

September 26, 2024

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

**Subject: Comment – Tentative Order No. R9-2024-0002
Waste Discharge Requirements for Orange County Waste and
Recycling Prima Deshecha Zone 1 Landfill**

Dear Mr. Hufferd:

Geosyntec Consultants, Inc. (Geosyntec) appreciates this opportunity to comment on Tentative Order No. R9-2024-0002, Waste Discharge Requirements (WDRs) for Orange County Waste and Recycling Prima Deshecha Zone 1 Landfill. We have organized our comments into three sections: 1) Comments applicable to the entire document, 2) Comments applicable to the Order, 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 (IGP)

The document references “*Order No. 2014-0057-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Industrial Activities Order NPDES No. CAS000001 (IGP)*” 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. Prohibitions Beyond 40 CFR Chapter 1, Subchapter N and the IGP

Section B.2 lists the types of discharges from the Landfill that are prohibited. B.2.e prohibits the discharge of “*stormwater flows that have come into contact with waste to stormwater conveyance systems*”.

40 CFR Chapter 1, Subchapter N, Part 445, Subpart B requires that additional pollutants be monitored in stormwater discharges from municipal solid waste landfills discharging landfill wastewater and establishes effluent limitations for regulated pollutants. 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). The Industrial General Permit authorizes discharges of landfill wastewater and contaminated stormwater provided that the requirements of 40 CFR Chapter 1, Subchapter N, Part 445, Subpart B are met.

Suggested edit: remove 2.e from the list of Prohibitions or alter B.2.e as follows, “Waste, including leachate, ~~and/or landfill gas condensate, and/or stormwater flows that have come into contact with waste to stormwater conveyance systems~~, except as authorized by the San Diego Water Board.”

3. Requirements beyond the scope of the Construction General Permit (CGP)

Sections C.2 and D.1 require the Discharger to obtain coverage under the CGP for any construction at the Landfill “that will result in a land disturbance of one or more acres”. The Order includes 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 IGP 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, including vertical expansion within the footprint of the Landfill, that disturbs one or more acres of land.

Suggested edits:

Order Section C.2 – The Discharger must obtain coverage under 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)*, issued by the State Water Board, for ~~any~~ final closure activities ~~construction~~ at the Landfill ~~that will result in a land disturbance of one or more acres~~.

Order Section D.1 – **Construction General Permit for Stormwater**. Obtain coverage under the CGP⁵ for ~~any construction~~ 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 **Section C.2 Permits** – of this Order. ~~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 5 – 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 D.12.i states, “*The volume of leachate collected monthly must be reported and the quantities provided in each semi-annual 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 and the IGP**

Order Section E.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.*” As discussed above in Comment #2, discharges of landfill wastewater and contaminated stormwater are authorized under the IGP provided that the requirements of 40 CFR Chapter 1, Subchapter N, Part 445, Subpart B are met.

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 I.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 (SPCC) 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 the federal Spill Prevention, Control, and Countermeasure (SPCC) regulations contained in 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. Footnotes 13-17 Incorrectly Reference CCR title 27, section 20415

Footnotes 13-17 currently reference CCR title 27, section 20415(b)(1)(8)(1-5), but this text does not exist as referenced.

Suggested edits:

¹³ CCR title 27, section 20415(b)(1)(8B)(1).

¹⁴ CCR title 27, section 20415(b)(1)(8B)(2).

¹⁵ CCR title 27, section 20415(b)(1)(8B)(3).

¹⁶ CCR title 27, section 20415(b)(1)(8B)(4).

¹⁷ CCR title 27, section 20415(b)(1)(8B)(5).

8. Detection Groundwater Monitoring Program Network

MRP Part II.D.2 discusses the existing groundwater monitoring network for the Landfill but incorrectly lists the number of wells that are part of the existing groundwater monitoring network and refers generically to a “downgradient monitoring point”. In addition, piezometer

MP-10 is in perched groundwater; therefore, the groundwater elevation is not used to generate the potentiometric surface map, and piezometers 08-P4, 08P-11, and 08-P12 are in Zone 4.

