

**BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

In the Matter of)

**BROWNING-FERRIS INDUSTRIES OF)
CALIFORNIA, INC., a California Corporation)
And wholly-owned subsidiary of REPUBLIC)
SERVICES, INC., a California Corporation, dba)
SUNSHINE CANYON LANDFILL)**

CASE NO. 3448-14

Amendment to the Findings and)
Decision of the Hearing Board)
_____)

AMENDMENT TO THE FINDINGS AND DECISION

The Findings and Decision of the Hearing Board for the above case, dated December 15, 2016, is hereby amended as follows:

On Page 20, Paragraph 6:

"The Hearing Board shall hold a hearing at 9 a.m. on March 1, 2019 to review the status of this matter and consider the modification and/or extension of this order."

The Date has been corrected to *March 1, 2017*.

DATED: January 13, 2017

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
HEARING BOARD

FOR THE BOARD: _____

Julie Prussack, Vice Chair

Prepared by A. Rebecca Fleming

1 This Petition for a Stipulated Order for Abatement was heard on August 27, 31, October 25, 26, 27,
2 and November 2, 3, 5, 15, 29, 30, and December 1, 6, 7, 8, 13, 15, 2016, pursuant to notice in accordance
3 with the provisions of California Health and Safety Code (“H&S Code”) §40823 and District Rule 812. The
4 following members of the Hearing Board were present: Edward Camarena, Chair; Julie Prussack, Vice Chair;
5 Patricia Byrd; Hon. Nate Holden; and Roger L. Lerner, M.D., F.A.C.P. Petitioner, Executive Officer, was
6 represented by Nicholas A. Sanchez, Senior Deputy District Counsel; Karin Manwaring, Senior Deputy
7 District Counsel; and Mary Reichert, Senior Deputy District Counsel. Respondent Browning-Ferris
8 Industries of California, Inc. (“BFI”), a wholly-owned subsidiary of Republic Services, Inc. (“REPUBLIC”),
9 both corporations authorized to do business in the State of California (collectively hereinafter referred to as
10 “Respondents”), was represented by Thomas M. Bruen, attorney at law, with the Law Offices of Thomas M.
11 Bruen, P.C., and William G. Beck and Robert G. Rooney, attorneys at law, with the law firm of Lathrop &
12 Gage LLP. The public was given the opportunity to testify, evidence was received and the matter was
13 submitted. The Hearing Board finds and decides as follows:

14 **FINDINGS OF FACT**

15 1. Petitioner is a body corporate and politic established and existing pursuant to H&S Code
16 §40000, *et seq.* and §40400, *et seq.*, and is the sole and exclusive local agency with the responsibility for
17 comprehensive air pollution control in the South Coast Basin.

18 2. Respondent BFI, doing business as “Sunshine Canyon Landfill,” owns and operates a
19 landfill/solid waste disposal site located at 14747 San Fernando Road, Sylmar, California 91342 (hereinafter
20 referred to as “Sunshine Canyon Landfill” or the “Facility”), SCAQMD Facility ID #49111, subject to the
21 District’s jurisdiction and District Rules.

22 3. **California H&S Code §41700 and District Rule 402** prohibit the discharge from any source
23 whatsoever of such quantities of air contaminants or other material which cause injury, detriment, nuisance,
24 or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose,
25 health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury
26 or damage to business or property.

27 4. Sunshine Canyon Landfill operates under a Solid Waste Facility Permit issued by the
28 California Department of Resources Recycling and Recovery (“CalRecycle”) and handles approximately a

1 third of the daily waste of all of Los Angeles County. Sunshine Canyon Landfill receives almost 9,000 tons
2 of municipal solid waste per day.

3 5. The municipal solid waste disposed of in Sunshine Canyon Landfill generates landfill gas as
4 it decomposes. The major components of landfill gas are methane and carbon dioxide, and odorous gases in
5 lesser concentrations. Landfill gas, unless adequately collected, may escape from the landfill into the
6 atmosphere. Landfill disposal can also cause fresh trash odors. Liquids emanating from the surface of the
7 landfill may also cause odors.

8 6. Landfill gas collected from Sunshine Canyon Landfill is flared at multiple flare stations. The
9 flares at Sunshine Canyon Landfill are able to operate at a maximum combined total flow rate of 18,000
10 standard cubic feet per minute (scfm). The collected landfill gas is also sold to a third party who operates a
11 gas-to-energy facility and produces electricity from combustion of landfill gas in turbines.

12 7. The District alleges Respondents are insufficiently collecting the amount of landfill gas
13 currently generated at Sunshine Canyon Landfill, which can contribute to emissions of landfill gas from the
14 surface of the landfill including odorous gases. The District further alleges Respondents are failing to
15 adequately treat fresh trash odors generated at the Facility, which can cause odor emissions from the landfill
16 during morning hours.

17 8. The District has received over three thousand odor complaints beginning in October 2013
18 through the present, from the public and elementary school staff working and living near Sunshine Canyon
19 Landfill alleging the Facility as the source of the odor. The District has traced the odors back to Sunshine
20 Canyon Landfill on numerous occasions.

21 9. The District alleges the odors are the result of insufficient gas collection, inadequate
22 treatment of incoming daily waste, and inadequate daily and intermediate cover procedures.

23 10. Pursuant to District Rule 1150.1(e)(3), Respondents must conduct instantaneous and
24 integrated monitoring of the landfill's surface. Monitoring conducted by Respondent demonstrates that
25 Respondents are not controlling surface emissions sufficiently at the Facility based on the frequency of high
26 surface emissions reported in Sunshine Canyon Landfill's District Rule 1150.1 monitoring reports.

27 11. As a result of the odors emanating from Sunshine Canyon Landfill, a considerable number
28 of persons living in the community and elementary school staff and students near the Facility have been

1 forced to remain indoors.

2 12. From October 25, 2013, through present, the District has issued over ninety Notices of
3 Violation ("NOVs") against the Respondents for violating District Rule 402 and H&S Code § 41700.

4 13. Respondents have implemented numerous odor control measures through several previous
5 Stipulated Order for Abatement proceedings with this Board. However, despite these measures, Respondents
6 have been unable to conduct operations at the Sunshine Canyon Landfill without being in violation of state
7 law and SCAQMD Rules and Regulations regarding odor nuisance.

