California Regional Water Quality Control Board
San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS
On the Reissuance of an NPDES Permit for Discharges from
Browning-Ferris Industries, Corinda Los Trancos (Ox Mountain) Landfill, San Mateo County

The Regional Water Board received written comments on a tentative order distributed for public comment from the following parties:

1. Browning-Ferris Industries (BFI)
2. United States Environmental Protection Agency (U.S. EPA)

This response to those comments quotes each comment in *italics*, followed by a staff response. For the full context and content of each comment, refer to the comment letters.

BROWNING-FERRIS INDUSTRIES (BFI)

Comments on Limitations and Discharge Requirements

BFI Comment 1.
…Table 4 states that Kevin Iler is the Division Manager. Please revise his title to Operations Manager.

Response to BFI Comment 1.
We agree and revised the tentative order.

BFI Comment 2.
…Section II.B.1. Paragraph 3. This paragraph presents the groundwater treatment system (GWTS) design elements, some of which have been modified since the prior permit was issued. However, in the interest of accuracy, and because the pressure transducer may not always be operational (it may be removed periodically for cleaning and/or repair), BFI requests that the first sentence in this paragraph be revised to read "…two 5,000-pound granular activated carbon filtration units installed in series, ***iron precipitation using pH control and air sparging*** *~~air sparger~~, and a low permeable soil-lined sedimentation basin that discharges through a riser pipe to Corinda Los Trancos Creek. A weir ~~and pressure transducer~~ flow measurement system is installed at the outlet from the riser pipe to Corinda Los Trancos Creek."*

Response to BFI Comment 2.
We revised the tentative order to describe iron precipitation rather than air sparging. However, we did not delete mention of the pressure transducer since it, or another device, would need to be

in place anytime there is discharge to enable continuous flow monitoring as proposed in the tentative order. Occasional removal of the transducer for maintenance would be allowed and in compliance with the permit when there is no discharge. We also see the need to allow flexibility should BFI choose to replace the transducer with different technology. Thus, we revised Finding II.B.1 (third paragraph) of the tentative order as follows:

> The groundwater treatment system consists of a basket strainer, a 13,000-gallon holding tank, three bag filters in series, two 5,000-pound granular activated carbon filtration units installed in series, ~~air sparger~~ iron precipitation using pH control and air sparging, and a low permeable soil-lined sedimentation basin that discharges through a riser pipe to Corinda Los Trancos Creek. A ~~weir and pressure transducer~~ flow measurement system, which currently consists of a weir and pressure transducer, is installed at the outlet from the riser pipe to Corinda Los Trancos Creek.

BFI Comment 3.
…Section II.F. Technology-Based Effluent Limitations. It is unclear if this section is applicable to the Ox Mountain Landfill. The current GWTS [groundwater treatment system] has been designed to treat the majority of expected pollutants in the groundwater. Subsequent to issuance of the tentative order, BFI submitted a report presenting the infeasibility of available technologies to treat ammonia; the only other key pollutant found in effluent that is not treated by the GWTS. Please clarify the need for this Section, or revise this section, as appropriate.

Response to BFI Comment 3.
This section is applicable to the Landfill. Finding II.F of the tentative order describes the legal basis for technology-based effluent limits in general and this permit specifically. Fact Sheet section IV.C.2.d explains that the tentative order does not establish technology-based effluent limits for ammonia.

BFI Comment 4.
…Section II.H. Water Quality Control Plan. Corinda Los Trancos Creek flow is intermittent within an agricultural area that may not be a suitable source for municipal and domestic supply. Since it is not identified in the current San Francisco Bay Basin Plan for municipal and domestic supply, the water within the creek should not be identified for municipal and domestic beneficial uses.

Response to BFI Comment 4.
We disagree. As Finding II.H (second paragraph) explains, the tentative order "implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply." Corinda Los Trancos Creek does not meet any of the exceptions set forth in that resolution; therefore, we consider it potentially suitable for municipal or domestic supply.

BFI Comment 5.
…Section IV.A.1. Table 6. BFI notes that the parameter, total suspended solids (TSS), has been added to the list of parameters with effluent limitations. Please clarify the reason for addition of this parameter.

Response to BFI Comment 5.
Fact Sheet section IV.C.2 explains the rationale for the TSS limits. The federal Clean Water Act requires that permits include applicable technology-based requirements at minimum. U.S. EPA established technology-based requirements for the Landfills Point Source Category (*Effluent Limitation Guidelines for the Landfills Point Source Category* [40 CFR 445]). Although this category does not include BFI's discharge, it is similar enough with respect to TSS that, based on Best Professional Judgment pursuant to 40 CFR 125.3, we included TSS limits in the tentative order. If operated properly, the treatment system is capable of meeting these TSS limits. Therefore, these limits are appropriate to ensure the proper operation of the treatment system.

BFI Comment 6.
…Section IV.A.1, Table 6. Based on review of the permit, for accuracy, the average monthly and maximum daily effluent limitations for zinc should be reversed.

