

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

RESPONSE TO WRITTEN COMMENTS

ON THE CEASE AND DESIST ORDER AND REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

Browning-Ferris Industries (BFI)
Corinda Los Trancos (Ox Mountain) Landfill
Half Moon Bay, San Mateo County, CA
NPDES Permit No. CA0029947

I. Browning-Ferris Industries (BFI) - July 10, 2007

II. Editorial Changes to Tentative Cease and Desist Order (CDO)

III. Editorial Changes to Tentative Order (TO)

Note: The format of this staff response begins with a brief introduction of the party's comments, followed with staff's response. Interested persons should refer to the original letters to ascertain the full substance and context of each comment. Text changes are shown using underline for added text and ~~striketrough~~ for deleted text.

I. Browning-Ferris Industries

Comments and Responses on the CDO:

BFI Comment 1.

BFI informs us that the description of the groundwater extraction and treatment plant as "consisting of two 2000-pound granular activated carbon filtration units and an air stripper" is incorrect. The groundwater extraction and treatment plant does not include an air stripper. BFI requests that this description be corrected on Page 1 of the tentative Cease and Desist Order (CDO); Page 6, Section II, Item B of the Tentative Order (TO); Page F-4, Section II, Item A, last paragraph, of the Fact Sheet; and that Attachment C, the Flow Schematic, be corrected to not include an air stripper. BFI suggests the following text:

"... consisting of two 2000-pound granular activated carbon filtration units ~~and an air stripper~~ installed in series."

Response 1.

The suggested revisions have been made in the Revised CDO and TO.

BFI Comment 2.

BFI requests that the previous sample location designations (INFL-1, EFFL-1, etc.) be retained for consistency with over 13 years of historical data and to facilitate future data retrieval and management. This comment applies to Tables 1 and 2, and action task a. of the tentative CDO; and Attachments C, E (Sections II et. seq.) and F (Section II, Table F-2, et. seq.) of the TO.

Response 2.

We have made the requested revisions to the CDO and TO.

BFI Comment 3.

Page 3, Table 2, action task a:

In addition to mercury and cyanide, please include interim effluent limitations for copper, nickel and silver as follows:

Copper	11.8 µg/L
Nickel	160 µg/L
Silver	4 µg/L

Deadline for all of the above: Upon effective date of the Order.

A justification for these interim effluent limits and compliance schedule is provided as Attachment A to this letter.

Response 3.

Based on BFI’s submittal, and on the Regional Water Board’s own analysis of BFI’s effluent data, the Regional Water Board concludes that BFI will not be able to immediately comply with the effluent limitations for copper, nickel, and silver, and will therefore discharge waste in violation of its NPDES permit. The Regional Water Board has therefore included these pollutants in the revised CDO. Based on the Regional Water Board’s calculations, taking the minimum of (1) the effluent limitation from the previous permit, or (2) the 99.87th percentile of the effluent monitoring results from May 2001 to May 2006, the interim limits are maximum daily effluent limitations (MDELs) of 12 µg/L for copper; 120 µg/L for nickel; and 4 µg/L for silver.

Several revisions to the CDO and the TO have been made accordingly:

CDO, Table 2, row a:

Action	Deadline						
	Mercury	Cyanide	Selenium	Copper	Nickel	Silver	Vinyl Chloride
a. Comply with the following interim effluent limits (at Monitoring Station EFF-001 EFFL-1): Mercury: Maximum daily effluent limit (MDEL) = 2.4 µg/L Cyanide: Maximum daily effluent limit MDEL= 5.2 µg/L Copper: MDEL = 12 µg/L Nickel: MDEL = 120 µg/L Silver: MDEL = 4 µg/L	Upon the effective date of this Order	Upon the effective date of this Order	Not Applicable	<u>Upon the effective date of this Order</u>	<u>Upon the effective date of this Order</u>	<u>Upon the effective date of this Order</u>	Not Applicable

