Updated: Sunday, March 15, 2026

SCAQMD Order for Abatement Tasks
Sunshine Canyon Landfill
Sylmar, California

Task No./ Order Condition No.	Task Description	Task-Specific Deliverable	Responsibility	Due Date	Progress as of March 15, 2026
1a	Prepare written status report at least 30 days in advance of Status Hearing on September 3, 2025, so status report due on or before Monday, August 4, 2025	Reports to SCAQMD	Tom Bruen (Status Rpt.)	30 days prior to 9/3 hearing	Required Status Report submitted to SCAQMD on August 1, 2025
			WCG (Technical Rpt.)	Prior to hearing	WCG technical corollary to status report submitted August 20, 2025
1b	Attend Status Hearing on September 3, 2025	None			BFIC & WCG attended
2	Possibly attend an earlier hearing	None			No earlier hearing
3	Develop and implement protocols to monitor and evaluate the effectiveness of each individual mitigation measure identified in the Order and potential effectiveness of combined mitigation measures. This is a general requirement with task-specific deliverables as noted below.	Protocols for SCL-LEA approval	Vendors/SCL-LEA/WCG	As scope of tests is defined but generally ASAP	Ongoing iterative process between vendors and SCL LEA with input from BFIC and WCG on scalability to larger-scale application at SCL.
Aerobic Microbiology					
4a	Microbiology-based Mitigation (Application) - application of aerobic microbiology-based solution(s) to enhance the oxidation of odiferous compounds (fresh trash odors) during waste unloading, spreading, and compacting operations at the working face. SCL LEA's preference was to use Eco-Flush solution, manufactured in South Africa, for this application, but due to supply chain problems, BFIC (with SCL LEA concurrence) used Bio Cleanse until Eco Flush was delivered.	None	*Bio Cleanse* provided by The Living Earth Foundation (LEF) delivered to SCL on May 21, 2025. Started applying to working face Tuesday 6/3/25. *Bio Cleanse/Weaver* Foam combo in mornings since 6/17/25 and *Bio Cleanse* alone at end of day. Switched to Eco-Flush in mid-September 2025.		
		None	Much-delayed shipment of *Eco-Flush* from South Africa arrived at SCL on 9/3/25. Its high viscosity necessitates a multi-step dilution process. Began spraying working face with dilute *Eco-Flush* in mid-September 2025 in same manner as *Bio Cleanse*		
		None	Bio SI's *Ag Formula* and *SD25* are alternate microbial solutions that could be applied to the working face but *Bio Cleanse* and *Eco-Flush* being evaluated first. Bulk order of *Ag Formula* and *SD25* delivered to SCL 7/31/25 for other applications.		
4b	Microbiology-based Mitigation (Foam Gun Application) - application of odor neutralizer and microbiology-based solution(s) at the same time using a foam gun during waste unloading, spreading, and compacting operations at the working face.	None	Laboratory testing directed by WCG chemist (Dr. Manny Varona-Torres) determined that the surfactant in WCG odor neutralizer is NOT detrimental to Bio SI microbiology in terms of effectiveness. WCG's 7/22/25 Tech Memo to that effect included in WCG's 8/20/25 technical report. The consensus is that the surfactant in WCG's odor neutralizer will not be detrimental to any of the other microbial solutions.		
4c	Microbiology-based Mitigation (Enviro Cover ADC) - additional spraying of aerobic microbiology-based solution(s) within the current lift of waste being disposed, prior to application of Enviro Cover alternative daily cover at the end of each operating day	None	*Bio Cleanse* delivered to SCL on May 21, 2025. Started applying to working face Tuesday 6/3/25. *Bio Cleanse/Weaver Foam* combo in mornings since 6/17/25 and *Bio Cleanse* alone at end of day. Began spraying working face with dilute *Eco-Flush* in mid-September 2025 in same manner as Bio Cleanse.		
