

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE ADDENDUM NO. 4 TO ORDER NO. 99-74

WASTE DISCHARGE REQUIREMENTS FOR
THE SYCAMORE LANDFILL INC., A SUBSIDIARY OF
REPUBLIC SERVICES INC., SYCAMORE LANDFILL, SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board) finds that:

Waste Disposal Capacity

1. The Sycamore Landfill (Landfill) is a municipal solid waste (MSW) landfill operated by Sycamore Landfill Inc., (hereinafter, Discharger), a wholly owned subsidiary of Republic Services Inc. Discharges to the Landfill are regulated under Order No. 99-74 and addenda, "**Waste Discharge Requirements for the Sycamore Landfill Inc., a Subsidiary of Allied Waste Industries Inc., Sycamore Landfill, San Diego County,**" issued by the San Diego Water Board on October 13, 1999, and amended on June 8, 2005, June 19, 2013, and April 15, 2015.
2. The Sycamore Landfill is a 491-acre Class III solid waste facility located north of the San Diego River and west of the City of Santee within Little Sycamore Canyon.
3. The Sycamore Landfill has an estimated 42,246,551 cubic yards (approximately 32,382,000 tons) of remaining capacity for solid waste and daily cover soil.¹ The Landfill owner has estimated the operational life of the site to be 20.7 years, or until October 2031.²
4. The Discharger is in the process of laterally expanding the landfill in a four-stage process (Stages I, II, III, and IV), with several of the expansion units divided into sub-stages. Stages I-B North, I-B South, III-A, III-B, III-C, III-D2, and IV have been constructed.³ This Addendum prescribes waste discharge requirements for the construction of, and subsequent solid waste disposal operations in a new expansion unit designated as "Stage IV-B." Stage IV-B will expand the floor of Stage IV into an adjacent area and will have only a base liner system. The floor of Stage IV-B will connect to the base liner of Stage IV once constructed as shown in **Attachment A**. As such, Stage IV-B has no side slope liner system in its design.

¹ Estimates based on information reported in CalRecycle's SWIS database (2014) and capacity estimates assume a conversion calculation of 1,540 pounds per cubic yard or 0.77 tons per cubic yards.

² Joint Technical Document (JTD) dated November 2011.

³ These sub-stages have increased the capacity of the landfill by 4,411,000 cubic yards (approximately 3,397,000 tons) of waste operations space.

5. The liner design for Stage IV-B is the same as the design approved in Addendum No. 3 to this Order for Stages III-C, III-D1, III-D2, and IV. The Stage IV-B unit incorporates the same base liner design as constructed in previous Stages.⁴
6. The expansion unit Stage IV-B will increase the footprint and disposal capacity for solid wastes by adding 8.8 acres of lined waste disposal area with an additional capacity of 1,600,000 cubic yards.

California Environmental Quality Act

7. An Environmental Impact Report (EIR) for the project was certified by the City of San Diego, as lead agency, on September 20, 2012 pursuant to the requirements of the California Environmental Quality Act (CEQA)⁵ (Public Resources Code section 21000, et seq.). The EIR concludes that the proposed project will have significant unmitigatable impacts related to land use, transportation and circulation, noise, aesthetics, biological resources, and air quality. The EIR identifies significant but mitigatable impacts to transportation and circulation, noise, aesthetics, biological resources, air quality, historical resources and paleontological resources. The EIR incorporates a statement of Overriding Considerations and a Mitigation, Monitoring and Reporting Program (MMRP), which were also adopted by the City of San Diego. The EIR also concludes that the project will have no significant or less than significant impacts related to water quality, greenhouse gas emissions, energy, geologic conditions, hydrology, and water quality.
8. The San Diego Water Board is a responsible agency under CEQA and has reviewed the EIR prepared for the project. The San Diego Water Board concurs with the EIR's conclusions that the project as proposed in this Addendum will have no significant effect on water quality and water resource-related environmental factors.

Public Participation

9. The San Diego Water Board has notified interested parties of its intent to amend waste discharge requirements for the Sycamore Landfill.
10. The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the expansion of the Sycamore Landfill.

⁴ The base liner system is consistent with the previously approved and constructed liner system found in Stages III-B, III-C, III-D2, and IV.

⁵ Public Resources Code section 21000, et seq.