Response to BFI Comment 6.
We agree and revised the tentative order (as shown with Response to U.S. EPA Comment 2).

BFI Comment 7.
…Section VI.C.2.b(i)(b). For accuracy, reference to Fact Sheet Table F-8 should be revised; the correct table is F-9 for the priority pollutants list.

Response to BFI Comment 7.
We agree and revised the tentative order.

BFI Comment 8.
…Section VI.C.3. For clarification, in the middle of the paragraph, would the ambient receiving water sample point after the discharge be equivalent to the former E-Pond, renamed RSW-002 point? This is a reasonably accessible point for sampling.

Response to BFI Comment 8.
We agree. The former E-POND is an acceptable sampling location for the Ambient Background Study and Report and other receiving water monitoring. For clarity, we revised Provision VI.C.3 of the tentative order as follows:

> The Discharger shall also collect background ambient receiving water monitoring data for priority pollutants that are required to perform a reasonable potential analysis and to calculate effluent limitations. The data on the conventional water quality parameters (pH, salinity, and hardness) shall also be sufficient to characterize these parameters in the ambient receiving water at a point after the discharge has mixed with the receiving waters<u>, such as at receiving water Monitoring Location RSW-002 as defined in the MRP</u>. These data shall be collected once during the permit term within 12 months prior to applying to

reissue the permit. The Discharger shall submit a report that presents all these data to the Regional Water Board no later than 180 days prior to the Order expiration date. The report shall be submitted with the application for permit reissuance.

BFI Comment 9.
…Section VI.C.4.b(v). Please clarify the annual reporting requirement referenced section. Section VI.C.3.b does not exist in the current tentative order.

Response to BFI Comment 9.
We agree and revised Provision VI.C.4 of the tentative order as follows:

a. ~~Pollutant Minimization Program for Pollutants with Effluent Limitations~~

The Discharger shall develop and conduct a Pollutant Minimization Program as further described below when there is evidence that a priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) and either:

(i) A sample result is reported as DNQ and the effluent limitation is less than the RL; or

(ii) A sample result is reported as ND and the effluent limitation is less than the MDL, using ~~SIP~~ definitions in Attachment A and reporting protocols described in the MRP.

b. ~~Pollutant Minimization Program Submittals for Pollutants with Effluent Limitations~~

If triggered by the reasons in section VI.C.4.a, above, the Discharger's Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals ~~acceptable to the Regional Water Board~~:

(i) Annual review and semi-annual monitoring of potential sources of the reportable priority pollutants. The Executive Officer may approve alternate measures, such as~~, which may include~~ fish tissue monitoring or ~~and~~ other bio-uptake sampling~~, or alternative measures approved by the Executive Officer~~ when ~~it is demonstrated that~~ source monitoring is unlikely to produce useful analytical data;

(ii) Quarterly monitoring for the reportable priority pollutants in the influent to the groundwater~~wastewater~~ treatment system. The Executive Officer may approve~~, or~~ alternative measures ~~approved by the Executive Officer~~ when ~~it is demonstrated that~~ influent monitoring is unlikely to produce useful analytical data;

(iii) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below effluent limitations;

(iv) Implementation of appropriate cost-effective control measures for the reportable priority pollutants, consistent with the control strategy; and

(v) An ~~Annual~~ annual report ~~required by section VI.C.4.b, above~~, which shall specifically include the following items:

(a) All Pollutant Minimization Program monitoring results for the previous year;

(b) List of potential sources of the reportable priority pollutants;

(c) Summary of all actions undertaken pursuant to the control strategy; and

(d) Description of actions to be taken in the following year.

BFI Comment 10.
…Section VI.C.7. Subsequent to issuance of the tentative order, BFI submitted the Ammonia Treatment Technology Report and concluded that of available technologies, it would be infeasible to treat ammonia at the landfill. To accurately address the recent report submittal, this section should be omitted from the permit.

Response to BFI Comment 10.
We agree and revised the tentative order.

BFI Comments 11.
[Provision VI.C.6 (last paragraph)], Footnote 8. At the bottom of the page, for accuracy, the word "Zeland" should be spelled "Zealand."

Response to BFI Comment 11.
We agree and revised the tentative order.

Comments on Attachment C – Process Flow Diagram

BFI Comment 12.
The title of this figure should be modified to omit the letter "T" in the word "LOST" to read "LOS."

Response to BFI Comment 12.
We agree and revised the tentative order.

Comments on Attachment D – Standard Provisions

BFI Comment 13.
…Section VII. Since the Ox Mountain GWTS [groundwater treatment system] is not a Publicly Owned Treatment Plant (POTW), this section is not applicable to this facility. BFI recommends that this section be omitted from the permit.

Response to BFI Comment 13.
We disagree. As explained in Fact Sheet section VII.A, these standard provisions must be included in every NPDES permit either expressly or by reference. Since the Ox Mountain Landfill is not a publically owned treatment works (POTW), the POTW requirements do not apply to the landfill's discharges.

