



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

March 18, 2016

Mr. Neil Mohr
General Manager
Sycamore Landfill Inc.
8514 Mast Boulevard
Santee, CA 92071

In reply refer to / attn:
259845:agrove

Subject: Adoption of Addendum No. 4 to Order No. 99-74 for the Sycamore Landfill, Santee, CA

Mr. Mohr:

Enclosed is a copy of 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 addendum prescribes requirements for the design and construction of the Stage IV-B expansion areas, as described in the associated Design Reports.¹ The California Regional Water Quality Control Board San Diego Region (San Diego Water Board) adopted Addendum 4 to Order No. 99-74 during its board meeting on March 9, 2016.

A copy of the Order is also available at the following webpage:

http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/

Please submit all future monitoring reports to the San Diego Water Board by email.² This reporting requirement includes all amendments to the Joint Technical Document (JTD), Design Reports, Construction Quality Assurance (CQA) Reports, information provided in regularly scheduled monitoring reports, work plans, etc. The email submittal of reporting information must include a signed cover/transmittal letter (with the facility name, facility contact information, and permit number) and be sent via email to SanDiego@waterboards.ca.gov. Information required by waste discharge requirements issued to regulated parties must be uploaded into the Geotracker database and should be emailed to SanDiego@waterboards.ca.gov, but it does not replace routine email correspondence that may be sent to individual San Diego Water Board staff members.

¹ The "Design Report for Stages III-D1, D2, and IV at Sycamore Landfill" was submitted to the San Diego Water Board on November 10, 2014. The "Design Report for the Stage IV-B Expansion Unit at Sycamore Landfill" was submitted to the San Diego Water Board on September 8, 2015.

² See public notification on electronic reporting on-line at:
http://www.waterboards.ca.gov/sandiego/docs/Electronic_Reporting_Sept2014.pdf

Documents that are 50 MB or larger should be transferred to a disc and mailed to the San Diego Water Board. For more extensive information provided in JTDs, Design Reports, CQA Reports, and other large documents; the San Diego Water Board staff may request that specific individual items such as appendices to large/complex technical reports, large drawings, and large maps continue to be provided in paper format. If you have any specific questions about email submittal procedures please contact our Mission Support Unit staff, Ms. Cleo Munoz at 619-521-3384 or Cleo.Munoz@waterboards.ca.gov.

In the subject line of any response, please include the reference code **259845:agrove**. For questions or comments, please contact Ms. Amy Grove by phone at (619) 521-3920, or by email at AGrove@waterboards.ca.gov.

Respectfully,



David W. Gibson
Executive Officer

DWG:jac:jro:alg

Enclosure: Addendum No. 4 to Order No. 99-74

cc: Mr. Bill Prinz, City of San Diego Solid Waste Local Enforcement Agency, via email to WPrinz@sandiego.gov

Mr. Jesus Torres, Sycamore Landfill Inc., via email to JTorres@rrepublicservices.com

Mr. Neven Matasovic, Geo-Logic Associates, via email to nmatasovic@geo-logic.com

Tech Staff Info & Use	
Order No.	99-74
Party (GT/CIWQS) ID	1302
File No.	06-0252
WDID	9 000000252
Reg. Measure ID	147420
Place ID	259845

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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, "**Waste Discharge Requirements for the Sycamore Landfill Inc., a Subsidiary of Allied Waste Industries Inc., Sycamore Landfill, San Diego County,**" as amended, 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 Stage IV-B of the Sycamore Landfill.

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 Stage IV-B unit incorporates the same liner design as constructed in previous Stages⁴ and approved in Addendum No. 2 to this Order. Additionally, a geotextile will be placed on the side-slopes of Stages III-C, and D2.
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) (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.

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 & 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-foot 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)	Two feet protective cover soil 60 mil HDPE (single side textured, textured side down) GCL 40 mil HDPE (both sides textured) Prepared subgrade

	Prepared subgrade	
Stage III-C, III-D1, III-D2,	Two feet protective cover soil layer 8-ounce nonwoven geotextile 1-foot gravel LCRS layer 16-ounce nonwoven geotextile 60 mil HDPE (both sides textured) GCL 40 mil HDPE (both sides textured) prepared subgrade.	Two feet protective cover soil layer 8-ounce nonwoven geotextile 60 mil HDPE (single side textured, textured side down) ¹ GCL 40 mil HDPE (both sides textured), prepared subgrade.
Stage IV , IV-B	Two feet protective cover soil layer 8-ounce nonwoven geotextile 1-foot gravel LCRS layer 16-ounce nonwoven geotextile 60 mil HDPE (both sides textured) GCL 40 mil HDPE (both sides textured) prepared subgrade.	Not applicable for Stage IV-A and IV-B.

¹ 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



DAVID W. GIBSON
Executive Officer