Living Earth Foundation (LEF) Phytoremediation Microbiology					
4d(1)	Collaborate with SCL-LEA to establish evaluation protocols for Task 4d(2) within two months	Evaluation Protocol	SCL LEA & LEF	Ongoing	LEF *Bio Cleanse* delivered to SCL 5/21/25, but two original test areas staked out in field were filled over. SCL LEA staked out two new plots and BFIC started watering 6/19/25 to encourage new plant growth. New plant growth modest but expect to finalize protocol and apply *Bio Cleanse* in 2Q 2026.
4d(2)	Microbiology-based Mitigation (Soil Enhancement Protocols) - initiate an "innovative" pilot program for the purpose of supplementing the effectiveness of soil, mulch, compost, or combination thereof, using microbiology-based technologies, in an unspecified number of "grids."	Pilot Program	LEF & SCL LEA w/ BFIC & WCG support	Ongoing	BFIC covered large area of "top deck" with additional intermediate cover soil and spread mulch over around 2 acres. Staked out ~1.5-acre test area in early October 2025 and sprayed half of it with Bio S.I.'s SD 25 microbial solution. Remainder is control area. Bio S.I. installed methane and ammonia sensors along with weather station in test area. Test areas wiped out by heavy rainfall in early 2026. BFIC plans to re-establish test areas, this time mixing mulch into cover soil rather than placing on top.
4e	Microbiology-based Mitigation (Cover Soil) - to the extent possible, make efforts to improve biofiltration properties of the soil by improving organic content by adding organic soil, compost, and/or biochar to enhance the microbiology-based solution's impact on plant root growth and ability to oxidize landfill gas in an effort to increase phytoremediation ability of vegetation	None	LEF & SCL LEA w/ BFIC & WCG support	Ongoing	
Windfall Bio Phytoremediation Microbiology					
4f(1)	Collaborate with SCL LEA to establish evaluation protocols for Task 4f(2) within two months	In Progress	Windfall Bio & SCL LEA w/ support from WCG	Windfall Bio bench-scale and field tests complete. Test plots established in field and SCL LEA began daily baseline methane monitoring on 5/14/25. Windfall Bio-designed flux boxes fabricated and delivered to SCL 5/30/25. Test pad completed and flux boxes installed 6/3/25. SCL LEA began baseline methane monitoring in flux boxes 6/4/25. Flux boxes on flat area inoculated with *MEMS* on 6/17/25. Flux box on slope inoculated 6/24/25. Windfall Bio report issued 8/18/25. Field tests indicate *MEMS* successfully metabolize methane and NMOCs. .	
4f(2)	Microbiology-based Mitigation (Phytoremediation Protocols) - application to enhance phytoremediation in multiple test grids.	None	Windfall Bio & SCL LEA w/ support from WCG	Pending	Windfall Bio *MEMS* may be one of a few microbial solutions applied to enhanced intermediate cover soil on top deck (Conditions 4d and 4e)
4g	Closure Turf - examine feasibility of not removing existing closure turf when cell development impacts an area for the purpose of developing a landfill gas collection system and a leachate collection system that would function with the closure turf remaining in place.	Evaluation & Tech Memos	SCS & GLA	Not specified	SCS evaluated feasibility of removing synthetic turf only and leaving underlying membrane in place and issued an affirmative Tech Memo on 6/11/25. GLA evaluated potential slope stability issues and issued a Tech Memo on 6/5/25. BFIC has been implementing this partial Closure Turf removal procedure as the occasion arises to minimize odor and methane releases.