TO, Fact Sheet, Section IV.C.4.b(1),(d-f):

(d) ~~*Infeasibility of Compliance with Final WQBELs.*~~ On October 27, 2006, the Discharger submitted a Feasibility Study in response to the Reasonable Potential Analysis (RPA), ~~which was prepared by Regional Water Board staff, which and~~ concluded that WQBELs are necessary for copper. In its study, the Discharger ~~asserts~~ asserted that Regional Water Board staff, by using inappropriate receiving water hardness figures and by failing to convert “dissolved metal” concentrations to “total recoverable metal,” did not determine appropriate water quality criteria for copper. The Discharger also asserted that when appropriate water quality criteria for copper are calculated, they are higher than those calculated by Regional Water Board staff; and, when appropriate water quality criteria for copper are calculated, there is, in fact, no reasonable potential for effluent concentrations of copper to contribute to exceedances of applicable water quality criteria; and ~~therefore, WQBELs for copper are not required.~~ In its Feasibility Study, the Discharger did not address the question of whether it is feasible to achieve immediate compliance with final WQBELs for copper.

Regional Water Board staff conducted an RPA for this facility using a background/receiving water hardness concentration of 73 mg/L CaCO₃, which is the lowest observed hardness concentration in the receiving water (at sampling station E-002) in 13 samples collected between April 17, 2002, and December 19, 2003. The average hardness in those 13 samples is 102 mg/L CaCO₃. If this average hardness value was used in the RPA, there would still be a finding of “reasonable potential” for copper. Regional Water Board staff also used the specific conversion factors that are presented in and required by the CTR and the SIP for converting “dissolved metal” to “total recoverable metal.” In its Feasibility Study, the Discharger did not present the background/receiving water hardness data, which it felt should be used to determine water quality criteria for copper; n or ~~did it present the conversion factors, which that~~ it felt should be used to determine water quality criteria for copper.

The Discharger presented a second infeasibility analysis as an attachment to its comments on the tentative draft of this Order. This infeasibility analysis asserts the Discharger cannot immediately comply with final WQBELs for copper. Regional Water Board staff examined the Discharger’s effluent data from May 2001 through May 2006. The 95th percentile of the effluent data set (11 µg/L) exceeds the AMEL (5.1 µg/L); the 99th percentile of the effluent data set (14 µg/L) exceeds the MDEL (10 µg/L); and the mean of the effluent data set (4.5 µg/L) is less than the long term average of the projected normal distribution of the effluent data set after accounting for effluent variability (3.3 µg/L). Therefore, the Regional Water Board concurs with the Discharger’s assertion of

~~infeasibility to comply. Because the Discharger did not present a basis for its assertion that Regional Water Board staff used inappropriate water quality criteria for copper in the RPA, Regional Water Board staff adhere to the conclusion that WQBELs are necessary for copper. Further, because the Discharger has not addressed the question of feasibility to comply with final WQBELs for copper, interim effluent limitations and a schedule for compliance with final WQBELs cannot be justified. The Order establishes final effluent limitations for copper.~~

(e) Need for Cease and Desist Order. Pursuant to State Water Board Order WQ-2007-0004, compliance schedules are not authorized for numeric objectives or criteria that were in effect prior to the SIP. This includes the Basin Plan objectives for copper. Because it is infeasible for the Discharger to immediately comply with final WQBELs for mercury, the Discharger will discharge waste in violation of this Order. Therefore, a Cease and Desist Order has been adopted concurrently with this Order. The Cease and Desist Order is necessary to ensure that the Discharger achieves compliance; it establishes time schedules for the Discharger to complete necessary investigative, preventive, and remedial actions to address its imminent and threatened violations.

~~(e)(f) Antibacksliding.~~ Antibacksliding requirements are satisfied, as the effluent limitations ~~being established for nickel by this Order~~ are more stringent than ~~effluent limitations for nickel that were those established by the previous permit~~ Order 93-146.