Suggested edits: The groundwater monitoring network for the Landfill is comprised of ~~two~~ four background wells, ~~and two-three~~ compliance wells, ~~a downgradient monitoring point, and piezometers~~. The background monitoring wells are MW-1, MW-9R, ~~and MW-13, and MW-14~~. The compliance monitoring wells are MW-4, MW-12, and J. The Discharger constructed MW-14 in 2024 as an additional ~~upgradient compliance~~ background monitoring well for the Landfill until the southern portion of the Zone 4 Landfill is developed. The Discharger will then transition MW-14 to a ~~downgradient~~ compliance monitoring well for the Zone 4 Landfill. ~~The piezometers for measuring groundwater elevations are MP-10, 08-P4, 08P-11, and 08-P12.~~

9. **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 I.B, and any additional parameters included in the approved SAP.

10. **Edit footnote references in Table 1 of MRP Part II.D and remove excessive and unnecessary analysis for “Metals”**

Several of the footnotes referenced in Table 1 of MRP Part II.D erroneously direct the reader to CCR title 27, section 20415(b)(1)(B), which does not relate to groundwater monitoring parameters for Detection Monitoring Programs. This table also includes “Metals” as groundwater monitoring parameters for the Landfill when the Landfill is already required to monitor for metal surrogates (i.e., total dissolved solids, chloride, nitrate, sulfate, and nitrate as nitrogen), 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 excessive and unnecessary.

Suggested edits: Adjust the footnote references and remove “Metals” from Table 1 of MRP Part II.D. If “Metals” are not removed, adjust the footnote reference to be the same as that for “Volatile Organic Compounds”.

Consider adding an additional/separate footnote to define Units.

Table 1 – Groundwater Monitoring Parameters

Monitoring Parameters	Units ²⁰	Sampling Frequency ²¹⁰
pH ²²⁺	pH	Semi-annual
Field Conductivity ²²⁺³	µS/cm	Semi-annual
Turbidity ²²⁺³	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 ²³²	µg/l	Semi-annual
Metals ¹⁴	mg/l	Semi-annual

²⁰ Note: µS/cm = micro siemens/ per centimeter; NTU = Nephelometric turbidity units; mg/l = milligrams per liter; µg/l = micrograms per liter.

²¹⁰ The San Diego Water Board Executive Officer may increase or decrease the monitoring frequency if determined to be necessary.

²²⁺ These monitoring parameters are field parameters measured during sampling activities. Note: mg/l = milligram per liter; µg/l = micrograms per liter; NTU = Nephelometric turbidity units; µSiem = micro siemens/centimeter.

²³² The list of monitoring parameters is derived from 40 CFR, Part 258, Appendix I "Constituents for Detection Monitoring." These constituents are generally expected to be in or derived from wastes associated with landfills.

10. Please provide rationale for Surface Water Monitoring Program Elements

MRP Part II.E states, “The SAP must include a surface water monitoring plan compliant with the specific requirements and performance standards found in CCR title 27, section 20415(c), 40 CFR part 258.27, and Order No. 2014-0057-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (IGP).” The reference to the IGP is irrelevant as that Permit covers discharges of stormwater that are typically sampled in conjunction with rain events, not surface water sampling that would be conducted during dry weather if groundwater springs are flowing.

MRP Part II.E.1.b states, “*A sufficient number of monitoring points established at appropriate locations and depths to yield samples from each surface water body that provide the data to evaluate compliance with the Water Standard and to evaluate the effectiveness of the corrective action program.*” The Landfill is not in a corrective action program. Also, the surface water monitoring points previously identified at Prima are groundwater springs that are sampled semi-annually only if observed flowing. The surface water monitoring for the Landfill has never included sampling of Prima Deshecha Cañada because this water body only discharges from the Landfill as a result of rain events.