Comments on Attachment E – Monitoring and Reporting Program (MRP)

BFI Comments 14-15.
…Section III. Table E-2. The GWTS [groundwater treatment system] is a closed system and the flows into the GWTS will be equivalent to the flows out of the GWTS. Therefore, BFI recommends removing the "Flow" parameter from this Influent Monitoring table and adding it into Table E-4 for Effluent Monitoring.

…Section III. Table E-2. With the removal of Flow from Table E-2, footnotes below Table E-2, should be revised to reflect the updated table by removing the reference to "gpd," "Continuous" sample type, and all of footnote [3].

Response to BFI Comments 14 - 15.
We agree and revised Monitoring and Reporting Program Table E-2 as follows:

Table E-2. Influent Monitoring

Parameter	Units[1]	Sample Type[2]	Minimum Sampling Frequency
~~Flow[3]~~	~~gpd~~	~~Continuous~~	~~1/Day~~
pH	Standard Units	Grab	1/Quarter
⋮	⋮	⋮	⋮
Vinyl Chloride	µg/L	Grab	1/Year

[1] Unit Abbreviations:
~~gpd = gallons per day~~
ºC = degree centigrade
mg/L = milligrams per liter
umhos/cm = micromhos per centimeter

[2] Sample Type Abbreviations
~~Continuous = measured continuously, and recorded and reported daily~~
Grab = Grab sample

~~[3] The following data shall also be reported monthly for influent flow:~~
~~Daily: Daily average flow (MGD)~~
~~Monthly: Monthly average flow (MGD)~~

BFI Comment 16.
…Section IV. Table E-3. This table describes the requirements for monitoring of effluent at point EFF-001, in the outfall from the sedimentation basin prior to Corinda Los Trancos Creek. However, as currently configured, flow is measured at the weir after the effluent mixes with spring water from the top of Corinda Los Trancos Creek. In addition, minor modifications to the footnotes should be made to more correctly correspond with the table. The following revisions should be made to the Footnotes below Table E-3:

Footnote [1] Add references to gpd, ^{o}C, and umhos/cm.

*Footnote [2] Remove C-24 and replace it with "**Continuous**" sample Type.*

*Footnote [3] Revise to read: "For effluent flows, **measurements will be obtained at the weir, including re-routed spring water, and** the following information shall also be reported monthly:" Also, because flows from the GWTS [groundwater treatment system] are relatively low, average daily and monthly flow are better measured in gallons per day (gpd) rather than Million Gallons per Day (MGD). Please revise the units accordingly.*

Response to BFI Comment 16.
We agree and revised Monitoring and Reporting Program Table E-3 as follows (these changes include revisions in response to U.S. U.S. EPA Comment 2):

Table E-3. Effluent Monitoring at EFF-001

Parameter	Units[1]	Sample Type[2]	Minimum Sampling Frequency
Flow Rate[3]	gpd	Continuous	Continuous/Recorded Daily
⋮	⋮	⋮	⋮
Chemical Oxygen Demand (COD)	mg/L	Grab	1/Quarter
Oil & Grease	mg/L	Grab	1/Quarter
Settleable Matter	ml/l-hr	Grab	1/Quarter
Nitrite	mg/L	Grab	1/Quarter
⋮	⋮	⋮	⋮
Chronic Toxicity[8]	chronic toxicity units	Grab	1/Quarter

Footnotes to Table E-3:

[1] Unit Abbreviations:
ºC = degree centigrade
mg/L = milligrams per liter
umhos/cm = micromhos per centimeter
gpd = gallons per day
mg/L = milligrams per liter
TUc = chronic toxicity unit

[2] Sample Type Abbreviations:
Continuous = Measured continuously, and recorded and reported daily
~~C-24 = 24-hour composite~~

[3] For effluent flows, the following information, measured at the weir and including re-routed spring water, shall also be reported monthly:
Daily: Daily average flow, Million Gallons per Day (~~MGD~~ gpd)
Monthly: Monthly average flow (~~MGD~~ gpd)

[4] The Discharger shall use ultra-clean sampling (U.S. EPA 1669) to the maximum extent practicable, and ultra-clean analytical methods (U.S. EPA 1631) for mercury monitoring.