8 14. The City of Los Angeles City Council and the County of Los Angeles Board of Supervisors
9 designated the Sunshine Canyon Landfill Local Enforcement Agency (SCL-LEA) to be the primary local
10 agency that provides the regulatory permitting, enforcement, and operational compliance oversight at
11 Sunshine Canyon Landfill on behalf of the California Environmental Protection Agency's Cal Recycle.¹

12 15. Numerous regulatory agencies, including the South Coast Air Quality Management District,
13 SCL-LEA, Los Angeles County Regional Planning, City of Los Angeles Planning Department, City of Los
14 Angeles Bureau of Sanitation, the Los Angeles Regional Water Quality Control Board, the California
15 Department of Toxics Substances Control, and other state or local agencies, have jurisdiction over
16 Respondent and/or Respondent's affiliates' transfer stations.

17 16. Given the number of regulatory agencies involved and potential for events beyond the control
18 of Respondent, the SCAQMD recognizes that the necessity to modify this Order may arise. In the event that
19 a petition for modification of the requested Order is filed that asks this Hearing Board to make a finding that
20 delay in performance or non-performance of any requirement of this Order was the result of a Force Majeure,
21 the following definition shall apply: Force Majeure includes any act of God, war, fire, earthquake, flood, or
22 natural catastrophe; civil disturbance, labor strike, vandalism, sabotage, or terrorism; restraint by court order
23 or public authority or agency; or the inability, despite Respondent's demonstration that it exercised due
24 diligence and best efforts, to obtain sufficient food waste or a consent, permit or approval necessary for
25 Respondent's performance of any of the requirements of this Order. Force Majeure shall not include normal

26
27 ¹ An LEA is an entity designated by the governing body of a county or city and is empowered to implement delegated
28 California Environmental Protection Agency's Cal Recycle programs and locally designated activities.

1 inclement weather, economic hardship, or inability to pay.

2 17. On April 2, 2015, the SCL-LEA Board of Directors passed a motion directing the SCL-LEA
3 Program Manager, "upon completion of the review of both SCAQMD consultants' reports, to provide the
4 Board members with a report of the SCL-LEA recommendations along with the technical backup,
5 documentation and reasoning for those recommendations."

6 18. In response to the direction provided by its governing board, the SCL-LEA produced a report
7 entitled "SUNSHINE CANYON LANDFILL LOCAL ENFORCEMENT AGENCY COMPILATION OF
8 POTENTIAL MITIGATION PRACTICES AND PROGRAMS," dated September 2015. (A true and correct
9 copy of Section 3 of the report, titled "Sunshine Canyon Landfill Local Enforcement Agency Compilation of
10 Potential Mitigation Practices and Programs" is referenced hereto as Exhibit A.) The report in its entirety is
11 available at

12 [http://docs.google.com/viewer?a=v&pid=sites&srcid=c2NsbGVhLm9yZ3xzY2xsZWZ3ZWJzaXRlfGd4Oj](http://docs.google.com/viewer?a=v&pid=sites&srcid=c2NsbGVhLm9yZ3xzY2xsZWZ3ZWJzaXRlfGd4OjNlMmlyYjQ1ZWNmNjAxMDE)
13 [NlMmlyYjQ1ZWNmNjAxMDE](http://docs.google.com/viewer?a=v&pid=sites&srcid=c2NsbGVhLm9yZ3xzY2xsZWZ3ZWJzaXRlfGd4OjNlMmlyYjQ1ZWNmNjAxMDE).

14 19. The two (2) reports prepared at the direction of the District by experts in the field of trash
15 odor and landfill gas collection, concluded that Sunshine Canyon Landfill required improvements in:
16 intermediate cover, daily cover, use of alternative daily cover, additional baropneumatic field testing, enhance
17 drainage of leachate, investigation of landfill gas migration and surface leakage on sideslopes, and landfill
18 gas quality monitoring. The District is relying on these recommendations in the reports for the conditions in
19 this Order for Abatement.

20 20. AB 1826 provided that by April 1, 2016, businesses that generate eight cubic yards or more
21 of organic waste per week were required to arrange for organic waste recycling services. By January 1, 2017,
22 the threshold amount of organic waste generated per week will be reduced to 4 cubic yards or more.
23 Additional and on-going deadlines require local jurisdictions to provide information, prepare annual reports,
24 and conduct formal reviews. By January 1, 2019, the mandatory organic waste recycling will be expanded
25 to include commercial solid waste. If CalRecycle determines that the statewide disposal of organic waste in
26 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling
27 requirements on businesses will be expanded and certain exemptions may be eliminated.

28

1 21. Evidence presented, including expert testimony, demonstrates that the Food Waste and
2 Organics Diversion Program conditions in this Order will assist in achieving state mandates directed towards
3 greenhouse gas reductions and organic waste recycling on an expedited basis with measures that are otherwise
4 not required of Respondent by law. Further, the Food Waste and Organics Diversion Program conditions in
5 this Order are not required of Respondent as part of its franchise agreement with the City of Los Angeles.

6 22. Evidence further supports conditions directed towards organics removal as this creates a
7 leveraged effect: diverting organic materials away from the landfill results in less odorous trash and trash that
8 is less dense and more permeable. This has the effect of reducing landfill gas generation while improving the
9 landfill gas collection system's efficiency.

10 23. Increasing the existing infrastructure to process organic and food waste using alternative
11 methods, although not required by AB 1826, is essential to the success of this legislation.

12 24. The District has consulted with several public agencies, including the Los Angeles County
13 Sanitation District (LACSD), in developing the terms and conditions of this stipulated order. Evidence
14 presented has shown that the diversion of food waste will help reduce the amount of landfill gas generated at
15 the landfill and will contribute to the reduction of potential odors from the landfill. Pursuant to this Order,
16 Respondent will cause to be constructed a food waste pre-processing facility to be operated at the American
17 Transfer Station that will be able to send pre-processed food waste from the American Transfer Station to the
18 LACSD's Carson waste water treatment plant. LACSD is expanding their capacity to digest such pre-
19 processed food waste at that facility. The Carson facility is also expected to generate renewable energy as a
20 byproduct of the anaerobic digestion of this pre-processed waste.

