clarify what “data” is being referenced in the requirement to “report data in a tabular format”. Is this in reference to volume data or laboratory analytical data?

4. **Requirements inconsistent with 40 CFR Chapter 1, Subchapter N**

Order Section G.8.d states, “*Precipitation that interacts with waste on the working face of the Landfill or exposed wastes resulting from erosion or construction activities, must be treated as leachate. The Discharger must collect and manage leachate generated from precipitation in a manner consistent with this Order and CCR title 27. The Discharger must ensure that leachate generated during precipitation events does not enter the stormwater conveyance system. Any stormwater that mixes with leachate is considered wastewater and must be managed accordingly.*” 40 CFR Chapter 1, Subchapter N, Part 445, Subpart B requires that additional pollutants be monitored in stormwater discharges from municipal solid waste landfills that discharge landfill wastewater. Landfill wastewater is defined as wastewater generated by landfilling activities and includes leachate, landfill gas condensate, wash water from vehicles and equipment that contact refuse, surfaces that contact refuse, and stormwater that contacts refuse (also referred to as contaminated stormwater).

Suggested edit: Precipitation that interacts with waste on the working face of the Landfill or exposed wastes resulting from erosion or construction activities, must be treated as leachate landfill wastewater. ~~The Discharger must collect and manage leachate generated from precipitation in a manner consistent with this Order and CCR title 27. The Discharger must ensure that leachate generated during precipitation events does not enter the stormwater conveyance system. Any stormwater that mixes with leachate is considered~~ Discharge of landfill wastewater from the stormwater conveyance system and must be managed accordingly analyzed in accordance with 40 CFR Chapter 1, Subchapter N, Part 445, Subpart B.

5. **Excessive requirements for Notification of Noncompliance for Petroleum Spills**

Order Section K.9.k relates to reporting Petroleum Spills and states, “*The Discharger must report any discharges of petroleum products from above ground or underground storage tanks, vehicles, or heavy machinery used for construction or operation of the Landfill, to land, surface water, groundwater, or stormwater conveyance systems.*” The requirement to report any spill is excessive and unnecessary. Suggest instead requiring the Discharger to report spills as required by federal Spill Prevention, Control, and Countermeasure regulations and statewide General Permits for stormwater discharges.

Suggested edit: The Discharger must report discharges of ~~any~~ petroleum products from above ground or underground storage tanks, vehicles, or heavy machinery used for construction or operation of the Landfill, to land, surface water, groundwater, or stormwater conveyance systems in accordance with 40 CFR Part 112 Subpart A, the [National Pollutant Discharge Elimination System \(NPDES\) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities Order WQ 2022-0057-DWQ, NPDES No. CAS000002 \(CGP\), and the NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, Order WQ 2014-0057-DWQ, as amended by Order WQ 2015-0122-DWQ and Order WQ 2018-0028-DWQ, NPDES No. CAS000001 \(IGP\).](#)

COMMENTS APPLICABLE TO THE MRP (ATTACHMENT A)

6. **Glossary needed to define terms**

Please consider defining the following terms, at a minimum, in a glossary or appendix:

- Constituents of Concern (COC)
- Detection Groundwater Monitoring Parameter
- Method Detection Limit (MDL)
- Practical Quantitation Limit (PQL)
- COC List
- COC Scan
- Appendix I Constituents
- Appendix II Constituents

7. **Modifications to Detection Groundwater Monitoring Program Network**

MRP Part II.D.2 discusses Discharger's plans to construct an additional monitoring well for monitoring the upgradient background for Zone 1 when the southern portion of Zone 4 is developed. Discharger has already constructed this well.