⋮

BFI Comments 17-19.
…Section IV. Table E-4. As presented above, in discussion of Table E-2, to measure flows at the GWTS [groundwater treatment system], add ***Flow*** *to this table, to be measured in* ***gallons per day (gpd)****, with a sample type of* ***Continuous****, at least* ***once per day (1/Day)****.*

…Section IV. Table E-4. Bis(2-Ethylhexyl)Phthalate is a ubiquitous lab and field contaminant. It has not been confirmed at the Ox Mountain Landfill. Therefore, it is recommended that sampling frequency be conducted annually. BFI requests that the Minimum Sampling Frequency be reduced to once per year ***(1/Year)****.*

*…Section IV. Table E-4. In the interest of accuracy, the Footnotes header should reference Table E-****4****. In addition, references to ^{o}C, mg/L, TUc, and S.U. should be omitted from Footnote [1] Unit Abbreviations.*

Response to BFI Comments 17-19.
We agree and revised Monitoring and Reporting Program Table E-4 as follows:

Table E-4. Effluent Monitoring at EFF-001A

Parameter	Units[1]	Sample Type[2]	Minimum Sampling Frequency
Flow[3]	gpd	Continuous	1/Day
Total Phenols	mg/L	Grab	1/Quarter
Benzene	µg/L	Grab	1/Quarter
Bis(2-Ethylhexyl)Phthalate	µg/L	Grab	1/~~Quarter~~ Year
a-Terpineol,	mg/L	Grab	1/Year
Benzoic acid	mg/L	Grab	1/Year
p-Cresol	mg/L	Grab	1/Year
Vinyl Chloride	µg/L	Grab	1/Quarter

Footnotes to Table E-~~3~~4:

[1] Unit Abbreviations:
gpd = gallons per day
~~ºC = degree centigrade~~
mg/L = milligrams per liter
ug/L = micrograms per liter
~~TU+c = chronic toxicity unit~~
~~S.U. = pH standard units~~

[2] Sample Type Abbreviations:
Continuous = Measured continuously, and recorded and reported daily
Grab = Grab sample

BFI Comment 20.
…Section V.A.1. The text of this item references 96-hour continuous static bioassays. For accuracy, it should read: 96-hour continuous static ***renewal*** *bioassays."*

Response to BFI Comment 20.
We agree and revised the tentative order.

BFI Comment 21.
Section V.A.5. No dechlorination is performed at the GWTS [groundwater treatment system]. In addition, ammonia concentrations generally do not vary over the course of a test. Therefore, testing for ammonia is typically performed as an initial measurement at the time the sample is received at the testing laboratory. The paragraph should be revised to read: "~~Effluent must be dechlorinated prior to testing~~. Monitoring of the bioassay water shall include ***an initial ammonia measurement, and*** *~~on a daily basis~~, the following parameters: pH, dissolved oxygen, ~~ammonia (if toxicity is observed)~~, temperature, hardness, and alkalinity* ***on a daily basis.*** *These results shall be reported. If a violation of acute toxicity requirements occurs, the bioassay test shall be repeated with new fish as soon as practical and shall be repeated until a test fish survival rate of 90 percent or greater is observed. If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish* ***as soon as practical*** *and shall continue ~~as soon as practical~~ until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater)."*

Response to BFI Comment 21.
We mostly disagree. These standard bioassay test requirements ensure accurate, comparable results. Nevertheless, to clarify that dechlorination is unnecessary, we revised Monitoring and Reporting section V.A.5 as follows:

> ~~Effluent must be dechlorinated prior to testing.~~ Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity….

BFI Comment 22.
…Section V.B.1. As recommended by Pacific EcoRisk [BFI's contract laboratory for toxicity testing], it has been standard practice to run the chronic toxicity test using renewal samples collected on three days during a 7-day test period, rather than daily. Therefore, it is recommended that the second sentence in this section be revised to read: "Grab samples collected on ~~consecutive~~ ***three*** *days* ***over the 7-day test period (e.g., Monday, Wednesday, and Friday)*** *are required for toxicity tests requiring renewals."*

Response to BFI Comment 22.
We agree and revised the tentative order. Collecting and transporting daily samples in a manner consistent with good sampling and laboratory procedure from Ox Mountain Landfill's relatively remote location to its contract toxicity laboratory in Fairfield is difficult.

BFI Comment 23.
…Section V.B.1.d. For accuracy, on the 10th line of the paragraph, add a period after "with justification."

Response to BFI Comment 23.
We agree and revised the tentative order.

BFI Comment 24.
*…Section VI.A. Table E-5. In the interest of accuracy, the Footnotes header should reference Table E-**5**. In addition, a references to **ppt = parts per trillion** should be added to Footnote [1] Unit Abbreviations.*

Response to BFI Comment 24.
We agree and revised the tentative order.

BFI Comment 25.
*…Section VI.B. Table E-6. In the interest of accuracy, the Footnotes header should reference Table E-**6**. In addition, references to gpd, and µg/L should be omitted from Footnote [1] Unit Abbreviations.*

Response to BFI Comment 25.
We agree and revised the tentative order.

BFI Comment 26.
*…Section VII.D.1.f.2). Since the Ox Mountain Landfill GWTS [groundwater treatment system] treats groundwater from beneath the landfill, at the end of the last full line of this paragraph, the word "wastewater" should be replaced with "**groundwater**."*

Response to BFI Comment 26.
We disagree. This section revises Attachment G, Regional Standard Provisions, which supplements the federal Standard Provisions. While BFI treats and discharges a specific kind of wastewater – extracted contaminated groundwater – it still treats and discharges wastewater. The term "wastewater" is used throughout Attachment G.