21 25. The District and Respondent disagree as to whether Respondent was, is, or has been in
22 violation of H&S Code §41700 and District Rule 402. The District alleges that Respondent is unable to
23 conduct operations at the Facility plant without being in violation of H&S Code §41700 and District Rule
24 402. The Order set forth hereinafter is likely to result in lawful operations by Respondent with respect to
25 complying with SCAQMD rules and regulations, including SCAQMD Rule 402.

26 26. District Rule 806(b) and H&S Code §42451(b) permit the Hearing Board to issue a stipulated
27 order for abatement upon the terms and conditions set forth in the stipulated Findings and Decision without
28 making findings regarding: (a) whether Respondent is in violation of H&S Code §41700, or any District rule

1 or regulation; (b) whether the order will not constitute a taking of property without due process of law; and
2 (c) whether the order results in closing an otherwise lawful business, such closing would not be without a
3 corresponding benefit in reducing air contaminants.

4 CONCLUSIONS

5 27. The Order set forth hereinafter is likely to mitigate the conditions contributing to the odor
6 nuisance and further compliance with SCAQMD rules and regulations. This Order is intended to help reduce
7 air emissions impacts to the nearby communities, implement steps to reduce any public health impacts that
8 may exist, and alleviate odors while a more permanent solution is achieved.

9 28. The District, by this Petition, seeks a Stipulated Order for Abatement to impose certain
10 conditions on Respondent's operation of its Facility. The District believes that such conditions will bring
11 Respondent's operation in compliance with the District's rules.

12 29. It is not unreasonable to require Respondent to comply with District rules and regulations.

13 30. The issuance of a Stipulated Order for Abatement upon a fully noticed hearing would not
14 constitute a taking of property without due process of law.

15 31. This Stipulated Order for Abatement is not intended to be nor does it act as a variance.

16 ORDER

17 THEREFORE, subject to the aforesaid statements and good cause appearing, the Hearing Board
18 hereby orders Respondent to immediately cease and desist from operating the Facility in a manner that
19 violates H&S Code §41700 and District Rule 402, or in the alternative comply with the following conditions
20 and increments of progress:

21 CONDITIONS AND INCREMENTS OF PROGRESS

22 **Hours of Operation**

23 1. Respondent shall submit to the District, the SCL-LEA, the Los Angeles County Department
24 of Public Works, and the Los Angeles City Bureau of Transportation within ten (10) business days of the
25 issuance of this Order, a Traffic Mitigation Program that establishes a program to address unnecessary truck
26 trips and reduce queuing of trucks outside the Facility potentially resulting from the change in operational
27 hours described below. The program shall address, at minimum, the following: (1) a schedule for regular
28 landfill users (such as commercial and municipal haulers as well as transfer trucks/trailers) that minimizes

1 queuing along San Fernando Boulevard and diversions to other landfills, and (2) and a plan to reserve landfill
2 capacity for small commercial and private users.

3 2. Respondent shall upon issuance of this Order, prohibit the unloading/dumping of transfer
4 trailer loads from all Republic transfer stations and from all third parties, including the City of Los Angeles
5 Bureau of Sanitation, from occurring any earlier than 9 am during weekdays and Saturdays.

6 a. Respondent shall, during modified operating hours, provide funding for independent
7 third party odor monitoring at or near Van Gogh Charter School during the hours of 6
8 am through 9 am. Respondent shall require the Odor Monitors to take measures to
9 prevent odor fatigue and to keep records. Such records shall include an odor ranking
10 taken every twenty (20) minutes that includes location, wind condition, and an odor
11 assessment using a consistent scale. The Independent Third Party Monitor shall report
12 directly to the District, with a copy to Respondent.

13 i. The objectives of this assessment are to identify significant findings and issue
14 recommendations and best practices related to the following key areas:

- 15 1. Timeliness, quality, accuracy, and usefulness of forecasting adverse
16 weather to reduce the detection of landfill odors at the school.
- 17 2. Effectiveness of Respondent's internal and external coordination and
18 collaboration at implementing the adverse weather protocol.
- 19 3. Effectiveness of forecasting and use of the weather sources listed in the
20 adverse weather protocol.
- 21 4. Identification and evaluation of opportunities for improved
22 collaboration among Respondent and Los Angeles City Bureau of
23 Sanitation.

24 ii. The independent third party odor monitoring is not intended to supplant the
25 complaints received from the community, Van Gogh Charter School, or the
26 District's public odor complaint investigation policy and response process, nor
27 is it intended to provide evidence of the absence of any nuisance conditions.

28 b. Respondent shall submit to the Executive Officer and Hearing Board (attention

1 ClerkofBoard@aqmd.gov), within forty-five (45) days of issuance of this Order, a
2 proposed plan to prohibit the unloading and dumping of route collection trucks at the
3 landfill during the hours of 6 am to 9 am, weekdays and Saturdays.

4 **Food Waste and Organics Diversion Program**

5 3. Respondent shall implement the Food Waste Diversion Program described in Exhibit C for
6 the purpose of increasing the diversion of Food Waste and organic materials from disposal at the Sunshine
7 Canyon Landfill. In order to implement the Food Waste Diversion Program, Respondent shall at a minimum
8 meet the following increments of progress:

9 Agromin OC Chino Organics Recycling Compost Facility

- 10 a. Respondent shall, or shall cause Agromin OC to, within fifteen (15) business days of
11 issuance of this Order, submit to the District and any other required government
12 authorities, a permit application to implement Covered Aerated Static Pile (CASP)
13 composting (the "CASP Equipment") of up to 75 tons per weekday of food waste at the
14 Agromin OC Chino Organics Recycling Compost Facility, located at 8100 Chino Corona
15 Road, in Chino, California ("the Chino Facility"). Respondent shall pay for expedited
16 processing.
- 17 b. Respondent shall, or shall cause Agromin OC to, within fifteen (15) business days of
18 issuance of this District permit, purchase all equipment necessary to implement the
19 CASP at the Chino Facility.
- 20 c. Respondent shall, within sixty (60) business days of issuance of this District permit,
21 obtain all equipment necessary to construct the CASP at the Chino Facility.
- 22 d. Respondent shall, within seven (7) days of obtaining all equipment necessary to
23 implement the CASP at the Chino Facility, commence construction.
- 24 e. Respondent shall, within ninety (90) days of obtaining all equipment necessary to
25 implement the CASP at the Chino Facility, begin receiving food waste materials at the
26 Chino Facility that have been diverted from Sunshine Canyon Landfill.
- 27 i. Respondent shall demonstrate to the Executive Officer, by no later than
28 December 31, 2017, compliance with the required diversion of 75 tons per day

1 of food waste by December 31, 2017, and the required diversion of up to 37.5
2 tons per day of food waste by June 30, 2017, from Sunshine Canyon Landfill to
3 the Chino Facility.