MRP Part II.E.2 states, “*The Discharger must add additional monitoring points as necessary to supplement monitoring point S3 located downgradient of the Landfill in the Prima Deshecha Cañada to meet the performance requirements found in CCR title 27, section 20415(c).*” Monitoring point S3 is a groundwater spring, not a sample point in the Prima Deshecha Cañada. Adding additional monitoring points in the Prima Deshecha Cañada is unnecessary because it is not generally a flowing water body except during rain events, in which case stormwater discharges are sampled in accordance with the IGP.

MRP 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 water 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. Surface water samples are collected during dry weather if groundwater springs are flowing and are not expected to contact industrial materials or activities. There is also very little to no comingling of water produced by groundwater springs with industrial stormwater runoff. Please provide rationale for requiring the analysis of surface water samples for IGP parameters when stormwater discharge samples are already monitored in accordance with the IGP or revise this requirement to be consistent with the current MRP (R9 2003-0306) which states that surface water monitoring samples are to be analyzed for the same constituents as groundwater samples collected under the DMP.

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. As previously discussed, Prima Deshecha Cañada is not generally a flowing water body except during rain events; therefore, establishing a point of compliance for the surface water monitoring program on the Prima Deshecha Cañada where it discharges from the Landfill also does not make sense. The point of compliance for the surface water monitoring program should be the location of the spring or established surface water monitoring point that is furthest downgradient of waste contained in the Landfill.

Suggested edits:

MRP Part II.E – The SAP must include a surface water monitoring plan compliant with the specific requirements and performance standards found in CCR title 27, section 20415(c), and 40 CFR part 258.27, and Order No. 2014-0057-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (IGP).

MRP Part II.E.1.b – A sufficient number of monitoring points established at appropriate locations and depths to yield samples from each surface water body that provide the data to evaluate compliance with the Water Standard and to evaluate the effectiveness of the ~~corrective action~~detection monitoring program.

MRP Part II.E.2 – **Surface Water Monitoring Network.** The Discharger must add additional monitoring points as necessary to supplement monitoring point S3 ~~located downgradient of the Landfill in the Prima Deshecha Cañada~~ to meet the performance requirements found in CCR title 27, section 20415(c).

MRP Part II.E.3 – **Surface Water Monitoring Program Elements.** Surface water monitoring must be conducted semi-annually ~~in the Prima Deshecha Cañada~~at springs and established surface water monitoring points when there is sufficient water to collect a sample to satisfy the requirements of CCR title 27, section 20415(c). Surface water samples must be analyzed for the monitoring parameters found in ~~the IGP Table 1 (Section D.3 Detection Groundwater Monitoring).~~ Every five years, coincident with the five-year COC scan, the Discharger must analyze surface water 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~~the spring or established surface water monitoring point that is furthest downgradient ~~for~~ of waste contained in 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 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 use of the term “COC List”**

MRP 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 and 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.*” This reference to the “COC List” is not consistent with previous discussions regarding the “COC List”. The current requirements in Part II.G appear to be more like 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. **Timeframe for Determination of Secondary Source in a Background Well is too short**

MRP Part III F.1.c states that the Discharger must “*within 120 days, 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*” 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: *Within ~~120~~ 180 days*, 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.

15. **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.

16. **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.

17. **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.

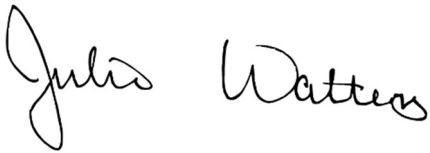
18. **Inconsistency in Reporting Schedules for Five-Year COC Scans**

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).

We greatly appreciate your time and attention to these details. If you have any questions or comments, please contact Julie Walters at (562) 257-1409 or Misty Steele at (562) 257-1413.

Sincerely,



Julie Walters, CPSWQ, QISP, QSD
Senior Professional



Misty Steele, CPSWQ, IGP ToR, QSD
Principal