BFI Comment 27.
…Section VII.D.1.f.6). It is not clear if this item is applicable to the Ox Mountain Landfill since it appears to relate to a wastewater treatment plant. BFI recommends that it be omitted.

Response to BFI Comment 27.
We disagree. This section revises Attachment G, Regional Standard Provisions, which supplements the federal Standard Provisions. It requires BFI to include the results of an annual facility inspection verifying the adequacy of the facility's Stormwater Pollution Prevention Plan in its annual report. As this section states, this element of the annual report is required if "the Discharger does not route all stormwater to the headworks of its wastewater treatment plant." Since BFI does not route stormwater to a headworks, this requirement applies.

BFI Comment 28.
…Section VII.D.1.f.7). Since the Ox Mountain Landfill does not operate a wastewater treatment plant, the paragraph should be revised to read: "...and the Spill Prevention Plan, so that..." In addition, remove the bracket "]" at the end of the paragraph.

Response to BFI Comment 28.
We disagree. This section revises Attachment G, Regional Standard Provisions, which supplements the federal Standard Provisions. This section refers to several reports required for all wastewater treatment facilities. BFI operates a specific kind of wastewater treatment facility (see Response to BFI Comment 26), thus the requirement to update the Wastewater Facilities Status Report applies. Specific elements of these reports that pertain only to municipal wastewater treatment plants can be noted as "not applicable" in the reports.

We revised the tentative order to correct the typographical error.

<u>Comments on Attachment F – Fact Sheet</u>

BFI Comment 29.
…Section I, Table F-1 states that Kevin Iler is the Division Manager. Please revise his title to Operations Manager.

Response to BFI Comment 29.
We agree and revised the tentative order.

BFI Comment 30.
…Section II.A. Because the pressure transducer may not always be operational (it may be removed periodically for cleaning and/or repair), and to allow for flexibility in achieving the objective of flow monitoring, BFI recommends that the second to last sentence in the first paragraph should be revised to read: "A weir ~~and pressure transducer~~ flow measurement system measures the total flow from the outlet of the riser pipe, including the spring water redirected from above the landfill. The weir is located approximately 200 feet downstream of the riser pipe inlet."

Response to BFI Comment 30.
We agree. See Response to BFI Comment 2.

BFI Comment 31.
*…Section II.D. The second to last paragraph in this section presents the current GWTS [groundwater treatment system] configuration. However, to correctly describe the current system, BFI recommends that the third from last paragraph [fifth sentence] read: "The Discharger implemented **pH control and** air sparging **systems** to reduce ~~dissolved~~ iron levels in early 2012, and reconfigured its drainage system so that the sedimentation basin could become a part of the treatment system providing for additional ~~dissolved~~ iron ~~reduction~~ <u>removal</u>."*

Response to BFI Comment 31.
We agree and revised the tentative order.

BFI Comment 32.
…Section IV.B.2. As stated above, because the pressure transducer may not always be operational when removed for cleaning and/or repair, and to allow for flexibility in achieving the objective of flow monitoring, the last bulleted item should be revised to read: "Installed flow

monitoring by a weir ~~and transducer~~ ***flow monitoring system*** *located at the outlet from the riser pipe, outside the sedimentation basin approximately 200 feet from the riser pipe inlet."*

Response to BFI Comment 32.
We agree. We revised the tentative order Fact Sheet section IV.B.2, as follows:

- Installed flow monitoring, which currently consists of a weir and pressure transducer ~~by a weir and transducer~~ located at the outlet from the riser pipe, outside the sedimentation basin approximately 200 feet from the riser pipe inlet.

BFI Comment 33.
…Section IV.C.2.d. Since the ammonia treatment technologies evaluation report was prepared after the tentative order was issued, this paragraph should be revised, starting with the second sentence to read: "Therefore, this Order does not establish technology-based limitations for ammonia. ~~Provision VI.C.7 requires the Discharger to study and report on the feasibility of applying further ammonia treatment technology at this site prior to the next permit reissuance.~~ ***A study evaluating ammonia treatment options indicated that it is infeasible to treat ammonia in the groundwater to the technology-based limit."***

Response to BFI Comment 33.
We agree and revised Fact Sheet section IV.C.2.d as follows:

> **Ammonia.** Ammonia data collected at the sedimentation basin discharge point ranges from non-detect to 13 mg/L, with a mean of 5.4 mg/L, indicating that it is infeasible for the current treatment technology at the site to meet the technology-based AMEL of 4.9 mg/L and MDEL of 10 mg/L. The Discharger submitted a report on the feasibility of adding additional ammonia treatment at the Facility (*Feasibility Study to Remove Ammonia From Groundwater as an Upgrade to the Groundwater Treatment System to Meet Permit Limits*, February 27, 2013) that concluded the available technologies are infeasible. Therefore, this Order does not establish technology-based limitations for ammonia. ~~Provision VI.C.7 requires the Discharger to study and report on the feasibility of applying further ammonia treatment technology at this site prior to the next permit reissuance.~~

BFI Comment 34.
…Section IV.C.2.e. Table F-7. There appear to be several errors in the table with daily maximum and monthly average values being reversed. For accuracy, the table should be revised….

