

**REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**EXECUTIVE OFFICER SUMMARY REPORT
DECEMBER 12, 2018**

ITEM NO. 6

SUBJECT

Consideration of Tentative Waste Discharge Requirements for Sycamore Landfill Inc., Sycamore Landfill, San Diego County, Tentative Order No. R9-2018-0069. (*Amy Grove*)

STAFF RECOMMENDATION

Adoption of Tentative Order No. R9-2018-0069 is recommended.

KEY ISSUES

1. The Sycamore Landfill must be expanded to remain operational and serve the solid waste disposal needs of San Diego County.
2. Tentative Order R9-2018-0069 (Tentative Order, Supporting Document 1) ensures the design and construction of the waste management units are protective of water quality and meet State and federal regulation requirements.
3. The Tentative Order requires maintenance and monitoring of the Sycamore Landfill to ensure: (a) containment systems function as designed, (b) potential impacts to water quality from stormwater runoff and exposure of waste are minimized, (c) waste degradation products such as leachate and landfill gas are controlled and contained, (d) corrective actions are effectively implemented to restore water quality, and (e) nuisance conditions are mitigated.
4. The Tentative Order contains discharge specifications for the receipt and management of allowable nonhazardous waste streams such as semi-solids (i.e., dredging wastes) 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.

PRACTICAL VISION

Controlling discharges of wastes through the issuance of effective WDRs is an essential component of the strategy to achieve healthy waters in the San Diego Region.

DISCUSSION

The Sycamore Landfill (Landfill) is a 324-acre class III (non-hazardous) municipal solid waste landfill that has been in operation since 1976. The Landfill is in Santee, California and is owned and operated by Sycamore Landfill Inc., a subsidiary of Republic Services (Supporting Document No. 2). The Tentative Order replaces the existing Sycamore Landfill waste discharge requirements (WDR) Order No. 99-74, "*Waste Discharge Requirements for the Sycamore*

Landfill Inc., A Subsidiary of Allied Waste Industries Inc. Sycamore Landfill, San Diego County” and addenda.¹

The Tentative Order establishes requirements for future development, expansion, design, operation, maintenance, and monitoring of the Sycamore Landfill. The vertical and lateral expansion of the Landfill is necessary to accommodate the existing and future solid waste disposal needs in the County of San Diego. The Landfill’s lateral waste disposal footprint will increase from 324 acres to 352.6 acres and vertically to a waste prism thickness of approximately 500 feet (Supporting Document No. 3). The 28.6 acre lateral expansion incorporates the former SDG&E corridor that previously bisected the Landfill. The SDG&E power lines were relocated in 2016 to the ridgeline along the western perimeter of the Landfill property, allowing landfilling operations to move into the area formerly occupied by the SDG&E power lines and complete development of the proposed Landfill footprint.

The future development and expansion of the Landfill was described in the final revised Joint Technical Document (JTD), submitted in August 2017.² The JTD contained the information necessary to draft WDRs, provided the necessary supporting technical analyses and information, and included a phasing plan for future development of the Landfill. The Landfill will be developed in eleven additional phases,³ including Stage IV-D which was constructed earlier in 2018 and is located within the 28.6 lateral expansion area included in the Tentative Order. The proposed lateral and vertical expansions will increase the Landfill’s capacity by 82 million cubic yards.

The Discharger was concerned that the Landfill would run out of capacity prior to the adoption of the Tentative Order by the Board. The design of Stage IV-D was included in the JTD to abate this concern and the proposed design is consistent with all future stages of expansion. Upon approval of the JTD, the Discharger was allowed to construct and move landfilling operations into Stage IV-D (Supporting Document No. 4), even though this expansion area falls partially outside the currently permitted footprint.⁴

The Discharger has indicated that it will be necessary to expand the Landfill again in 2019 to meet the solid waste disposal needs of San Diego County. Therefore, staff anticipates the Discharger will submit the Stage V design report in the near future.