IT IS HEREBY ORDERED, that Order No. 99-74 be amended as follows:

1. DISCHARGE SPECIFICATION B.29(a) is revised as shown in the underlined text below:

Each landfill unit phase constructed after the effective date of this Order shall be designed and constructed in accordance with Title 27 and this Order and approved by Regional Board staff prior to operation. At least **120 days** prior to the beginning of construction for each new construction phase, a Final Design Report shall be submitted to Regional Board staff for review and approval and shall include, but not be limited to, the engineered design plans, the contract specifications, a construction quality assurance (CQA) plan to verify that construction specifications will be met, and a revised water quality monitoring plan. Approval of the final design report shall be obtained from Regional Board staff prior to the construction of the landfill liner or cover. During construction of any new cell, the Discharger shall submit the Daily Field Reports, completed by the CQA Officer, by 5 P.M. on the following business day. Daily Field Reports may be faxed or emailed, in a searchable pdf format, and shall include observations, photographs, a record of field tests, problems or issues identified during construction and actions taken to correct the problems, and shall be signed by the CQA Officer.

A final construction report shall be submitted for approval by Regional Board staff after each phase of construction and prior to the discharge of waste into the constructed phase. The final construction report shall include, but not be limited to, as-built plans, a CQA report with a written summary of the CQA program and all test results, analyses, and copies of the inspector's original field notes, and a certification as described in Section 20324 of Title 27. The discharge of wastes into any new expansion area shall not be initiated prior to the San Diego Water Board completing a final construction inspection in accordance with Section 20310(e) of Title 27.

The phased construction of waste management units at Sycamore Landfill shall be as follows:

- a. The composite liner system for Stages III and IV (comprised of phases III-A, III-B, III-C, III-D1, III-D2, IV, and IV-B) shall be constructed as follows:

Expansion Unit	Basal Composite Liner System (Top to Bottom)	Sideslope Composite Liner System (Top to Bottom)
Stages III- A & III-B	2-feet protective cover soil layer 8-ounce nonwoven geotextile 1-foot gravel LCRS layer 16- or 18-ounce geotextile 60 mil HDPE (both sides textured) GCL 40 mil HDPE (both sides textured) Prepared subgrade	Two feet protective cover soil 60 mil HDPE (single side textured, textured side down) GCL 40 mil HDPE (both sides textured) Prepared subgrade

Expansion Unit	Basal Composite Liner System (Top to Bottom)	Sideslope Composite Liner System (Top to Bottom)
<u>Stage III-C, III-D1, III-D2, and IV and IV-B¹</u>	<u>Two feet protective cover soil layer</u> <u>8-ounce nonwoven geotextile</u> <u>1-foot gravel LCRS layer</u> <u>16-ounce nonwoven geotextile</u> <u>60 mil HDPE (both sides textured)</u> <u>GCL</u> <u>40 mil HDPE (both sides textured)</u> <u>prepared subgrade.</u>	<u>Two feet protective cover soil layer</u> <u>8-ounce nonwoven geotextile</u> <u>60 mil HDPE (single side textured, textured side down)¹</u> <u>GCL</u> <u>40 mil HDPE (both sides textured), prepared subgrade.</u>

¹ Stages III-D2, and Stage-IV, and IV-B will not have lined side slopes. These units will be constructed adjacent to existing lined units and include essentially an extension of the base liner area.

² For all side-slopes the 60 mil HDPE will be singled-sided, textured with the exception of the slope above the wide bench (in Stages III-C and III-D2 as indicated in Findings 7 and 8 of this Addendum). Side slopes above the wide bench (i.e. maintenance road) in Stages III-C and III-D2, will incorporate a 60-mil double-sided textured HDPE to increase stability along these slopes.

- b. The Protective Soil Cover (or Operations Layer). On the basal liner system this layer will be at least 24-inches thick. On the sideslopes, this layer serves as the draining layer of the sideslope LCRS and will be placed 8 to 10 feet vertically up the sideslopes initially, and incrementally 8 – 10 feet up the entire lined sideslopes for placement of subsequent lifts.
- c. The Protective Soil Cover (or Operations Layer) shall also meet the following minimum requirements:
 - i. Be free of debris, roots, scrap material, asphalt, concrete, vegetation, untreated refuse, and other deleterious, or objectionable material.
 - ii. Not contain asphalt, concrete, limestone, or other material that could adversely react with the Unit’s leachate.
 - iii. Be comprised of gravel, sands, clays, and/or silts, and have a minimum average permeability of at least 1×10^{-4} cm/sec, but in no case shall the protective soil layer have a permeability of 1×10^{-5} cm/sec or less.

I, David W. Gibson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on March 9, 2016

TENTATIVE
 DAVID W. GIBSON
 Executive Officer