Response to BFI Comment 34.
We agree and revised Fact Sheet Table F-7 as follows:

Table F-7. BPJ-Based Effluent Limitations

	Unit	Monthly Average	Daily Maximum
BOD_5	mg/L	~~140~~ 37	~~37~~ 140
TSS	mg/L	27	88
Vinyl Chloride	ug/L	--	0.5
Phenol	ug/L	~~26~~ 15	~~15~~ 26

Zinc	ug/L	~~200~~ 110	~~110~~ 200

BFI Comment 35.
…Section IV.D.3.d. Table F-9. At the bottom of the table, the Maximum Background or Minimum Detection Limit for Total Ammonia is reported to be 0.025 mg/L. It appears that this value may be un-ionized ammonia rather than total ammonia. Please verify and revise this value as appropriate.

Response to BFI Comment 35.
This value is correct as stated in the tentative order; it is for total ammonia.

BFI Comments 36-37.
*…Section IV.D.4.b. For accuracy, in the second full paragraph of this section, line six, add the word "to" so that the sentence reads: "…corresponds **to** the section of the creek...."*

*…Section IV.D.4.b(i). For accuracy at the end of this paragraph, please correct "Coridna" to "**Corinda**."*

Response to BFI Comments 36-37.
We agree and revised the tentative order.

BFI Comment 38.
…Section VI.A. For accuracy, please replace "chlorine" with "chloride" on line three.

Response to BFI Comment 38.
We agree and revised the tentative order.

BFI Comment 39.
…Section VII.B. Table F-11. When comparing the tables in the MRP with this table there are a few inconsistencies. Also, as presented in above (Page E-3), because the GWTS [groundwater treatment system] is a closed system, BFI requests that flow through the GWTS be measured at the effluent point after treatment. Therefore, BFI requests that continuous monitoring at Influent INF-001 be removed.

Response to BFI Comment 39.
See Response to BFI Comments 15-16 above and Response to BFI Comment 40 below.

BFI Comment 40.
*…Section VII.B. Table F-11. For accuracy, please delete the "C" before "BOD." In addition, since BOD is not included as a Parameter for the influent sample, please delete "1/Quarter" under Influent INF-001 on this line. Add "**Calcium**" to the list of Parameters and "**1/Quarter**" under the Influent INF-001 column. Add "**Vinyl Chloride**" to the Parameter column and "**1/Quarter**" under the Effluent EFF-001 and EFF-001A. To distinguish between analytes collected at the Effluent EFF-001 and EFF-001A sample locations, BFI recommends denoting samples collected at EFF-001A with an asterisk or other denotation. The asterisk would be added to correspond with the Parameters Total Phenols, Benzene, Vinyl Chloride,*

*Bis(2-ethylhexyl) phthalate, a-Terpineol, Benzoic Acid, and p-Cresol. A note defining this notation should be added to read: "**Note: *Indicates sample to be collected at EFFL-001A. All others are to be taken at EFFL-001.**" Finally, as requested above…, since Bis(2-Ethylhexyl)Phthalate is a ubiquitous lab and field contaminant, BFI requests that testing for this parameter be reduced to a frequency of "**1/Year**."*

Response to BFI Comment 40.
We agree and revised Fact Sheet Table F-11 as follows (we also added a footnote for parameters to be monitored at Monitoring Locations E-001 and E-001A, we added a footnote to indicate different receiving water monitoring frequencies at Monitoring Locations RSW-002 and RSW-003, and we revised oil and grease and settleable matter monitoring requirements as discussed in Response to U.S. EPA Comment 2):