SIGNIFICANT CHANGES

The following are significant differences between the Tentative Order and existing Order No. 99-74:

1. The Tentative Order increases the Landfill’s waste disposal footprint by 26.8 acres and more than doubles the height of the waste prism from approximately 200 feet up to 500 feet in thickness. The increase in landfill footprint and height would increase the

¹ Available on-line: [Order No. 99-74](#), Addenda [No. 1](#), [No. 2](#), [No. 3](#), [No. 4](#) and [No. 5](#); and [Monitoring and Reporting Program No. 99-74](#).

² Submitted as required by CCR title 27, section 21710 et seq.

³ Stages IV-D (5.9 acres); Stage V (8.1 acres); Stage VI (4.9 acres); Stage VII (12 acres); Stage VIII (4.5 acres); Stage IX (23.6 acres); Stage X (15.9 acres); Stage XI (6.9 acres); Stage XII (22.1 acres); Stage Xiii (19.4 acres); and Stage XIV (24.8 acres).

⁴Pursuant to Water Code sections 13260 and 13264.

Landfill's waste disposal capacity by 82 million cubic yards. The service life of the Landfill would be extended to approximately 2046, with a total capacity of Sycamore Landfill estimated at 153 million cubic yards.

2. The Tentative Order allows the Discharger to construct an engineered alternative liner design that includes encapsulation of the high-density polyethylene geomembrane and armoring of the side slopes to counteract the detrimental effects of drag on the liner system due to the stresses imposed by the overlying waste and future settlement of those wastes.
3. The Tentative Order prescribes improved construction quality assurance (CQA) measures for construction protocols, field testing of liner materials, an electronic leak detection survey after completion of expansion construction, and inspection of side slopes during post-construction protective cover soil material placement and during the operational period of each landfill stage.
4. The Tentative Order and monitoring and reporting program (M&RP) require the Discharger to implement a surface water monitoring program in accordance with Clean Water Act Section 401 Water Quality Certification No. 09C-076; 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; and CCR title 27, section 20415(c).
5. The Tentative Order and M&RP require the Discharger to implement a corrective action monitoring program in accordance with CCR title 27, section 20430, and Code of Federal Regulations (CFR) title 40, parts 258.50 and 258.55.

COMPLIANCE RECORD

The County of San Diego Department of Public Works, the former owner and operator of the Sycamore Landfill, completed a State-mandated Solid Waste Assessment Test (SWAT) investigation in 1992. The results indicated that volatile organic compounds (VOCs) had been released from the unlined portion of the Landfill. The presence of VOCs in groundwater indicates a release of waste constituents to groundwater, which requires the Discharger to implement a corrective action monitoring and reporting program in accordance with CCR title 27.

The Tentative Order requires the Discharger to continue implementing a groundwater corrective action monitoring program including sampling and analysis of the groundwater, and containment of the groundwater pollutants using a pump-and-treat system until VOCs are no longer present above the applicable concentration limit for the VOC for at least one year after the suspension of corrective action measures.⁵ Upon the completion of corrective actions, the Discharger will implement a detection monitoring program until a demonstration is made that the Landfill no longer poses a threat to water quality.

⁵ Pursuant to CCR Title 27, section 20340(g) – Corrective Action Program.

PUBLIC NOTICE

The Tentative Order was posted for public review on the San Diego Water Board website on August 28, 2018. Notification of this action was also sent to known interested parties by mail and email on August 29, 2018 (Supporting Document No. 5). After the initial public notice, changes were made to the Tentative Order, Monitoring and Reporting Program, and Information Sheet that required the San Diego Water Board to extend the public comment period until November 14, 2018 (Supporting Document No. 6). The revised documents were sent to the Discharger and all known interested parties and posted on the San Diego Water Board website on September 28, 2018. These actions satisfy the public notification requirements of Water Code, division 7, section 13167.5, and CCR title 27, section 21730(b). The San Diego Water Board did not receive any written comments regarding the Tentative Order from the public or the Discharger during the comment period.

SUPPORTING DOCUMENTS

1. Tentative Order No. R9-2018-0069 with attachments
2. Location Map for Sycamore Landfill
3. Phasing Map for New Stages at Sycamore Landfill
4. Initiating Discharge of Waste to the Stage IV-D Expansion Area under Water Code Section 13264
5. Transmittal Letter and Notice of Public Hearing
6. Modifications to Tentative Order No. R9-2018-0069, with attachments, in underline-strikeout text