Suggested edit: The groundwater monitoring network for the Landfill is comprised of two background wells, two compliance wells, a downgradient monitoring point, and piezometers. The background monitoring wells are MW-5A and MW-6. The compliance monitoring wells are MW-2, MW-10FR, and MW-9R when the southern portion of Zone 4 is developed. MW-9R is currently an upgradient background well for Zone 1. The Discharger ~~plans to~~ has constructed an additional deep well, MW-14, near MW-9R for monitoring the upgradient background for Zone 1 when the southern portion of Zone 4 is developed and MW-9R is transitioned to a downgradient compliance well for Zone 4. The piezometers for measuring groundwater elevations are MP-10, 08-P4, 08-P11, and 08-P12.

8. **Provide greater clarity on the required analysis for Detection Monitoring Program groundwater samples and correct the reference to Table 1 in Part II.D.3.b**

MRP Part II.D.3.b states, "*The groundwater samples must be collected, analyzed, and reported for the general chemistry parameters and COCs at the frequencies shown in Table 1 of Part II.B, and any additional parameters included in the approved SAP.*" Without specifying, either via a glossary definition or footnote, it is unclear from this wording what "COCs" are or that they are intended to represent the initial detection groundwater monitoring parameters for the landfill. Table 1 of Part II.D is also incorrectly referenced.

Suggested edit: The groundwater samples must be collected, analyzed, and reported for the ~~general chemistry parameters and COCs~~ groundwater monitoring parameters listed in Table 1 of Part II.D, and any additional parameters included in the approved SAP, at the frequencies shown in ~~the same table Table 1 of Part II.B, and any additional parameters included in the approved SAP.~~

9. **Analysis for "Metals" is unnecessary if metal surrogates are to be analyzed in groundwater samples**

Table 1 of MRP Part II.D includes "Metals" on the list of groundwater monitoring parameters for the landfill. The landfill is also required to monitor for metal surrogates, which are intended to serve as indicators of a potential release of leachate from the landfill. In addition, the landfill is required to test leachate for metals

annually and groundwater samples for metals during the Five-Year COC scan. Requiring analysis for both “Metals” and metal surrogates on a semi-annual basis is unnecessary.

Suggested edit: Remove “Metals” from Table 1 of MRP Part II.D.

Table 1 – Groundwater Monitoring Parameters

Monitoring Parameters	Units	Sampling Frequency ²⁵
pH ²⁶	pH	Semi-annual
Field Conductivity ¹⁴	µS/cm	Semi-annual
Turbidity ¹⁴	NTU	Semi-annual
Total Dissolved Solids	mg/l	Semi-annual
Chloride	mg/l	Semi-annual
Sulfate	mg/l	Semi-annual
Nitrate as Nitrogen	mg/l	Semi-annual
Volatile Organic Compounds ²⁷	µg/l	Semi-annual
Metals ¹⁵	mg/l	Semi-annual

10. Please provide rationale for Surface Water Monitoring Program Elements

Attachment A Part II E.3 states, “Surface water samples must be analyzed for the monitoring parameters found in the IGP. Every five years, coincident with the five-year COC scan, the Discharger must analyze surface samples for the constituents listed on the most current COC list. The point of compliance for surface water monitoring must be located on the Prima Deshecha Cañada at the outfall from the desiltation basin for the Landfill.” It is not clear from reading either the MRP or the Attachment B Information Sheet why the Regional Board is requiring analysis of surface water samples for IGP parameters. Please provide rationale for requiring the analysis of surface water samples for IGP parameters when storm water discharge samples are already monitored in accordance with the IGP.

Also, surface water bodies at the landfill do not travel through the desiltation basin; therefore, establishing a point of compliance for surface water monitoring at the outfall from the desiltation basin does not make sense.

Suggested edit: The point of compliance for surface water monitoring must be located on the Prima Deshecha Cañada at the outfall from the ~~desiltation basin~~[bio-mitigation area](#) for the Landfill.

11. **Confusion surrounding Leachate Monitoring requirements and Establishing Background Values for New COCs**

The information contained in MRP Part II.F.2 appears to fit better in the discussion of Data Analysis Methods (i.e., Part III) and also seems to conflict with earlier requirements (i.e., Table 1 of Part II.D).