Table F-11. Monitoring Requirements Summary

Parameter	Influent INF-001	Effluent EFF-001 or EFF-001A	Receiving Water
Flow	~~Continuous~~	Continuous [1]	1 / Quarter
pH	1 / Quarter	1 / Quarter	1 / Quarter [2]
Total Dissolved Solids (TDS)	1 / Quarter	1 / Quarter	--
Total Suspended Solids (TSS)	1 / Quarter	1 / Quarter	--
Total Oil and Grease	1 / Quarter	1 / Quarter	--
Settleable Matter	--	1 / Quarter	--
Ammonia (as Nitrogen)	1 / ~~Quarter~~	1 / Quarter	--
Acute Toxicity	--	1 / Quarter	--
Chronic Toxicity	--	1 / Quarter	--
Temperature	1 / Quarter	1 / Quarter	1 / Quarter [2]
Electrical Conductivity	1 / Quarter	1 / Quarter	--
Dissolved Oxygen (D.O.)		1 / Quarter	1 / Quarter [2]
~~C~~BOD	1 / Quarter	1 / Quarter	--
COD	--	1 / Quarter	--
Nitrite	--	1 / Quarter	--
Nitrate	--	1 / Quarter	--
Hardness	--	1 / Quarter	1 / Quarter [2]
Salinity	--	--	1 / Quarter [2]
Total Phenols	--	1 / Quarter [3]	--
Lead	--	1 / Quarter	--
Mercury	--	1 / Quarter	--
Selenium	--	1 / Quarter	--
Cyanide	--	1 / Quarter	--
Benzene	--	1 / Quarter [3]	--
Bis(2-ethylhexyl)phthalate	--	1 / ~~Quarter~~ Year [3]	--
Zinc	--	1 / Year	--
a-Terpineol,	--	1 / Year [3]	--
Benzoic acid	--	1 / Year [3]	--
p-Cresol	--	1 / Year [3]	--
Calcium	1 / Quarter	--	--
Magnesium	1 / Quarter	--	--
Sodium	1 / Quarter	--	--

Parameter	Influent INF-001	Effluent EFF-001 or EFF-001A	Receiving Water
Potassium	1 / Quarter	--	--
Sulfate (SO_4)	1 / Quarter	--	--
Bicarbonate (HCO_3)	1 / Quarter	--	--
Chlorine	1 / Quarter	--	--
Vinyl Chloride	1 / Year	1 / Quarter [3]	--
Standard Observations	--	--	1 / Quarter
Priority Pollutants	--	--	1 / Year

Footnotes to Table F-11:

[1] To be monitored at both Monitoring Locations E-001 and E-001A.

[2] To be monitored twice per year at Monitoring Locations RSW-002 and RSW-003.

[3] To be monitored at Monitoring Location EFF-001A; all other parameters are to be monitored at Monitoring Location EFF-001 (or Monitoring Location E-001A pursuant to footnote 1).

BFI Comment 41.
…Section VII.C.7. Since the Ammonia Treatment Technology Report has been submitted, reference to this provision should be omitted.

Response to BFI Comment 41.
We agree and revised the tentative order.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

U.S. EPA Comment 1.
The fact sheet states that the permit addresses only the discharge of treated groundwater, but also mentions that storm water drainage and roadwash are treated in the sedimentation basin prior to discharge. Please clarify the exact nature of the permitted discharge in both the fact sheet and Table 2 of the final permit.

Response to U.S. EPA Comment 1.
We agree and revised Table 2 of the tentative order as follows:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated Groundwater, Road Wash, and Stormwater	37º 29′ 34″ N	122º 24′ 42″ W	Corinda Los Trancos Creek

We revised Finding II.B.1 of the tentative order as follows:

> **Facility Description.** The Corinda Los Trancos (Ox Mountain) Landfill (hereinafter the Facility) is a Class III municipal refuse disposal site. Such facilities generate several types of wastewater, including leachate, truck and equipment wash water, stormwater, and polluted groundwater. This Order ~~only~~ addresses naturally occurring groundwater polluted as a result of groundwater infiltration into the landfill or by

pollutants released from the landfill liner system, and road wash and stormwater treated in the Facility's sedimentation basin.

We revised Fact Sheet section II (first paragraph) as follows:

> The Facility is located in Corinda Los Trancos Canyon, approximately 3 miles northeast of Half Moon Bay. Landfills of this type may generate several types of wastewater, including leachate, landfill gas condensate, truck and equipment wash water, stormwater, and polluted groundwater. This Order addresses ~~only~~ the discharge of treated extracted naturally occurring groundwater, polluted as a result of groundwater infiltration into the landfill or by pollutants released from the landfill liner system, and of road wash and stormwater treated in the Facility's sedimentation basin, to Corinda Los Trancos Creek.

U.S. EPA Comment 2.
I support your BPJ [Best Professional Judgment] application of EPA's ELGs [effluent limitation guidelines] for landfills to this permitted discharge. In addition, the final permit should be revised to include effluent limits for oil and grease and settleable matter, as specified in Basin Plan Table 4-2.

Response to U.S. EPA Comment 2.
We agree and revised Table 6 of the tentative order as follows (changes also reflect Response to BFI Comment 6):

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations[1]				Monitoring Location
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD_5	mg/L	37	140	---	---	EFF-001
⋮	⋮	⋮	⋮	⋮	⋮	⋮
Phenol	mg/L	0.015	0.026	---	---	EFF-001A
Oil & Grease	mg/L	10	20	---	---	EFF-001
Settleable Matter	ml/l-hr	0.1	0.2	---	---	EFF-001
Ammonia (as N)	mg/L	16	44	---	---	EFF-001
⋮	⋮	⋮	⋮	⋮	⋮	⋮
Zinc	µg/L	110~~200~~	~~110~~200	---	---	EFF-001

We revised Monitoring and Reporting Program Table E-3 as shown in Response to BFI Comment 16.