Weaver Consultants Group

Updated: Sunday, March 15, 2026

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4h(1)	Collaborate with the SCL LEA on Task 4h(2) and provide access to the Facility on a case-by-case basis as recommended by the SCL LEA	None	BFIC & SCL LEA	Not specified	SCL LEA has unrestricted access to SCL.
4h(2)	Enhanced Surface Emissions Data Collection - initiate an "innovative" pilot program for the purpose of improving surface emissions data collection to identify potential problematic grids and areas to improve landfill gas collection and to minimize potential for fresh trash odors to be carried by landfill gas emissions.	None	BFIC w/ vendor support	Not specified	SCS conducts monthly walk-over surveys and Firmatek conducts monthly drone survey w/ laser sensor. SCL LEA has Gazoscan laser gun and Landtec SEM5000 flame ionization detector (FID). Trellisense equipment received at SCL in mid-August and is set up to measure and record methane concentrations 24/7/365.
5a(1)	At six affiliated transfer stations, apply odor neutralizer and incorporate aerobic (and compatible anaerobic) microbiology-based solution(s) prior to transportation to the Facility.	In Progress	BFIC w/ WCG support	Not specified	All six affiliated transfer stations now retrofitted with dedicated loading pit spray systems. Began applying *Bio Cleanse* at East LA on 5/29/25 and at other five stations the week of 6/2/25. Drums of *Eco Flush* have been delivered to all six stations. WCG spraying *Eco Flush* at East LA and understands *Eco Flush* or *Bio Cleanse* being sprayed at other five transfer stations.
5a(2)	Document the above [Task 5a(1)] and make records available to SCAQMD upon request	None	WCG	Not specified	Documented in WCG's 8/20/25 Technical Report
5b	At the Facility, optimize use of foaming spray at the working face with an odor neutralizer, to be applied during early operating hours and adverse weather conditions	None	BFIC w/ RMR support	Not specified	See Conditions 4a & 4c
5c	At the Facility, upon acceptance of an identified "particularly odorous load", utilize foam gun for spot applications	None	BFIC w/ transfer station support	Not specified	Transfer station will notify SCL of odorous load in advance. Upon receipt, SCL will spray with foam during unloading and mix with mulch as load is dozed into working face. Stockpile of mulch available at SCL for this and other purposes.
5d	At the Facility, upon identification of a particularly odorous load at the working face, cover the odorous load immediately with odor buffering/adsorbing material (such as compost, mulch, ground green waste, biochar, soil, or non-odorous municipal solid waste)	None	BFIC	Not specified	
5e	Work with a third-party to develop an enhanced foam product and evaluate the effectiveness of both using a longer-range foam gun and of using foaming spray at the working face during early operating hours.	None	BFIC	Not specified	Longer range foam canon in use.
6	Conduct daily odor patrols to identify locations of leachate seeps	Daily Reports	WCG	Not specified	Ongoing. Typically twice per day during wet season and once per day during dry season. Multiple days with no new seeps during summer of 2025. WCG and LEA working on more robust inspection procedure.
6a	If a leachate seep is discovered, use a portable sprayer to apply odor neutralizer and/or aerobic (and compatible anaerobic) microbiology-based (methanotrophic microbes, bacteria, etc.) solution(s) on the leachate seep prior to remediating the seep (e.g., covering with soil, etc.)	None	WCG for small seeps RMR for larger seeps	Not specified	Ongoing. Initially sprayed with Bio SI *Ag Formula*, then *Eco Flush*, and until recently *Nok-Out* (chlorine dioxide) disinfectant. On hand supply of *Nok-Out* exhausted (more on order), but have reverted to using *Eco Flush*. Results indicate *Nok Out* and *Eco Flush* both effective, at least on small seeps. Using new, electronic WCG form to document.
6b	For continuous/pooled leachate seeps, treat leachate with odor neutralizer and/or microbiology-based solution(s) and pump out leachate into a closed liquid container and treat at onsite treatment facility	None	BFIC w/ Patriot support	Not specified	Ongoing by Patriot, as necessary and as directed by BFIC and/or its contractors. Larger seep in October 2024 Posi-Shell area dug out by Landmare and four sumps installed.
7	Continue construction of front entrance berm, including landscaping as a physical visual barrier and a physical odor barrier, which shall include a misting system with both odor neutralizer and a waterless vapor odor neutralizer	None	BFIC w/ GLA & Sukut.	Not specified	Ongoing. Currently in Phase 4 of five-phase construction schedule. Completion expected early 2027.
8	Implement 2023-2024 Wet Weather Preparation Plan (WWPP) and current 2025-2026 WWPP. Implement additional wet weather mitigation measures when feasible and appropriate	None	BFIC w/ SWT support	Not specified	2025 WWPP currently being implemented
9a	Collaborate with SCL-LEA to determine locations where hydroseeding would be most effective	None	BFIC & SCL LEA	Not specified	Test areas on top deck (locations shown in WCG's 8/20/25 technical report) wiped out by heavy rain in early 2026. BFIC plans to re-establish a ~1-acre test area, this time mixing mulch into cover soil rather than placing on top. Installation of new test area scheduled for March 2026.
9b	Hydroseed in areas anticipated to be most effective, including use of methanotrophic bacteria/microbes to enhance odor control and root growth.	None	BFIC w/ TBD vendor support	Not specified	
10	For the purpose of assessing the overall effectiveness of individual and/or combined mitigation measures, provide to the SCL-LEA the following: landfill gas system operational data, South Coast AQMD Rule 1150.1 instantaneous and integrated surface readings data; individual landfill gas well analytical/operational data; daily collected gas volumes; and meteorological data with corresponding date ranges.	Provide Access	BFIC	Not specified	SCL LEA now has access to all data, including individual well data.