TO, Fact Sheet, Section IV.C.4.b(3),(d-f):

~~(d) Infeasibility of Compliance with Final WQBELs.~~ On October 27, 2006, the Discharger submitted a Feasibility Study in response to the Reasonable Potential Analysis (RPA), ~~which was prepared by Regional Water Board staff, which and~~ concluded that WQBELs are necessary for nickel. In its study, the Discharger ~~asserts~~ asserted that Regional Water Board staff, by using inappropriate receiving water hardness figures and by failing to convert “dissolved metal” concentrations to “total recoverable metal,” did not determine appropriate water quality criteria for nickel. The Discharger also asserted that when appropriate water quality criteria for nickel are calculated, they are higher than those calculated by Regional Water Board staff; and, when appropriate water quality criteria for nickel are calculated, there is, ~~in fact,~~ no reasonable potential for effluent concentrations of nickel to contribute to exceedances of applicable water quality criteria; and ~~therefore,~~ WQBELs for nickel are not required. In its Feasibility Study, the Discharger did not address the question of whether it is feasible to achieve immediate compliance with final WQBELs for nickel.

Regional Water Board staff conducted an RPA for this facility using a background/receiving water hardness concentration of 73 mg/L CaCO₃,

which is the lowest observed hardness concentration in the receiving water (at sampling station E-002) in 13 samples collected between April 17, 2002, and December 19, 2003. The average hardness in those 13 samples is 102 mg/L CaCO₃. If this average hardness value was used in the RPA, there would still be a finding of “reasonable potential” for nickel. Regional Water Board staff also used the specific conversion factors that are presented in and required by the CTR and the SIP for converting “dissolved metal” to “total recoverable metal.” In its Feasibility Study, the Discharger did not present the background/receiving water hardness data, which it felt should be used to determine water quality criteria for nickel; n or did it present the conversion factors, which that it felt should be used to determine water quality criteria for nickel.

The Discharger presented a second infeasibility analysis as an attachment to its comments on the tentative draft of this Order. This infeasibility analysis asserts the Discharger cannot immediately comply with final WQBELs for nickel. Regional Water Board staff examined the Discharger’s effluent data from May 2001 through May 2006. The 95th percentile of the effluent data set (54 µg/L) exceeds the AMEL (31 µg/L); the 99th percentile of the effluent data set (81 µg/L) exceeds the MDEL (70 µg/L); and the mean of the effluent data set (25 µg/L) is less than the long term average of the projected normal distribution of the effluent data set after accounting for effluent variability (18 µg/L). Therefore, the Regional Water Board concurs with the Discharger’s assertion of infeasibility to comply. Because the Discharger did not present a basis for its assertion that Regional Water Board staff used inappropriate water quality criteria for nickel in the RPA, Regional Water Board staff adhere to the conclusion that WQBELs are necessary for nickel. Further, because the Discharger has not addressed the question of feasibility to comply with final WQBELs for nickel, interim effluent limitations and a schedule for compliance with final WQBELs cannot be justified. The Order establishes final effluent limitations for nickel.

(e) *Need for Cease and Desist Order.* Pursuant to State Water Board Order WQ-2007-0004, compliance schedules are not authorized for numeric objectives or criteria that were in effect prior to the SIP. This includes the Basin Plan objectives for nickel. Because it is infeasible for the Discharger to immediately comply with final WQBELs for mercury, the Discharger will discharge waste in violation of this Order. Therefore, a Cease and Desist Order has been adopted concurrently with this Order. The Cease and Desist Order is necessary to ensure that the Discharger achieves compliance; it establishes time schedules for the Discharger to complete necessary investigative, preventive, and remedial actions to address its imminent and threatened violations.

(e)(f) *Antibacksliding.* Antibacksliding requirements are satisfied, as the effluent limitations ~~being~~ established for nickel by this Order are more

stringent than ~~effluent limitations for nickel that were~~ those established by the previous permit Order 93-146.