4 ii. If Respondent is unable to achieve the required diversion of 75 tons per day of
5 food waste by December 31, 2017, Respondent shall submit a status report to
6 the Executive Officer and Hearing Board (attention ClerkofBoard@aqmd.gov),
7 and if required by the Executive Officer shall petition for a modification to this
8 Order, by no later than June 16, 2017. The status report shall at minimum
9 identify issues, obstacles, problem solving efforts, and a revised timeline.

10 iii. Respondent shall maintain records sufficient to quantify the diversion of food
11 waste from Sunshine Canyon Landfill to the Chino Facility. Such records shall
12 be certified to be true and accurate by a responsible corporate officer and made
13 available to the District upon request.

14 American Transfer Station

15 f. Contingent upon Respondent's receipt of the commercial franchise agreements from
16 the City of Los Angeles for Zones SLA and NEV, expected to be awarded in December
17 2016, Respondent shall, by no later than December 1, 2018, cause to be designed,
18 permitted, procured, constructed, and operated, a food waste pre-processing system at
19 the Republic Services American Transfer Station, located at 1449 W. Rosecrans
20 Avenue, Gardena, California (the "American Transfer Station"), that complies with all
21 the requirements of District Rule 410, and is capable of pre-processing up to 250 tons
22 per weekday of organic waste. Should Respondent not receive the commercial
23 franchise agreements from the City of Los Angeles for Zones SLA and NEV,
24 Respondent, within 30 days of being so notified, shall propose an alternative facility to
25 the Executive Officer to pre-process a proportionate amount of food waste and organics
26 from Respondent's share of the commercial waste stream still being collected by
27 Respondent in the Sunshine Canyon Landfill waste-shed.

28 i. Respondent shall submit, by December 1, 2017, all required applications and

1 requests for approval, including a complete application to the District for permits
2 to construct for the air pollution control equipment for the food waste processing
3 system at the American Transfer Station.

- 4 ii. Respondent shall, for each permit application or other necessary approval,
5 request and pay for expedited processing when available.
- 6 iii. Respondent shall demonstrate to the Executive Officer, by no later than March
7 30, 2019, that it is diverting 250 tons per day of food waste from Sunshine
8 Canyon Landfill to the American Transfer Station.
- 9 iv. If Respondent anticipates that it will not be able to divert 250 tons per day of
10 food waste from Sunshine Canyon Landfill to the American Transfer Station by
11 March 30, 2019, Respondent shall submit a status report to the Executive Officer
12 and the Hearing Board (attention ClerkofBoard@aqmd.gov), and if required by
13 the Executive Officer shall petition for a modification to this Order, by no later
14 than March 1, 2019. The status report shall at minimum identify issues,
15 obstacles, problem solving efforts, and a revised timeline.
- 16 v. Respondent shall maintain records sufficient to quantify in tons per day the
17 amount of food waste diverted from Sunshine Canyon Landfill to the American
18 Transfer Station. Such records shall be certified as true and accurate by a
19 responsible corporate officer and made available to the District upon request.

20 Innovative Waste Control & Falcon Transfer Station Transloading Program

- 21 g. Respondent shall, within thirty (30) days of issuance of this Order, implement a
22 transloading of bulk-delivered food waste program at the Falcon Transfer Station and at
23 the Innovative Transfer Station (the "Transloading Program") to divert at least 40 tons
24 per week of food waste from the Sunshine Canyon Landfill.
- 25 i. Respondent shall, by no later than July 1, 2017, submit a report to the Executive
26 Officer and the Hearing Board (attention ClerkofBoard@aqmd.gov) and the
27 District assessing the success of the Transloading Program, including records
28 quantifying the amount of food waste diverted, and the feasibility of

1 implementing the Transloading Program at Respondent's remaining four
2 Transfer Stations.

- 3 ii. If Respondent is unable to achieve the required diversion of food waste by July
4 1, 2017, from Sunshine Canyon Landfill by conducting the Transloading
5 Program, Respondent shall submit a status report to the Executive Officer and
6 the Hearing Board (attention ClerkofBoard@aqmd.gov), and if required by the
7 Executive Officer shall petition for a modification to this Order, by no later than
8 June 10, 2017.

9 Food Recovery Program

- 10 h. Respondent shall implement the Food Recovery Program described in Exhibit C, which
11 is made a part hereof, by performing the following:

- 12 i. Provide sufficient funding to Food Finders to purchase one hybrid-fueled pick-
13 up and delivery refrigerated truck and pay for all expenses associated with the
14 operation of the truck for one year, including, but not limited to, the cost to fuel,
15 maintain and insure the truck, and staff a delivery driver. The total purchase and
16 operational costs are not to exceed \$200,000. This vehicle shall be designated
17 for food recovery pick-ups from locations within the geographic area for which
18 such food waste would otherwise have been sent to Sunshine Canyon Landfill.
19 Such funding shall be provided by no later than February 1, 2017;
- 20 ii. Provide an additional \$30,000 in funding to Food Finders to be used for
21 marketing of the Food Recovery Program throughout the geographic area for
22 which food waste would otherwise be sent to Sunshine Canyon Landfill. Such
23 funding shall be provided to Food Finders by no later than February 1, 2017;
- 24 iii. Create and pay the costs associated with a flyer or other written material, to be
25 developed in concert with Food Finders, describing the Food Recovery Program,
26 to be included with all billing statements for one year to Respondent's customers
27 who produce food waste within the geographic area for which such waste would
28 otherwise be sent to Sunshine Canyon Landfill. This material shall first be

1 distributed to customers by no later than March 1, 2017;

2 iv. Provide reports to the SCAQMD as described below in subsection 3(i) that detail
3 the amount of food diverted pursuant to this Food Recovery Program that would
4 otherwise have been sent to Sunshine Canyon Landfill. Respondent shall consult
5 with Food Finders in developing these reports, which shall include to the extent
6 feasible the success of various marketing strategies in diverting food waste from
7 Sunshine Canyon Landfill.