Suggested edits: Move Part II.F.2 to III.D instead. Clarify what the Regional Board means by “substituting metal surrogates for Appendix I metals” in Part II.F.2.

12. **It is unclear how to successfully narrow the monitoring list of COCs**

It is not clear how following the steps outlined in MRP Part II.F.3 will result in fewer constituents on the landfill’s monitoring parameters list when these steps appear to be the minimum requirements for the Detection Monitoring Program. It seems that this section is more closely related to constituents for Detection Monitoring (i.e., Part II.D) and less closely related to leachate monitoring (i.e., Part II.F).

Please provide rationale, additional information, or further instruction on how to narrow the list of monitoring parameters for groundwater samples including references to 40 CFR or MRP appendices if appropriate. Consider relocating this discussion to Part II.D.

13. **Inconsistent requirements for Five Yearly COC Scan in relation to Zone 1**

In Zone 1, the semi-annual groundwater monitoring parameters list consists of the 47 40 CFR Part 258 Appendix I VOCs and five metal surrogates (chloride, nitrate, pH, sulfate, and total dissolved solids). Leachate is monitored annually for the 40 CFR Part 258 Appendix II constituents. Appendix II constituents that are confirmed in leachate are added to the “COC List” for the landfill. Every five years, groundwater samples from the detection monitoring well network are analyzed for the constituents on the landfill’s “COC List” as part of the COC scan.

The MRP for Zone 4 (Part II.G) requires that the five yearly COC scan consist of analysis for the 40 CFR Part 258 Appendix II constituents at detection monitoring wells, not the constituents on the landfill’s “COC List”. The MRP then states, “*All newly detected constituents verified by a retest become part of the COC list for regular detection groundwater monitoring at the Landfill when verified by a retest*” however, this reference to the “COC List” is not consistent with previous discussions regarding the “COC List” or with the MRP for Zone 1 (R9-2003-0306). The current requirements in Part II.G appear to be more similar to leachate monitoring procedures than detection monitoring procedures.

As previously mentioned, the reader would benefit, particularly when determining the requirements for the five-yearly COC scan, if a glossary provided definitions for COC Scan and “COC List”.

Suggested edit: The SAP must include a Five-Yearly COC Scan²⁹ ~~to create a~~ which involves collecting, analyzing, and reporting samples for the “COC List” of constituents ~~present~~ established through annual leachate monitoring in groundwater at each well. Any unknown peaks on the chromatographs must be reported along with an estimate of the concentration of the unknown analyte(s) as part of a Five-Yearly COC Scan. A second column or second method confirmation procedures must be performed to attempt to identify and more accurately quantify the unknown analyte(s), when unknown peaks are encountered. The Discharger must resample the well and reanalyze the sample for the newly detected constituent(s) if an analyte is detected that is not yet on the COC list within 30 days. ~~All newly detected constituents verified by a retest become part of the COC list for regular detection groundwater monitoring at the Landfill when verified by a retest.~~

14. Unclear reference to “Appendix I”

Part III.C.1 “Constituents of Concern” states, “*The COCs for the Landfill, including any updates, are listed in Appendix I. Statistical and non-statistical data analysis is limited to only those COCs that are on the current COC list*”³²”

Please clarify whether the MRP is referencing Appendix 1 of Attachment A or Appendix I of 40 CFR Part 258 or a different list of monitoring parameters for groundwater in this section.

15. Timeframe for Determination of Secondary Source in a Background Well is too short

MRP Part III F.1.c states that the Discharger must “*install a new upgradient or cross-gradient background well in a portion of the aquifer that will provide data representative of background conditions for the Landfill's compliance wells within 120 days*” if an excessive proportion of a synthetic COC is found in a background well but attributed to a source other than the Landfill. 120 days is a short timeframe in which the Discharger will need to prepare and submit a workplan, schedule drilling with a subcontractor, procure a drilling permit, and complete well drilling, installation, and sampling activities. It is recommended to extend this requirement to 180 days.