TO, Fact Sheet, Section IV.C.4.b(5),(d-f):

- (d) ~~*Infeasibility of Compliance with Final WQBELs.*~~ On October 27, 2006, the Discharger submitted a Feasibility Study in response to the Reasonable Potential Analysis (RPA), ~~which was prepared by Regional Water Board staff, which and~~ concluded that WQBELs are necessary for silver. In its study, the Discharger ~~asserts~~ asserted that Regional Water Board staff, by using inappropriate receiving water hardness figures and by failing to convert “dissolved metal” concentrations to “total recoverable metal,” did not determine appropriate water quality criteria for silver. The Discharger also asserted that when appropriate water quality criteria for silver are calculated, they are higher than those calculated by Regional Water Board staff; ~~and, when appropriate water quality criteria for silver are calculated,~~ there is, ~~in fact,~~ no reasonable potential for effluent concentrations of silver to contribute to exceedances of applicable water quality criteria; ~~and therefore,~~ WQBELs for silver are not required. In its Feasibility Study, the Discharger did not address the question of whether it is feasible to achieve immediate compliance with final WQBELs for silver.

Regional Water Board staff conducted an RPA for this facility using a background/receiving water hardness concentration of 73 mg/L CaCO₃, which is the lowest observed hardness concentration in the receiving water (at sampling station E-002) in 13 samples collected between April 17, 2002, and December 19, 2003. The average hardness in those 13 samples is 102 mg/L CaCO₃. If this average hardness value was used in the RPA, there would still be a finding of “reasonable potential” for silver. Regional Water Board staff also used the specific conversion factors that are presented in and required by the CTR and the SIP for converting “dissolved metal” to “total recoverable metal.” In its Feasibility Study, the Discharger did not present the background/receiving water hardness data, which it felt should be used to determine water quality criteria for silver; or did it present the conversion factors, which that it felt should be used to determine water quality criteria for silver.

The Discharger presented a second infeasibility analysis as an attachment to its comments on the tentative draft of this Order. This infeasibility analysis asserts the Discharger cannot immediately comply with final WQBELs for silver. Regional Water Board staff examined the Discharger’s effluent data from May 2001 through May 2006 and, due to a high percentage of non-detects (64%), was not able to perform a statistical analysis. Comparison of the MEC (9.0 µg/L) to the AMEL (1.0 µg/L) and MDEL (2.4 µg/L), however, indicates that the Discharger cannot meet the final limitations. Therefore, the Regional Water Board concurs with the Discharger’s assertion of infeasibility to comply. Because the Discharger

~~did not present a basis for its assertion that Regional Water Board staff used inappropriate water quality criteria for silver in the RPA, Regional Water Board staff adhere to the conclusion that WQBELs are necessary for silver. Further, because the Discharger has not addressed the question of feasibility to comply with final WQBELs for silver, interim effluent limitations and a schedule for compliance with final WQBELs cannot be justified. The Order establishes final effluent limitations for silver.~~

(e) Need for Cease and Desist Order. Pursuant to State Water Board Order WQ-2007-0004, compliance schedules are not authorized for numeric objectives or criteria that were in effect prior to the SIP. This includes the Basin Plan objectives for silver. Because it is infeasible for the Discharger to immediately comply with final WQBELs for mercury, the Discharger will discharge waste in violation of this Order. Therefore, a Cease and Desist Order has been adopted concurrently with this Order. The Cease and Desist Order is necessary to ensure that the Discharger achieves compliance; it establishes time schedules for the Discharger to complete necessary investigative, preventive, and remedial actions to address its imminent and threatened violations.

(e)(f) Antibalancing. Antibalancing requirements are satisfied, as the effluent limitations being established for silver by this Order are more stringent than effluent limitations for silver that were those established by the previous permit Order 93-146.

BFI Comment 4.