8 i. Respondent shall submit quarterly reports to the Executive Officer and the Hearing
9 Board on the progress and results of the Food Waste and Organics Diversion Program,
10 including but not limited to daily tonnage diverted from the landfill.

11 j. Nothing in this Order shall prevent Respondent from achieving the required diversions
12 using alternate facilities or methods.

13 **Landfill Cover**

14 4. Respondent shall continue the use of an Alternative Daily Cover (ADC), in lieu of using a
15 nine inch daily compacted soil cover, throughout the duration of the approved pilot demonstration project
16 that began in October 2015, in order to promote horizontal permeability in the landfill mass for the purposes
17 of improving collection of landfill gas and improving the leachate collection system's ability to drain
18 properly.

19 a. Respondent shall provide to the District copies of all data provided to the SCL-LEA
20 generated as a result of the pilot demonstration project and such other information as
21 reasonably requested by the District. Respondent shall also provide any analysis used to
22 determine the success or obstacles of the pilot demonstration project within ten (10)
23 business days of finalizing the information.

24 b. Respondent shall submit to the District within ten (10) business days of the conclusion
25 of the pilot program, all reports generated from the pilot program and evidence
26 demonstrating that it has completed the pilot program as determined by the Los Angeles
27 County Departments of Public Works and Regional Planning requirements. Respondent
28 shall also submit to the District within ten (10) business days of the conclusion of the

1 pilot program written confirmation from the SCL-LEA that Respondent has duly
2 completed the pilot program.

3 5. Respondent shall implement the intermediate cover enhancement pilot program as directed
4 by the SCL-LEA, as may be amended by the Los Angeles County Department of Public Works.

5 a. Respondent shall provide District staff with copies of all reports on the status and/or
6 results of the program submitted by Respondent to the SCL-LEA and such other
7 information as reasonably requested by the District.

8 6. Respondent shall conduct the intermediate cover program in a manner to be harmonized and
9 consistent with all local land use requirements, including the requirements in Los Angeles County's
10 Conditional Use Permit ("CUP"), including section 44A, and the landfill Implementation and Monitoring
11 Plans, and the City of Los Angeles "Q" conditions.

12 7. Respondent shall submit monthly District Rule 1150.1 surface monitoring results
13 (instantaneous and integrated readings) to the District for the enhanced monitoring grids that are involved in
14 the SCL-LEA intermediate cover enhancement pilot program and for the baseline comparative reference
15 control grid (Grid L11) within fourteen (14) business days after completion of the physical landfill monitoring
16 activities. This condition does not relieve Respondent from performing Quarterly District Rule 1150.1
17 surface emission reports on the overall landfill.

18 8. Respondent shall upon the issuance of this Order, apply additional soil cover on a minimum
19 of at least twenty (20) intermediate cover areas (as determined by the District, the SCL-LEA and Respondent)
20 designated as District Rule 1150.1 surface emissions monitoring grids that have exceeded the 25 parts per
21 million by volume methane maximum for integrated surface monitoring at least once during the last three (3)
22 quarters.

23 9. Respondent shall submit to the District for review and approval, within ninety (90) days of
24 issuance of this order, a proposal for additional methods/procedures for upgrading and improving the
25 additional areas of the landfill that have intermediate landfill cover, including appropriate methodologies,
26 metrics, and protocols for evaluating the performance.

27 a. Respondent's proposal shall consider and evaluate, at a minimum, the following options
28 (or combination of options): increased thickness of intermediate cover, use of lower

1 permeability intermediate/final cover materials, utilization of higher durability plastic
2 intermediate cover film material, higher compaction to increase density of the
3 intermediate cover, use of cured/mature compost to improve vegetative growth (and
4 potential bio filter affect), use of less steep intermediate slopes or other methods to
5 provide for better compaction of the side slopes, use of alternative spray on sealants,
6 (formulated for increased durability, wet weather, and odor control) to reduce
7 permeability of existing intermediate covered areas, and utilization of ClosureTurf® (or
8 product equivalent designed for intermediate cover usage).

9 10. Respondent shall expand the application of the SCL-LEA/District approved intermediate
10 cover upgrades to additional SCL-LEA designated District Rule 1150.1 surface emissions monitoring grids
11 if the data or other performance metrics demonstrate cover performance improvements (as determined by the
12 District, the SCL-LEA and Respondent). The parties shall, at the status hearing, return for a modification of
13 this Order to set an expeditious schedule to enhance those intermediate cover areas that the SCL-LEA
14 recommends be enhanced through the intermediate cover enhancement pilot program.

15 **Improved Gas Collection Well Efficiency and Integrity**

16 11. Respondent shall expeditiously dewater wells being impacted by liquids.

- 17 a. Respondent shall provide monthly reports to the District and the SCL LEA on all landfill
18 gas collection wells which have more than 30% of their overall length or more than 30%
19 of their perforated area below grade filled with leachate or water. Respondent shall
20 provide a graphic map showing the location of each liquid “impacted well” every other
21 month. For the monthly reports, Respondent shall provide a description of the remedial
22 measure(s) taken to address the landfill gas collection wells that are impacted by liquids.
- 23 b. Respondent shall, within sixty (60) days of the issuance of this order, provide proposed
24 methodologies and monitoring procedures to the District that determine the level of
25 dewatering within each impacted well. Methods may include the measurement of the
26 gas flow at each landfill gas collection well impacted by liquids.
- 27 c. Respondent shall install dewatering pumps in gas wells affected by liquids identified in
28 the October 2016 well sounding no later than February 28, 2017. This includes

1 dewatering pumps in gas wells at the Landfill that do not have pumps installed as of
2 November 15, 2016.

- 3 d. Respondent shall also upgrade the site leachate collection system through the addition of
4 both increased air compressor and drain line infrastructure no later than February 28,
5 2017, to enable conveyance of liquids removed from the wells. Liquids from the existing
6 pumps and the new pumps will be pumped and monitored under the site's O&M
7 dewatering program guidelines (Exhibit D).
- 8 e. Respondent shall perform a complete well field liquid sounding on a quarterly basis to
9 further determine the presence or absence of liquids in each of the site's vertical gas
10 extraction wells and will address gas wells affected by liquids as described in Exhibit D.
- 11 f. Respondent shall maintain records relating to compliance with this Condition and shall
12 provide District staff with copies upon request.

