

**Response to Written Comments
Draft Waste Discharge Requirements
Order No. R1-2023-0010
for
County of Sonoma**

**Annapolis Solid Waste Disposal Site
Regional Water Quality Control Board, North Coast Region
June 15, 2023**

Comments Received

The deadline for submittal of public comments regarding draft Waste Discharge Requirements for Order No. R1-2023-0010, Waste Discharge Requirements and Monitoring and Reporting Program (Proposed Order) for the County of Sonoma (Permittee) Annapolis Solid Waste Disposal Site (Facility) was March 24, 2023. Regional Water Board staff (Staff) received written comments from the Permittee in a timely manner.

In this document, the Permittees' comments are summarized, followed by the Staff response. Text to be added is identified by underline and text to be deleted is identified by ~~strike through~~ in this document. The term "Proposed Order" refers to the version of the permit that was sent out for public comment. The term "Proposed Permit" refers to the version of the permit that has been modified in response to comments and is being presented to the North Coast Regional Water Quality Control Board (Regional Water Board) for consideration.

**Sonoma County Department of Transportation and Public Works (County)
Comments:**

Waste Discharge Requirement Comments

Comment 1: WDR Page 9, Section II(L)(3) Annually Updated Corrective Action Plan

"An updated Corrective Action Plan is already required in Draft WDR Section V(S)(1) and an annual evaluation of corrective action effectiveness is also already required by the Draft M&RP. Recommend deletion of the last sentence as it represents an unnecessary redundancy."

Response 1: Staff concur. The Proposed Permit has been modified as follows:

Monitoring required under this Order will include continued sampling and assessment from corrective action monitoring points used to measure and document contaminant concentrations associated with releases at the Site. ~~An updated corrective action plan consistent with title 27 is required within the Annual Report.~~

Comment 2: WDR Page 21, Section V(O) Iso Settlement Map

Recommend replacing with the following to be consistent with Section II(E) of the Draft M&RP: “The Discharger shall produce an iso-settlement map of the Class III waste footprint and submit it by February 15, 2025, which will represent the final iso-settlement survey within the 30-year post closure maintenance period. Findings from this analysis will inform whether future differential settlement is likely to be of such magnitude as to impair the unit’s containment features (e.g., final cover system) or the free drainage of surface flow. The corresponding findings shall be evaluated to determine whether additional 5-year iso settlement analyses are warranted.”

Response 2: *Staff concur. The Proposed Permit has been modified as follows: The Discharger shall produce an iso-settlement map of the Class III waste footprint and submit it by February 15, 2025, which will represent the final iso-settlement survey within the 30-year post closure maintenance period. Findings from this analysis will inform whether future differential settlement is likely to be of such magnitude as to impair the unit’s containment features (e.g., final cover system) or the free drainage of surface flow. The corresponding findings shall be evaluated to determine whether additional 5-year iso settlement analyses are warranted.*

~~By February 15, 2024, and at least every five years thereafter, the Discharger shall produce and submit to the Regional Water Board an iso-settlement map accurately depicting the estimated total change in elevation of the final cover’s low-hydraulic-conductivity layer. The map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map submitted in the final Closure Report and shall indicate all areas where visually noticeable differential settlement may have been obscured by grading operations. The map shall be drawn to the same scale and contour interval as the topographic map in the Closure Report, but showing the current topography of the final cover, and featuring overprinted isopleths indicating the total settlement to date. Land surveying to a one-foot contour interval rather than aerial surveying may be substituted to produce the iso-settlement map.~~

Comment 3: WDR Page 22, Section V(P) Iso-Settlement Map

Recommend deletion of reference to five-year iteration of iso-settlement survey based on previous comment.

Response 3: *Staff concur. The Proposed Permit has been modified as follows:*

~~This information shall be included in the Annual Monitoring Report. as well as each five-year iteration of the iso-settlement map.~~

Comment 4: WDR Page 22, Section (V)S Due Date for Workplan and Report

“It is recommended that the due date for the Updated Corrective Action Plan be extended to February 15, 2024, to allow for adequate time to facilitate installation of replacement wells, and subsequent collection and evaluation of analytical data.”

In our meeting to discuss comments the County clarified their request for a related Workplan due date of July 15, 2023, and an Updated Corrective Action Report due date of February 15, 2025.