Suggested edit: Install a new upgradient or cross-gradient background well in a portion of the aquifer that will provide data representative of background conditions for the Landfill's compliance wells within ~~120~~ 180 days.

16. **Confusing reference to “Observation Stations”**

MRP Part IV.A.1 requires submittal of the following with the semi-annual monitoring report, “*topographic map (or copy of an aerial photograph), at an appropriate scale, identifying the maximum lateral extent of wastes in the Landfill, the locations of observation stations, monitoring points, background monitoring points, and the groundwater elevation contours with interpreted groundwater flow direction and gradient. Maps must also be updated to show the maximum extent of any waste constituent or waste degradation product in groundwater.*”

Please clarify what is meant by “the locations of observation stations” or remove this reference.

17. **Excessive requirement to include historical monitoring data in Semi-Annual Reports**

MRP Section IV.A.14 requires the submittal of “*All data obtained during the current and previous four semi-annual reporting periods presented in tabular form*” with each semi-annual monitoring report. This requirement is excessive as all monitoring data, historical and current, is submitted through GeoTracker.

Suggested edit: All data obtained during the current and previous ~~four~~two semi-annual reporting periods presented in tabular form.

18. **Excessive requirement to attach the April-September Semi-Annual Report to each Annual Compliance Report**

MRP Section IV.B.3 requires the Discharger to “*Include the Semi-Annual Groundwater Monitoring Report due annually on October 30. This report may be submitted as an attachment to the Annual Compliance Report.*” The Semi-Annual Groundwater Monitoring Report due annually on October 30 will already be available on GeoTracker at the time of the submittal of the Annual Compliance Report. Attaching the April-September semi-annual report to the Annual Compliance Report would likely result in an excessively large file that the Discharger may or may not be able to transmit to GeoTracker electronically.

Suggested edit: Remove Section IV.B.3 from the MRP completely.

19. **Inconsistency in Reporting Schedules for Five-Year COC Scans**

Attachment A Part II E.3 states, “*every five years, coincident with the five-year COC scan, the Discharger must analyze surface samples for the constituents listed on the most current COC list*” however the reporting schedule included in Attachment A Part IV.D lists different due dates for the next Groundwater COC report and the next

Surface Water COC report. It is recommended to synchronize these reporting schedules in accordance with Part II.E.3.

Suggested edit (Footnote D of Reporting Schedules Table): The Discharger's next five-year Surface Water COC Report is due April 30, ~~2028~~2026. COC list data must be collected in alternating seasons to account for seasonal variations. For example, if the previous COC sampling event occurred in the wet season (October 1 – April 30), the next COC sampling event should occur in the dry season (June 1 – September 30).

20. **Appendix 1 – Constituents of Concern (COCs) – is not referenced in MRP or consistent with 40 CFR Part 258**

It is unclear what the purpose of Appendix 1 of the MRP is for. "Appendix 1" (not to be confused with 40 CFR Part 258 Appendix I) is not referenced as a list of required monitoring parameters anywhere in Attachment A or the larger WDR and it is not consistent with 40 CFR Part 258 Appendix I or Appendix II constituents.

Suggested edits: Remove Appendix 1 or update the list of parameters to be consistent with the required monitoring parameter list for routine semi-annual groundwater monitoring (i.e., 40 CFR Part 258 Appendix I) or the required monitoring parameter list for the five-year COC scan (i.e., 40 CFR Part 258 Appendix II) and reference as appropriate in the WDR.

We greatly appreciate your time and attention to these details. If you have any questions or comments, please contact Misty Steele at (562) 257-1413.

Sincerely,



Julie Walters, CPSWQ, QISP, QSD
Senior Professional



Misty Steele, CPSWQ, IGP ToR, QSD
Principal