We added Fact Sheet section IV.C.2.f as follows:

> **Oil and Grease and Total Settleable Matter.** Limits for oil and grease and total settleable matter are based on Basin Plan Table 4-2, which requires oil and grease limits for all discharges and settleable matter limits for all discharges from sedimentation units.

We added the following to Fact Sheet section VI.B:

- Routine effluent monitoring for oil and grease and settleable matter has been established to determine compliance with effluent limits for these pollutants.

We revised Fact Sheet Table F-11 as shown in Response to BFI Comment 40.

U.S. EPA Comment 3.
I agree with your finding of the need for an effluent limit for chronic whole effluent toxicity.

Response to U.S. EPA Comment 3.
No response is required.

U.S. EPA Comment 4.
The effluent and receiving water minimum detection limits for some organic parameters with CTR criteria/Basin Plan objectives are high in comparison to those achieved under other NPDES permits issued by Regional Board 2. The minimum detection limits for these parameters should be improved during the term of the reissued permit.

Response to U.S. EPA Comment 4.
We agree. The tentative order requires the Discharger to comply with the minimum levels in Attachment G, Table C, List of Monitoring Parameters and Analytical Methods. Doing so will improve its detection limits.

U.S. EPA Comment 5.
The fact sheet for the final permit should discuss how the site is addressed/regulated for industrial storm water and sanitary wastewater.

Response to U.S. EPA Comment 5.
We agree. Stormwater at this site is regulated under the Industrial Storm Water General Permit (State Water Board Order 97-03-DWQ) and the General Permit for Storm Water Discharges Associated with Construction Activities (State Water Board Order 2009-0009-DWQ). Sanitary wastewater is disposed of either to a leach field (shop and offices located in the upper part of the active landfill) or by storage in above-ground tanks followed by trucking to a municipal wastewater treatment plant (offices located in the lower part of the Facility). The Regional Water Board does not regulate either disposal since disposal to the leach field would be regulated by the county, and disposal to the municipal treatment plant would be regulated by that municipality.

We revised Fact Sheet section I.B as follows:

> Discharge of treated groundwater from the Facility to Corinda Los Trancos Creek, a fresh water tributary to Pilarcitos Creek and water of the State and the United States, is currently regulated by Order No. R2-2007-0062 (CIWQS Regulatory Measure Number 332605, NPDES Permit No. CA0029947), which was adopted on August 8, 2007, became effective on September 1, 2007, and expired on August 31, 2012. The Discharger was also subject to Order No. R2-2007-0063, a Cease and Desist Order (CDO) issued to address the Discharger's inability to

immediately comply with Order No. R2-2007-0062. The CDO is discussed further in section II.D.1, below. Because the CDO was intended to enforce Order No. R2-2007-0062, and because the Discharger complied with the requirements of the CDO, it is no longer necessary and this Order rescinds it. Facility stormwater is regulated under the Industrial Storm Water General Permit (State Water Board Order 97-03-DWQ) and the General Permit for Storm Water Discharges Associated with Construction Activities (State Water Board Order 2009-0009-DWQ). Sanitary wastewater is disposed of either to a leach field (shop and offices located in the upper part of the Facility) or by storage in above-ground tanks followed by trucking to a municipal wastewater treatment plant (offices located in the lower part of the Facility). The Regional Water Board does not regulate the disposal of sanitary wastewater at the Facility.

U.S. EPA Comment 6.
During the term of the reissued permit, I recommend that more be done at the site to reduce the need for an ammonia mixing zone. This could include improvements in ammonia treatment for the treated groundwater discharge and limiting the frequency of discharge to the wet season only.

Response to U.S. EPA Comment 6
The ammonia mixing zone in the tentative order is based on available information and conservative assumptions. For future permit reissuances, we will re-evaluate the mixing zone and may re-evaluate whether additional treatment or a seasonal discharge prohibition makes sense. The proposed mixing zone extends from the sedimentation basin riser pipe (discharge point) underground for 200 feet to a flow measurement weir where the creek surfaces into a concrete drainage structure.

For the tentative order, we evaluated reasonable potential and calculated ammonia effluent limits based on the limited data available for sedimentation basin effluent (collected only since January 2010). The previous order required sedimentation basin influent monitoring, not effluent monitoring. The available effluent data better represent the discharge than the much larger influent data set. The tentative order requires more effluent samples in the future, which will facilitate refinement of the mixing zone.

Ammonia treatment is currently infeasible based on the BFI's recently-submitted report, *Feasibility Study to Remove Ammonia From Groundwater as an Upgrade to the Groundwater Treatment System to Meet Permit Limits* (February 27, 2013). This could change in the future, and we could re-evaluate treatment feasibility when the permit is reissued.

A seasonal discharge prohibition is currently unnecessary because BFI already minimizes dry weather discharges by reusing treated wastewater for dust control and other onsite purposes. This too could change in a future, and if so, we could re-evaluate the need to prohibit discharges during dry weather if necessary to protect water quality.