Response 4: *Staff concur. The Proposed Permit has been modified as follows:*

1. Update Corrective Action Workplan Assessment and Report:
 - (a) the updated Corrective Action Workplan Plan and Assessment shall review the status of existing groundwater conditions, all existing environmental monitoring locations, monitoring wells, lysimeters, landfill gas probes, and provide for any needed replacement monitoring wells and /or a workplan for the proper abandonment of any damaged monitoring stations, wells. The submittal shall provide for any additional measures and engineering controls needed to address groundwater impacts at the Site.
 - (b) Workplan due ~~Due~~ July 15, 2023
 - (c) Updated Corrective Action Report due February 15, 2025

Comment 5: WDR Page 23, Section V(S)(6)(a) Leachate Inspection and Testing

The language in Section V(S)(6)(a) should be modified to remove reference to annual testing of the LCRS.

Response 5: *Staff concur. The language in section V(S)(6)(a) has been updated as follows:*

(a) Leachate tank farm and collection system shall be fully inspected annually, and evaluated for integrity, as needed. Inspection reports ~~or testing results~~ shall be submitted annually and include a complete report of findings and provisions for completion of all necessary maintenance and/or repairs.

Comment 6: WDR Page 24, Section V(1) (Emergency Response Plan)

The last sentence should be consistent with Section II(G) of the Draft M&RP.

Response 6: *Staff concur. The language in section V(1) has been updated as follows:*

Emergency Response Plans shall be reviewed, updated, and submitted to the Regional Water Board as per Section II (G) of Monitoring and Reporting Program R1-2023-0010. ~~by February 15, 2024, and every five years thereafter.~~

Comment 7: WDR Attachment B, Site Map

The site contour intervals were updated to the NAVD88 vertical datum based on the corresponding intersections with LiDAR data used to update the topographic map.

Response 7: *Comment noted. The Revised Site Map, Attachment B replaces the former Site Map, Attachment B.*

Monitoring and Reporting Program Comments

Comment 8: MRP Page 6, Section II(B)(2) Inclusion of Annual Financial Report

CalRecycle requires the submittal of the Annual Inflation Factor Report by June 1st of each calendar year and the requirement to include this information in the Annual Report (due February 15th) represents an unnecessary redundancy. Section II(B)(2) should be deleted.

***Response 8:** Staff disagree and provided clarification at our April 2023 meeting. We clarified that inclusion of the last completed financial report (for CalRecycle) within the Annual Report is an important component in documenting the status of the required corrective action financial assurances on an annual basis. This is the only reporting requirement for submittal to the Regional Board by the owner or operator and therefore not redundant. No changes have been made to the Proposed Permit in response to Comment 8.*

Comment 9: MRP Page 6, Section II(B)(3) Updated Post Closure and Corrective Action Cost Estimates

New cost estimates will be forthcoming as a result of the new WDR/M&RP and the required Updated Corrective Action Plan and Assessment Report, but after their completion, subsequent updates should be based on the above Title 27 criteria. Therefore, the 5-year requirement stipulated in Draft MRP Section II(B)(3) should be deleted.

***Response 9:** Comment noted. Staff concurs with deletion of the 5-year requirement and submittal of the updated post closure costs and corrective action costs to be submitted with the afore mentioned Corrective Action Report under this Order, due by February 15, 2025. The amended language reads as follows:*

By February 15, 2025, ~~4, 2029 and every five years thereafter, until the rescission of this MRP,~~ the Discharger shall provide as part of the annual monitoring report updated post-closure costs and corrective action cost estimates Regional Water Board staff for review. The Discharger shall demonstrate to CalRecycle and report to the Executive Officer that it has established an acceptable financial assurance mechanism described in California Code of Regulations, title 27, section 22228 in at least the amount of the cost estimate approved by the Executive Officer. The Discharger shall include an annual update of the required insurance policy demonstrating that the cap manufacturer's maintenance policy or an equivalent policy subject to Executive Officer approval is in effect and in good standing. The Executive Officer may delete the requirement of submitting updated cost estimates, with the exception of inflation adjustments, upon finding that the need for further corrective action is unlikely and that post-closure costs are likely to remain constant.

