REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

EXECUTIVE OFFICER SUMMARY REPORT December 13, 2023

ITEM NO. 6

SUBJECT

Consideration of Tentative Addendum No. 5 to Order No. 90-09, *Waste Discharge Requirements for the Otay Annex Landfill, Otay Landfill Inc.- Republic Services, San Diego County* (Tentative Addendum No. 5) and *Tentative Monitoring and Reporting Program No. R9-2023-0095 for Republic Services, Otay Landfill Inc., Otay Annex Sanitary Landfill, San Diego County* (Tentative MRP No. R9-2023-0095). (Erin Schmitt)

STAFF RECOMMENDATION

Staff recommend adoption of Tentative Addendum No. 5 (**Supporting Document 1**) and Tentative MRP No. R9-2023-0095 (**Supporting Document 2**).

KEY ISSUES

- Tentative Addendum No. 5 updates existing waste discharge requirements (WDRs) to reflect the current waste disposal operations at the Otay Annex Sanitary Landfill (Landfill) and ensure accepted waste streams are compatible with the Landfill's containment structures.
- 2. Tentative MRP No. R9-2023-0095 replaces the Landfill's existing monitoring and reporting program (MRP) to ensure consistency with other landfill MRPs issued by the San Diego Water Board.

PRACTICAL VISION

The San Diego Water Board's issuance of WDRs and MRPs for landfills is a proactive approach to maintaining high quality waters and protecting the beneficial uses within the Region. Tentative Addendum No. 5 and the MRP provide technical criteria for the continued operation and maintenance of the Landfill and the ancillary containment and monitoring systems designed to protect human health and the environment. The Board's adoption of the Tentative Addendum No. 5 and the Tentative MRP No. R9-2023-0095 align with the mission of the Practical Vision chapter on *Strategizing for Healthy Waters*, by supporting the Board's ongoing efforts to protect and restore the chemical, physical, and biological integrity of the waters in the San Diego Region (e.g., accepting wastes from San Diego Bay Sediment Cleanup Projects).

https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/

¹ Practical Vision:

DISCUSSION

The purpose of this item is to provide the Board with information to assist in its consideration of Tentative Addendum No. 5 and Tentative MRP No. R9-2023-0095. If adopted, Tentative Addendum No. 5 will update existing WDRs to reflect the current waste disposal operations at the Landfill and ensure accepted waste streams are compatible with the Landfill's containment structures, and Tentative MRP No. R9-2023-0095 will ensure consistency with other landfill MRPs issued by the San Diego Water Board.

The Landfill is a 230-acre municipal solid waste disposal site located east of interstate 805 and south of Olympic Parkway in San Diego County (**Supporting Document 3**). The Landfill is owned and operated by Otay Landfill Inc., a subsidiary of Republic Services, Inc. (Discharger). The Discharger acquired the Landfill from the County of San Diego (County) in 1997. The County established the Landfill in 1979 and operated it until 1997. The Landfill is an active Class III municipal solid waste facility, accepting nonhazardous commercial and residential wastes generated within San Diego County.

The Landfill waste footprint is divided into five waste management units that include Canyons A, B, 1, 2, and 3. Canyons A, B, 1 and 2 represent the unlined portions of the waste disposal footprint. Canyons A and B were closed prior to the Discharger's acquisition of the Landfill in 1997. The Discharger constructed an interim final cover over Canyons 1 and 2 between 2012 and 2016, as operational needs allowed. The Discharger intends to continue disposal operations in Canyons 1 and 2 to bring the site to final grade as part of the final, vertical expansion of the Landfill. Canyon 3 is the only lined portion of the waste disposal footprint and the current operational area of the Landfill. Canyon 3 comprises 75.7 acres and is constructed with a composite liner system and leachate collection and removal system (LCRS) consistent with the requirements found in California Code of Regulations (CCR) title 27.

The San Diego Water Board adopted Order No. 90-09 on March 12, 1990, and subsequently amended the Order four times to reflect changes in ownership, operations, and waste acceptance criteria at the landfill.

Tentative Addendum No. 5 updates existing WDRs to incorporate waste acceptance criteria for more stringent requirements regarding free liquids entering the landfill and the types of wastes that are accepted for disposal. The Landfill was used almost exclusively for the 2016 Campbell Shipyard Bay Sediment Cleanup and Capping project and since then has become the preferred facility for upland disposal of dredged sediment from cleanup projects within the Region. Tentative Addendum No. 5 also ensures waste accepted at the Landfill is compatible with the original containment structures in the lined portion of the Landfill. The Discharger's current protocol for wet waste acceptance includes a paint filter test which provides a qualitative pass/fail measurement for the presence of free liquids in dredged sediments. Tentative Addendum No. 5 requires the Discharger to quantitatively analyze wet waste to

determine the moisture content and solids-to-liquids ratio for wet waste, consistent with the requirements in CCR title 27, section 20220(c).

Tentative MRP No. R9-2023-0095 replaces MRP No. 90-09 and provides formal requirements for both a detection monitoring program and a corrective action monitoring program for groundwater, consistent with the requirements of CCR title 27. The monitoring specifications prescribed in Tentative MRP No. R9-2023-0095 ensure the earliest possible detection of an unauthorized release of waste constituents to groundwater from the Landfill, incorporates reporting requirements for wet waste acceptance, and monitoring requirements for groundwater, surface water, the vadose zone, and leachate. Tentative MRP No. R9-2023-0095 also provides an updated list of constituents of concern for groundwater and leachate monitoring and requires additional groundwater sample collection and data analysis to demonstrate changes in groundwater conditions over time.