Page 3, Table 2, task b:

Replace existing text regarding implementation of pilot studies with the following suggested language:

Action	Deadline (for Cu, Ni, Ag, Hg, Se & CN)
<p><i>Implement preparation of a Sampling and Analysis Plan (SAP), for approval by the Regional Water Board, for a comprehensive groundwater treatment system monitoring program</i></p> <p><i>Implement monitoring program</i></p>	<p><i>Upon effective date of this Order</i></p> <p><i>Quarterly, for a period of two (2) years after SAP approval (anticipated to be completed by February 1, 2010)</i></p>

Development and implementation of a comprehensive monitoring program is required to fully evaluate the impacts of copper, nickel and silver on the receiving water, as those metals may be found in the water upgradient from the landfill at concentrations greater than effluent limitations (Refer to Justification for Compliance Schedule, Attachment A). Similarly, data presented in

Table 4 suggests that mercury could also be naturally occurring at concentrations exceeding the proposed limits. Therefore, mercury should likewise be included in the monitoring program. In addition, the program should also include testing for cyanide, as the data presented in Table 5 includes only two trace-level detections of cyanide in the past 13 years of monitoring, making a statistical evaluation of these detections impossible. Finally, data presented in Table 6 indicates that detectable concentrations of selenium over the past approximately 5 years are significantly (order of magnitude) higher than levels measured during the preceding approximately 8 years of Plant operation, indicating that a more rigorous sampling and testing protocol is required to ensure the validity and quality of the data.

Response 4

Based on discussions with the Discharger indicating that previous sampling and analytical protocol may have been flawed, the Regional Water Board agrees that the tasks required by the CDO should include improving sample collection and analytical protocol, and assessing the impact of the improved protocol. However, we think six months to investigate and improve sample and analytical protocol, and one year to monitor and report on the results, is a reasonable amount of time. If data based on improved sampling protocol provides evidence that copper, nickel, silver, mercury, selenium, or cyanide, do not violate or threaten to violate final effluent limits, monitoring of those pollutants will be continued. Otherwise, the more aggressive tasks, such as evaluation and pilot testing of treatment methods to remove metals, would be required.

Regarding naturally-occurring background concentrations of pollutants, if copper, nickel, silver, or mercury are present in the receiving water at concentrations greater than water quality objectives, that would by itself show reasonable potential for those pollutants, per the SIP. Background concentrations that exceed water quality objectives would demonstrate that the receiving water does not have sufficient assimilative capacity to protect its beneficial uses, hence reasonable potential would exist, and an effluent limit would be required. If this were the case, intake credits may be an option. The Discharger should collect the information necessary to justify intake credits if it chooses to pursue this option.

The Regional Water Board has revised the CDO to include the following schedule of tasks:

Table 2: Time Schedules and Prescribed Actions

Action	Deadline						
	Mercury	Cyanide	Selenium	Copper	Nickel	Silver	Vinyl Chloride
a. Comply with the following interim effluent limits (at Monitoring Station EFF-004 EFFL-1): Mercury: Maximum daily effluent limit (MDEL) = 2.4 µg/L Cyanide: Maximum daily effluent limit MDEL= 5.2 µg/L Copper: MDEL = 12 µg/L Nickel: MDEL = 120 µg/L Silver: MDEL = 4 µg/L	Upon the effective date of this Order	Upon the effective date of this Order	Not Applicable	<u>Upon the effective date of this Order</u>	<u>Upon the effective date of this Order</u>	<u>Upon the effective date of this Order</u>	Not Applicable