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11	Collaborate with the SCL-LEA to identify Rule 1150.1 monitoring grids with continuing excessive surface emissions and enhance the intermediate cover with the most appropriate mitigation measures. Eight potentially appropriate mitigation measures listed in 11a through 11h.	Grid Map	BFIC, WCG, & SCL LEA	Not specified	A total of 58 grids with methane > 100 ppmv identified based on monthly surveys in Jan thru Apr. 2025. Most of the 58 grids have already been addressed with Posi-Shell, enhanced intermediate soil cover, additional MSW cover, & mulch. Others will be addressed by Closure Turf repairs and application of microbial solution(s).
12	Address grids that continue to demonstrate excessive surface emissions by prioritizing installation of shallow horizontal/slope/trench collectors at such grids, and assess utilization of large plastic sheeting or Closure Turf cover, with installation of flat/ horizontal landfill gas collection pipes underneath the cover, and cover problematic grids with large plastic sheeting or Closure Turf if determined to be feasible and likely to reduce excessive surface emissions	None	BFIC w/ Landmarc support	Not specified	In progress as necessary. Seep near 2024 Posi-Shell area dug out and sumps installed.
13a	Review the current Cell Sequencing Plan (in collaboration with SCL-LEA) to determine the feasibility of optimizing the sequence to focus on filling over the grids (and including installation of horizontal collectors from the start of filling) where the practice of 9 inches of compacted daily soil without peel back was implemented	None	BFIC w/ SCS & GLA support	Not specified	Cell sequencing plan modified and selected grids with methane > 100 ppmv have already been covered with additional lifts of MSW.
13b	If appropriate based on Task 13a, draft a 5-year Cell Development Plan	None	BFIC w/ GLA support	Timeline dependent on Condition 13a	Ongoing need to cover grids with methane > 100 ppmv will be factored into future Cell Development Plans
14	Continue implementation of top-down vertical landfill gas collection wells to supplement bottom-up landfill gas collection wells (and elsewhere at the Facility as appropriate) to achieve a minimum of 30 percent overlap for the effective radius of influence of the vertical landfill gas collection wells.	None	BFIC w/ SCS & Landmarc support	Not specified	Installation of 108 new gas extraction wells (Phases 1 & 2) completed in 2025 and 11 Phase 3 wells were also installed for a total of 119 new wells in 2025. Dozens of additional gas wells are budgeted for 2026; however, prior to installation, BFIC plans to modify its existing gas well network to optimize and increase gas recovery. Modifications will include installing solar-powered leachate removal pumps in selected waterlogged wells that are not producing as much gas as anticipated and automating the wellhead controls on certain wells to optimize gas recovery.
15a	Utilize larger diameter landfill gas extraction well-casings to improve vacuum levels and utilize a geosynthetic boot, bentonite seal, or additional soil layer (or combination thereof) around the base of the well-casing to minimize landfill gas leakage.	None	BFIC w/ SCS & Landmarc support	Not specified	Of the 119 new wells installed in 2025, 14 feature 10" versus 8" well casings.
15b	Maintain records from Task 15a and make available to SCAQMD	Records	BFIC w/ WCG support	Not specified	Records made available.
16	Implement a pilot project to enhance landfill gas movement by identifying and providing access to three locations (wells) in different areas of the Facility	SCS Tech Memo w/ drawings	BFIC w/ SCS support	Not specified	~15' x ~15' Square "waffles" were installed on four bottom-up landfill gas wells near current working face. Waffles consist of ~2' of drainage rock with geotextile top and bottom to enhance landfill gas recovery and increase radius of influence.
17a	Collaborate with the SCL-LEA to develop a smoke test protocol to assess potential odor transport pathways from the Facility to the community and surroundings based on the various meteorological factors and the current and future development topography of the Facility	Work Plan	BFIC w/ SCS support	Not specified	After repeated weather/wind-related delays, SCS released smoke at five locations on February 20, 2026; however, smoke dissipated before offsite migration pathways could be determined. Weather permitting, SCS is scheduled to repeat smoke tests on March 13, 2026 using larger smoke cartridges not available on February 20, 2026.
17b	Conduct smoke tests and use the results to assess the potential for additional odor mitigation measures to reduce and/or prevent the odors from reaching the community (such as physical barriers, dilution, or dispersion technologies, or odor neutralization and/or vapor phase odor neutralization techniques)	Report	BFIC w/ SCS support	Late 2025/early 2026	
18	Start partial final closure for all areas that have already reached final elevation in accordance with a final closure plan approved by the SCL-LEA and the Regional Water Quality Control Board	Conceptual Alternate Final Cover Design	BFIC w/ GLA support	Not specified	First final closure area (~20 acres) identified in northwest corner of SCL but clay not available for "prescriptive" final cover. GLA engineering report on alternate final cover options expected May 2026. LARWQCB expected to take several months to review and approve alternative final cover design once selected and submitted. Unlikely to be ready to implement until 2027.

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