13 **Well Integrity Testing Program**

- 14 12. No later than December 15, 2016, and in addition to the liquid management program
15 described in Section 11, Respondent shall commence integrity testing of all vertical gas wells
16 at the Landfill (estimated to require approximately 90 days) to evaluate the performance of
17 each gas well. Respondent shall correct any such well identified by the testing as ineffective
18 or impacted (other than by liquids) to the point that landfill gas flow is appreciably restricted
19 as identified by the test. The corrective action shall commence no later than 30-days after
20 such identification. Respondent shall commence the needed corrective action within the 30-
21 day time limit, and thereafter diligently prosecute the correction of the well as required. If
22 corrective action is infeasible, the well shall be abandoned in accordance with NSPS
23 regulations. Further, if corrective action is recommended but does not resolve the identified
24 issue in the gas collection well, it shall be abandoned in accordance with NSPS regulations.
- 25 13. Respondent shall maintain records relating to compliance with this Condition and shall
26 provide District staff with copies upon request.

27 **Treatment of Fresh Trash Odors**

- 28 14. Respondent shall submit to the District for review and approval (which will be conducted in

1 consultation with other regulatory agencies), within sixty (60) days of the issuance of this
2 Order, a proposal for additional best management practices to supplement Respondent's
3 existing practices intended control and treat the fresh trash odors (the "Revised Best
4 Management Practices Plan").

- 5 a. Such proposal shall consider and evaluate, at a minimum, the following options:
6 use of trash truck and transfer trailer unloading practices that minimize creation
7 of odors, use of additional misting fan units (Dust Boss or equivalent) to treat
8 odors onsite, use of alternative working faces located in more advantageous
9 locations for early morning unloading, consideration of special procedures (e.g.,
10 immediate covering/burying of odorous loads at the working face) and other
11 practices to mitigate fresh trash odors.
- 12 b. Such proposal shall also consider, for use during the initial three hours of the
13 opening of the landfill at a minimum, applications of Odor-Shell® (or equivalent
14 product) designed for odor control for odorous loads identified during unloading
15 and on exposed portions of the working face.
- 16 c. Such proposal shall also consider and evaluate options to control, treat, and
17 minimize the impact of the odors that leave the site, including a methodology to
18 identify meteorological conditions before the start of operations to determine
19 best procedures/practices taken to minimize odor transport into the
20 neighborhood. The proposal shall also consider the utilization of innovative
21 technologies such as dry (waterless) vapor-phase (gas) for treatment of fresh
22 trash and landfill gas odors, which can be employed along potential odor
23 pathways.
- 24 d. Such proposal shall also consider and evaluate utilization, for use during the
25 initial three hours at a minimum of the opening of the landfill, of backpack
26 sprayer and/or other portable spray system (with odor neutralizer or equivalent
27 product) for directed use on identified odorous loads during unloading.
- 28 e. Such proposal shall also consider and evaluate utilization of stockpiled "odor

1 buffering/adsorbing material” (e.g., compost, ground greenwaste, soil) at the
2 working face. Respondent’s evaluation shall also consider and analyze the
3 potential for enhancing adsorbent material with odor adsorbents or other odor
4 neutralizers to increase effectiveness.

5 f. Respondent shall, within ten (10) business days of receiving written approval
6 from the District, implement the Revised Best Management Practices Plan. If a
7 “conditional approval” is granted, Respondent shall implement those
8 conditionally approved elements of the plan.

9 15. Respondent shall submit to the District for its review and approval (which will be conducted
10 in consultation with other regulatory agencies), within thirty (30) days of Respondent’s
11 receipt of the SCL-LEA findings and recommendations of programs for best management
12 practices for odor mitigation at transfer stations, an updated Odorous Load Management Plan
13 (the “Revised Odorous Load Management Plan”). This plan shall identify additional
14 measures to supplement Respondent’s existing best management practices to reduce odors at
15 the source, at transfer stations owned and/or operated by Respondent, and at the Facility. The
16 plan shall also consider periodic site assessments of each transfer station that sends waste to
17 the Facility for additional measures intended to abate odors.

18 g. Respondent shall, within ten (10) business days of receiving written approval
19 from the District, implement the Revised Odorous Load Management Plan. If a
20 “conditional approval” is granted, Respondent shall implement those
21 conditionally approved elements of the plan.

22 16. Respondent shall submit to the District, within ninety (90) days of the issuance of this Order,
23 an assessment on the feasibility of installing physical barriers and or dust/odor containment structures. The
24 assessment shall include an estimated timetable for improvements at the entrance road, including
25 consideration of a large physical visual berm lined with trees along the final realigned access road along with
26 other physical barriers (or containment systems) that can serve as a physical barrier to mitigate odors (e.g.,
27 controlled air movement, creating additional air turbulence or dispersion along odor travel pathways,
28 additional odor adsorption).

GENERAL CONDITIONS

1
2 1. Equipment and operations at the Facility are subject to the jurisdiction and regulatory
3 requirements of multiple agencies, including but not limited to the District, CalRecycle, Los Angeles
4 County Department of Public Works, Los Angeles County Regional Planning, City of Los Angeles
5 Planning Department, City of Los Angeles Bureau of Sanitation, and LACSD. The conditions in this Order
6 shall not in any way restrict or expand the scope of jurisdiction of any agency. If any agency that shares
7 jurisdiction over the Facility with the District requires Respondent to take any action that is inconsistent
8 with this Order, Respondent shall immediately contact the District by email at nsanchez@aqmd.gov and
9 describe the inconsistent provisions. Respondent shall endeavor to resolve the inconsistency with the
10 Executive Officer. If the inconsistency is resolved, Respondent shall immediately inform the Hearing
11 Board in writing. If the inconsistency cannot be resolved, Respondent shall petition for a hearing before the
12 Board for further proceedings. At such proceeding, only the provision in dispute shall be resolved by the
13 Hearing Board while the other conditions in this Order shall remain in full force and effect.