SIGNIFICANT CHANGES

The significant changes to Order No. 90-09 are:

- 1. Tentative Addendum No. 5 establishes discharge specifications for the receipt and management of allowable special wastes, including dredged sediments and dewatered sludge. These waste streams have the potential to increase the generation of leachate and landfill gas and affect the integrity of containment systems when not properly managed.
- 2. Tentative Addendum No. 5 amends the Findings of Order No. 90-09 (Order No. 90-09) to accurately document the Landfill's (a) previous change in ownership, (b) total acreage, location, and division of waste management units, (c) previous waste discharge requirements and addendums, and (d) acceptance of special wastes.
- 3. Tentative Addendum No. 5 amends existing Prohibitions to include the current regulatory citations and add Prohibitions to clearly identify inappropriate wastes for disposal at the Landfill.
- 4. Tentative Addendum No. 5 amends the Discharge Specifications to include the current regulatory citations and add Discharge Specifications to designate appropriate disposal areas for special wastes, waste characterization criteria, sludge waste acceptance criteria, and dredged sediment waste acceptance criteria.
- 5. Tentative Addendum No. 5 amends the Provisions to include the current regulatory citations.

6. Tentative Addendum No. 5 amends the Reporting Requirements to include the current address of the San Diego Water Board and add Reporting Requirements that require the Discharger to comply with Tentative MRP No. R9-2023-0095 and landfill gas monitoring program requirements prescribed by the San Diego County Department of Environmental Health and Quality, Local Enforcement Agency. The adoption of Tentative Addendum No. 5 will also add Reporting Requirements to require notification of the San Diego Water Board in the event of slope failures, seepages, detection of fluid in unsaturated zones, damage to the liner system, damage to the stormwater conveyance system, damage to the landfill gas system, release of leachate, exposed wastes, temperature readings of 145? For greater, and post-rain inspection reports.

The significant changes to MRP No. 90-09 are:

- 1. Tentative MRP No. R9-2023-0095 replaces MRP No. 90-09 and formalized the requirements for both a detection monitoring program and a corrective action monitoring program for past releases of waste constituents from the Landfill in compliance with current regulations.
- 2. Tentative MRP No. R9-2023-0095 requires surface water, vadose zone, groundwater, and leachate monitoring to ensure the long-term protection of groundwater and surface water quality and beneficial uses within the Otay Valley Hydrologic Area.
- 3. Tentative MRP No. R9-2023-0095 updates the constituents of concerns for the existing CAP.

COMPLIANCE RECORD

The Board issued two Notices of Violation (NOV) for the following violations of Order No. 90-09, as amended:

- Failure to implement and maintain erosion control measures and best management practices in 2016. The Discharger resolved the violation through the implementation and maintenance of erosion control measures and other BMPs.
- Failure to comply with waste acceptance protocols in 2011. The Discharger resolved the violation by ceasing the acceptance of hazardous wastes.

The Board also issued two Investigative Orders in 2016 and 2020, requesting the following information:

- A discussion regarding the excessive production of leachate at the Otay Landfill in 2016.
- A Storm Water, Erosion Controls, and BMP Implementation Report in 2016.
- A Leachate Generation Report in 2016.
- A Slope Stability Workplan and Final Report in 2016.
- An evaluation of the structural integrity of containment structures at the Otay Landfill, including liner systems, leachate collection and removal systems, and monitoring system in 2016.
- An evaluation regarding the cause of excessive leachate production at the Otay Landfill in 2016.
- Analytical data and documentation that waste acceptance criteria is appropriately implemented at the Landfill for all non-municipal solid waste in 2020.
- Analytical data and documentation for the quantities and types of waste accepted at the Landfill in 2020.
- A demonstration that containment structures and operational protocols are functioning as designed and capable of maintaining wastes, waste by-products, and protective of water quality in 2020.

The Discharger complied with the requirements of the Investigative Orders by providing the information requested in a series of technical reports.

RESPONSE TO COMMENTS

The San Diego Water Board received one comment letter (**Supporting Document 4**) during the public review and comment period, from the Discharger on November 13, 2023. San Diego Water Board staff prepared written responses to the Discharger's comments (**Supporting Document 5**). Many of the comments provided by the Discharger were not substantive or did not require a response. Several comments provided corrections to well numbers and the Discharger's name that staff accepted and included in the revised tentative documents. Other comments regarding surface water monitoring and slope failure notification requirements were addressed by providing additional clarification and rationale for the proposed requirements.

PUBLIC NOTICE

Notification of this action was sent to Republic Services and known interested parties on September 27, 2023 (**Supporting Documents 6 and 7**). Additionally, the San Diego Water Board posted Tentative Addendum No. 5 and MRP No. R9-2023-0095 on its website on September 27, 2023. These actions satisfy the 45-day public notification and comment period requirements of Water Code, division 7, section 13167.5, and CCR title 27, section 21730(b).

SUPPORTING DOCUMENTS

- 1. Revised Tentative Addendum No. 5
- 2. Revised Tentative Monitoring and Reporting Program No. R9-2023-0095
- 3. Vicinity Map
- 4. Public Comment Letters
- 5. Response to Public Comments
- 6. Transmittal Letter
- 7. Notice of Public Hearing and Comment Period