Comment 10: MRP Page 7, Section II(B)(4) Leachate Collection Testing

The Annapolis landfill is not equipped with a leachate collection system subject to testing requirements. Section II(B)4 should be deleted.

***Response 10:** Staff concur. Section II(B)4 has been deleted from the Proposed Order.*

~~4. In accordance with California Code of Regulations, title 27, section 20340(d), any leachate collection and removal system shall be tested annually to demonstrate proper operation. Results shall be compared with earlier tests made under comparable conditions. The Discharger shall submit results with the annual report. Given that the current leachate collection system is sealed and cannot directly receive the introduction of test liquids, documentation and comparison of monthly leachate flow volumes is an acceptable means to ensure that the leachate collection system is operating.~~

Comment 11: MRP Page 7, Section II(B)(5) Map of Differential Settling

Generation and submittal of an annual differential settlement map represents an unnecessary redundancy and will be addressed through the standard observation provisions. Deletion of Section II(B)(5) is requested.

Response 11: *Staff concur.* Section II(B)5 has been deleted from the Proposed Order.

~~5. A map showing any areas of differential settlement noted by visual observation and highlighting areas of repeat or severe differential settlement. If severe settlement is noted (>5 feet) this map shall be made by or under the direction of a California Registered Civil Engineer or Certified Engineering Geologist.~~

Comment 12: MRP Page 8, Section II(C)(3) Daily Rainfall Records in Tabular Form

Daily rainfall measurements will be reviewed to identify qualifying storm events as required under the standard observation provisions. However, inclusion of daily rainfall data in tabular form within the Surface Water and Storm Water Sampling Report represents an unnecessary redundancy. During our meeting to discuss this comment County staff offered that the onsite automated weather station collects rainfall records in a tabular form, daily, so the existing language would work best by adding "Available" to records.

Response 12: *Staff concur.* The language in section II(C)(3) has been amended as follows:

3. Available Records from daily rainfall measurements in tabular form.

Comment 13: MRP Page 9, Section II(H): Schedule for Constituents of Concern

Recommend deleting the word "spring" in first sentence and changing the second sentence to spring 2027; fall 2032 and every five years thereafter.

Response 13: *Staff concur.* The language in section II(H) has been amended as follows:

The Discharger shall submit reports of the results of groundwater, ~~springs,~~ surface water, and leachate sample test results for the COCs every 5 years, or more frequently if required. The monitoring for COC report shall alternate between fall and spring seasons in conjunction with the regular semi-annual sampling; ~~fall 2023, spring 2028~~fall 2032 and every five years thereafter.

Comment 14: MRP Page 12, Section III(B)(2) Date Change Request, Consistent with Comment 13

Request for consistent dates with previous comment. "Groundwater monitoring shall be sampled for COCs in Spring 2027, Fall 2032, and every five years thereafter alternating between seasons."

Response 14: Staff concur. The language in section III(B)(2) has been amended as follows:

Groundwater monitoring wells shall be sampled for COCs in ~~Fall~~ Spring 2027, ~~Spring~~ Fall 2032, and every five years thereafter alternating between seasons.

Comment 15: MRP Pages 15-17, Section IV (C)(2): Table C – Leachate Monitoring Program

Requested clarifications for Table C, Leachate Monitoring Program, include the addition of asterisk footnotes, deletion of "low level" from VOCs, deletion of "dissolved" from Organophosphorus pesticides and replace "ug/l", and addition of "for annual leachate constituents" following "taken" to Table Notes 1.

Response 15: Staff concur. The clarifications and typos are corrected and Table C language in section III(B)(2) has been amended as follows:

VOCs*** (~~low level~~)

Organophosphorus Pesticides*** ug/l ~~dissolved~~, (note, duplicate entry also deleted)

Table Notes:

1. Frequency shown is for the regular leachate collection removal system sampling. Leachate seep samples shall be taken for the annual leachate constituents whenever seeps are present both at first occurrence and weekly thereafter until the seep is corrected and ceases to discharge.

* Field Parameters

** Monitoring Parameters

*** Constituents of Concern (See Attachment 1)

Comment 16: MRP Page 17-19, Section IV (D)(2) Table D - Surface Water Monitoring Program

Clarifications are requested for spelling error, added asterisks**

for bicarbonate/carbonate alkalinity, calcium (dissolved), iron (dissolved), magnesium (dissolved), sodium (dissolved), and manganese, "conditional" under Nitrate, Sulfate and Table Notes, appears in error.