14 2. Respondent shall immediately contact the District (via email at nsanchez@aqmd.gov),
15 should the District's review of any of Respondent's submissions required hereunder cause the District to
16 conclude in writing that additional measures are necessary at the landfill to control odors and Respondent is
17 unable to agree to such measures. Such notice shall describe the reasons for the infeasibility of the
18 provisions or other concerns with the provision. Respondent shall endeavor to resolve the infeasibility with
19 the Executive Officer or his designee. If the feasibility of the provision cannot be resolved, Respondent
20 shall petition the Hearing Board for further proceedings. Such proceeding shall be limited to a hearing on
21 the imposition of the measure(s) described in the notice to the District as infeasible or otherwise
22 problematic.

23 3. Respondent shall, beginning on January 15, 2017, submit monthly tonnage reports to the
24 Executive Officer and the Hearing Board and identify the amount of tonnage diverted from the landfill as a
25 result of the delay in the unloading/dumping of all transfer trailer loads during early morning hours and the
26 Food Waste and Organics Diversion Program.

27 4. Any notices, reports, or other information required by this Order shall be provided to the
28 District (via email at nsanchez@aqmd.gov).

Exhibit C -- Food Waste Diversion Program

**SOUTH COAST AGRICULTURE
CLERK OF THE BOARD**

According to Cal Recycle, Californians throw away nearly 6 million tons of food scraps or food waste each year. CalRecycle states this represents about 18 percent of all the material that goes to landfills.

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Definition of Food Waste: As used herein, "Food Waste" means decomposable organic waste that would usually be disposed of in the Sunshine Canyon Landfill, including discarded or left-over: food, food preparation by-products, food products from grocery stores and other retail and wholesale food sale outlets, food products from manufacturers and distributors of food products, restaurant cull and trim, restaurant waste including mixed paper and food waste, butcher shop scraps and discarded meat and fish, and food waste from restaurants, hotels, fast food establishments, stadiums and special event locations, health care facilities, schools and other educational institutions. Food Waste includes any human edible food, animal feed, and organics materials resulting from the food or feed production or preparation process.

Respondent BFIC shall, or shall cause its affiliates to, engage in the following measures for the purpose of reaching the pooled daily tonnage goals (per year) for the diversion of Food Waste, which would usually be disposed of at the Sunshine Canyon Landfill, to other facilities.

Annual Food Waste Diversion Plan

	Collection and Processing of Source Separated Organics	Transloading of Bulk Delivered Organics at Transfer Stations	Food Recovery Program	Total Annual Food Waste Diversion
2017	10,000	2,000	15,000	27,000
2018	40,000	3,000	30,000	63,000
2019	100,000	4,000	45,000	149,000

To achieve the above estimated Food Waste Diversion Plan, Respondent BFIC or its affiliates shall commit to pursue the following Food Waste diversion efforts:

A. Collection and Processing of Source Separated Organics

1. Respondent shall pursue as expeditiously as possible all feasible projects to facilitate handling processed organic waste diverted from Sunshine Canyon Landfill, including but not limited to:
 - a. Operation of a demonstration Food Waste composting project at its Agromin joint venture facility located in Chino, California, capable of diverting from landfilling an estimated 75 tons per day of Food Waste that would otherwise be disposed of at the Sunshine Canyon Landfill to the maximum extent feasible. [Estimated operational time Q2, 2017.]
 - b. Operation of a Food Waste pre-processing facility at the American Waste Transfer Station located in Gardena, California, capable of diverting from landfilling an estimated 250 tons per day of Food Waste that would otherwise be disposed of at the Sunshine Canyon Landfill to the maximum extent feasible. [Estimated operational time Q4, 2018.]

- c. Negotiation and execution of an agreement with the Los Angeles Sanitary District (LA San) to deliver Food Waste to LA San’s Carson facility for digestion and the production of saleable methane, for use in the generation of electric power. From discussions with LA San, they are looking to install equipment in the next 2-3 years that would increase their overall capacity to accept processed food waste to approximately 500 tons per day.

The following table shows the additional Food Waste diversion goals will be substantially in excess of the requirements under the City of Los Angeles Commercial Franchise agreement.

Summary of Source Separated Organics Diversion
In Addition to LA Commercial Franchise Requirements

	Source Separated City of LA Franchise	Source Separated – over perform on City of LA franchise and other customers	Total Source Separated Organics
2017	5,200	4,800	10,000
2018	17,000	23,000	40,000
2019	31,000	69,000	100,000

B. Transloading of Bulk Delivered Organics at Transfer Stations

- 1. Respondent shall transload bulk delivered Food Waste and organics at Falcon and Innovative Transfer Stations to separate and divert from landfilling at Sunshine Canyon an estimated 40 tons per week of Food Waste and organics and report the status to the District as required in the Order.

C. Food Recovery Program

- 1. Respondent shall implement the Food Recovery Program as required in the Order. The goal of the program is to divert Food Waste that is still edible from disposal at the Sunshine Canyon Landfill and to deliver such edible Food Waste to food pantries, homeless shelters and other non-profit food distribution centers and organizations, so that such edible Food waste may be consumed by hungry persons.

**TETRA TECH BAS**SOUTH COAST AGRICULTURAL
CLERK OF THE BOARDS

16 DEC -6 A7:38

Landfill Gas Extraction Well Dewatering Guidelines for the Sunshine Canyon Landfill

This document presents the process and procedures that are used to determine (1) whether a vertical gas extraction well has been adversely impacted by an accumulation of liquids in the well casing of a vertical landfill gas (LFG) extraction well thereby requiring a pump to be installed, and (2) procedures that are taken once a pump is installed to monitor these wells.

The overall purpose of installing a pump in a gas extraction well is to remove the liquids to ensure the well is functioning as intended. If water is left un-managed, liquids will accumulate within the casing of a vertical LFG extraction well and reduce the flow of LFG being collected. This will affect system collection efficiency, create regulatory compliance issues and promote surface emissions and odors. To overcome these issues and maintain gas collection system performance and efficiency, it is necessary to remove the accumulated liquid from the vertical landfill gas extraction wells.

1.0 Liquid Level Measurements in Vertical Gas Extraction Wells

There are currently three (3) methods used at Sunshine Canyon Landfill (SCL) to measure the liquid level inside a vertical gas extraction well. These methods include the following:

- Liquid Level Sounder
 - Standard water level meter which uses the conductivity of water, alarming with a signal when encountered.
- Bubbler Tube System
 - Compressor and PDA system developed by Plexus Controls where liquid level is calculated using the internal air compressor, the system pressurizes a hose installed permanently inside the well and calculates the liquid level from the pressure (differential pressure) value. When a well is under vacuum (or sealed), both hoses (low and high pressure) must be connected so that the liquid level calculated by the instrument is

based on the pressure of the liquid only and not a combination of the liquid pressure and well gas pressure (suction/vacuum).

- Downhole Camera
 - A 2-inch camera head and reel are lowered into the well casing and live footage is recorded and reviewed to determine the well integrity / potential functionality and visible water level in the well. The water level in each well is determined by the length of the camera and cable from ground surface to the water surface in the well casing. The following information is recorded during the camera inspection: Date, time, casing height above grade (ft), top of casing to perforations (when visible) (ft), top of casing to liquid (ft), and top of casing to bottom (ft).

Tetra Tech BAS (TT-BAS) is currently performing liquid level monitoring of the vertical gas extraction wells on behalf of Republic Services Inc. (RSI) at the following frequency:

- Each vertical gas extraction well is inspected with a well sounder semi-annually (twice per year).
- The water level in each vertical gas extraction well with a pump is measured with the bubbler tube system once per week, unless a more frequent interval is determined.
- Vertical gas extraction wells experiencing unexplained reduced flow rates of 50% or greater, while maintaining the same vacuum on the well, are identified during the twice monthly well monitoring and tuning and are then inspected with a downhole camera (assuming the wells have not been inspected with a camera during the past quarter). A minimum of twenty (20) wells per quarter are inspected to identify potential issues in the well casing (i.e. liquids, damage, etc...).

2.0 Criteria for Pump Installation

After the liquid level in a vertical gas extraction well is established, the data is analyzed to determine whether the installation of a pneumatic liquid extraction pump is warranted. It is important to prioritize the installation of pumps based on whether there are ongoing issues at or near the well. There are several factors to consider before a well is selected for pump installation (1 = Highest Priority):



1. Surface emission exceedances (and gas leaks above background levels) occurring near / around well (within 200 feet);
2. Lateral subsurface migration / increased methane level in a nearby perimeter probe;
3. Unexplained reduced flow rate (50% or greater while maintaining same vacuum) or static vacuum build up (with no flow) in well indicating limited collection;
4. A significant amount (30% or greater) of the gas extraction well perforations are blocked (assuming recharge);

Pneumatic pumps are constructed of corrosion resistant materials. The operation of the pump is controlled by air pressure, which pushes the liquid out of the pump and into the force main. Pumps are installed at low-points in the well casing (i.e. bottom of the well casing). These pumps require sufficient air pressure and flow to pump out the liquids from the well casing in order to function properly. Therefore, an air supply line has to be installed to each pump location. The pneumatic pumps being installed in the vertical LFG wells at SCL are PumpOne Environmental EP4-BL pumps and QED Environmental AP4+ Ultra pumps.

3.0 Inspection and Maintenance of Vertical LFG Wells with Pumps

TT-BAS currently performs weekly inspections of each vertical gas extraction well in which a pump is installed. TT-BAS uses the bubbler tube system for determination of the liquid level.

Each vertical gas extraction well with a pump is inspected weekly for the following:

- Well ID
- Date
- Depth to liquid (Ft)
- Pump in Well (Yes / No)
- Condensate and Air Line Connected (Yes / No)
- Pump Running / Operating (Yes / No)
- Pump Counter Reading (Cycles)
- Comments / Maintenance Notes



The bubbler tube data is reviewed and if any issues are identified, maintenance on the pump and or well is completed. Some of the issues identified which require maintenance include:

1. Pump is clogged or plugged and needs to be pulled out of the well and serviced / re-built;
2. Blockage identified in condensate conveyance line and needs to be resolved by either flushing the line with high pressure or cutting out the blockage;
 - a. It is recommended that when an HDPE leachate line is initially installed the line be flushed with water so that the dirt and pipe shavings be removed and prevent potential future clogging
3. Pump is stuck or jammed requiring the airline to be disconnected then reconnected in an effort to restore operation;
4. Condensate and airline removed due to active operations. Once work is completed in area, condensate and airline are installed / reconnected.
 - a. This information will be tracked on a weekly basis and reported so that everyone knows how long an area within the waste has not been monitored and/or pumped.

In order to eliminate delays in replacement of a pump not working, a supply of new or rebuilt and tested pumps will be on hand so the malfunctioning pump can be replaced immediately. Other inventory of parts such as fitting, counter, air regulator, flow meter, pipes, hoses, etc. will be available for immediate use.

Furthermore, the volume of leachate pumped from the gas well dewatering program will be calculated/measured using data collected from flow meters/totalizers installed on the main header lines being discharged into the sewer.



PROOF OF SERVICE BY MAIL

I, the undersigned, declare that I am employed in the **County of Los Angeles, State of California**. I am over the age of eighteen years and I am not a party to the within action. My business address is **21865 Copley Drive, Diamond Bar, California 91765**.

On **January 20, 2017** I deposited in the **United States Mail at Diamond Bar, California**, an envelope sealed and addressed to

**THOMAS BRUEN ESQ
LAW OFFICES OF
THOMAS M BRUEN
1990 N CALIFORNIA BLVD
STE 608
WALNUT CREEK CA 94596**

**WILLIAM BECK
LATROP GAGE
2345 GRAND BLVD
SUITE 2000
KANSAS CITY MO 64108**

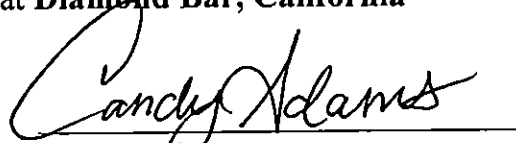
CASE FILE NO. 3448-14

which, envelope contained a true and correct copy of the attached **Findings and Decision and/or Minute Orders** before the **Hearing Board**, which envelope was then sealed and placed for collection, mailing and deposit on the above date, in the **United States Postal Service**, following ordinary business practices.

I am readily familiar with the practice of this office for collection and processing of correspondence for mailing with the **United States Postal Service**; this correspondence would be deposited with the **United States Postal Service** on the above date in the ordinary course of business.

I declare under penalty of perjury under the laws of the **State of California** that the foregoing is true and correct.

Executed on **January 20, 2017** at **Diamond Bar, California**


Candy Adams
Office Assistant