Response 16: Staff agrees with Comment 16. The clarifications and typos are corrected and Table D, asterisks** are added for bicarbonate/carbonate alkalinity**, calcium (dissolved) **, iron (dissolved) **, magnesium (dissolved) **, sodium (dissolved) **, and manganese**(dissolved).

Table D changes read as follows:

Nitrate as Nitrogen** ug/l Annually Conditionally**

Sulfate** ug/l Annually Conditionally**

Table Notes:

1. Turbidity and Total Suspended Solids may be substituted for each other depending on which sampling method is more readily available.
- ~~2. If results for conditional samples are not obtained then storm water/surface waste samples shall include testing for all conditional analytes.~~
- 3-2. Sampling shall take place during the next flow event after a verified measurably significant release in surface water/stormwater. Verification shall be determined according to California Code of Regulations, title 27, section 20420(j).
 - * Field Parameters
 - ** Monitoring Parameters (See Attachment 1)
 - *** Constituents of Concern (See Attachment 1)

Comment 17: MRP Page 20-23, Table F, Groundwater Detection and Corrective Action Monitoring Program

Clarifications are requested to add asterisks** for potassium (dissolved), bicarbonate/carbonate alkalinity, and fluoride, change Inorganics Frequency from (dissolved) to Five Years, delete footnote reference***5 (typo 5), deleting duplicate VOC entry (low level) (typo) and format/blank errors.

Response 17: *Staff concurs with Comment 17.* The clarifications and typos are corrected with Table F, asterisks** are added for bicarbonate/carbonate alkalinity**, calcium (dissolved) **, iron (dissolved) **, magnesium (dissolved) **, sodium (dissolved) **, and manganese**(dissolved). Table F blank/format has been corrected. Duplicate VOC entry (low level) has been deleted as follows: ~~VOCs*** (low level) mg/l Semi-Annual.~~

Comment 18: MRP Page 23, Section V(E), Points of Compliance

The last two sentences should be replaced with: *"The wells currently located closest to the WMU's point of compliance are MW-4R and MW-6a and, once installed, replacement wells MW-9R and MW-10R."*

Response 18: *Comment Noted.* The language in Section V(E) has been amended to clarify as follows:

The wells currently located closest to the point of compliance at the SWDS are MW-4R, MW6A, and upgradient wells MW-1R, MW-5R, (MW-9, MW10, MW-11 are not functional). Replacement wells are proposed as MW-9R and MW-10R.

Comment 19: MRP Page 25, Attachment 1 Formatting changes are needed for clarity. For Attachment 1 Title, add "Monitoring Parameters and" to Constituent of Concern for clarity. USEPA Method 6020 needs to be updated to 6000/7000 Series for the listed 6020 entries. Atrazine and Simazine need updating to Method 507 or alternate update. Chlordane needs an update to Chlordane-alpha and Chlordane-gamma. Delete 2,6-Dichlorophenol and Mirex due to the inability of the County's contract laboratory to analyze for this constituent. Kepone should be moved from USEPA Method 8081/8082 to 8270 list.

Response 19: Comments Noted. Formatting and title changes have been added for clarification. USEPA Method 6020 entries are changed to reflect the noted update to 6000/7000 Series. Method 507 or alternate has been added to Atrazine and Simazine. Chlordane has been expanded to include Chlordane-alpha and Chlordane-gamma. 2,6-Dichlorophenol and Mirex are retained on the list and the County may wish to pursue an alternate laboratory for this requirement. Kepone has been moved to the USEPA Method 8270 list. Attachment 1 (table) has been amended to reflect the above changes as follows:

MONITORING PARAMETERS AND CONSTITUENTS OF CONCERN
APPROVED US EPA ANALYTICAL METHODS

~~6010~~ 6000/7000 Series

Kepone (moved/added to list, "Semi-Volatile Organic Compounds USEPA Method 8270 - base, neutral, & acid extractables")

Polychlorinated biphenyl's (PCBs; Aroclors)-(duplicate)

Atrazine (Method 507 or alternate method)

Simazine (Method 507 or alternate method)

Chlordane (Chlordane-alpha and Chlordane-gamma)

Kepone-(moved)