Re-issuance of NPDES Permit

Action	Deadline						
	Mercury	Cyanide	Selenium	Copper	Nickel	Silver	Vinyl Chloride
b. Investigate sampling and analytical protocol, develop comprehensive monitoring plan, and submit report.	Report by March 1, 2008						Not Applicable
c. Implement monitoring plan and submit report on effect of improved sampling and analytical protocol.	Report by March 1, 2009						Not Applicable
d. If data submitted in task c provide evidence that pollutant does not violate or threaten to violate final effluent limits specified in Effluent Limitations and Discharge Specifications A.2 of the Permit, then monitor and submit annual report.	Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program						Not Applicable
e. For vinyl chloride, and for mercury, cyanide, selenium, copper, nickel, and silver if data submitted in task c or d provide evidence of discharge that is or threatens to be out of compliance (as defined in Section 2.4.5 of the SIP) with final effluent limits, implement pilot studies evaluating improvements to the groundwater treatment system identified in the Discharger's Infeasibility Report (Permit Attachment H) likely to reduce concentrations of cyanide, mercury, selenium, copper, nickel, silver, and/or vinyl chloride from the groundwater treatment system, and therefore to receiving waters.	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order <u>March 1, 2009</u>	Upon the effective date of this Order
f. Evaluate and report on the results of the pilot studies in reducing concentrations of cyanide, mercury, selenium, copper, nickel, silver, and/or vinyl chloride from the groundwater treatment system.	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008

Re-issuance of NPDES Permit

Action	Deadline						
	Mercury	Cyanide	Selenium	Copper	Nickel	Silver	Vinyl Chloride
g. In the event that the pilot studies identified in the Discharger's Infeasibility Report (Permit Attachment H) performed in task c are insufficient for meeting discharge into compliance with final limits WQBELs specified in Effluent Limitations and Discharge Specifications A.2 of the Permit for cyanide, mercury, selenium, copper, nickel, silver, and/or vinyl chloride, identify additional treatment technologies and submit a schedule for implementation of additional actions to reduce the concentrations of these pollutants.	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008 <u>March 1, 2010</u>	September 1, 2008
h. Implement the improvements and modifications to the groundwater treatment system in accordance with the schedule submitted in tasks e or f and g, as appropriate, and submit annual status reports.	Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program						
i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit.	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010 <u>October 28, 2011</u>	April 28, 2010

BFI Comment 5.

Page 3, Table 2, task c, et seq.

Revise the remainder of Table 2 (starting with action task c) as suggested below:

Action	Deadline						
	Cu	CN	Hg	Ni	Se	Ag	Vy Cl
c. Implement field testing and improvements to the existing groundwater treatment system to reduce concentrations of vinyl chloride	Not Applicable						Upon effective date of this Order
d. Evaluate and report on the results of the groundwater treatment system improvements on reducing effluent concentrations of vinyl chloride	Not Applicable						September 1, 2008
e. In the event that monitoring indicates continued Reasonable Potential for copper, cyanide, mercury, nickel, selenium and/or silver to exceed WQBELs, evaluate treatment methodologies for these metals	Within six (6) months following completion of a two-year monitoring period (from task b above; anticipated to be completed by July 1, 2010)						NA

Re-issuance of NPDES Permit

f. Implement pilot studies evaluating groundwater treatment system modifications to reduce concentrations of copper, cyanide, mercury, nickel, selenium and/or silver	Within one (1) year of completing an evaluation, if feasible treatment technologies (task e above) are identified (anticipated to be completed by July 1, 2011)	NA
g. Evaluate and report on the results of the pilot studies on reducing effluent concentrations of copper, cyanide, mercury, nickel, selenium and/or silver. In the event that the pilot studies are insufficient for meeting final WQBELs, identify additional treatment technologies and submit a schedule for implementation of additional actions to reduce the concentrations of these metals	Within six (6) months of completing the pilot studies (task f above, anticipated to be completed by January 1, 2012)	NA
h. Implement the improvements and/or modifications to the groundwater treatment system in accordance with the schedule submitted in tasks d and/or g and submit annual status report	Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program	NA
i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit	January 1, 2013	April 28, 2010

Response 5.

Please see the response to comment 4.

Comments and Responses on the TO:

BFI Comment 1.

Page 6, Section II, Item B. See comment #1 to the Tentative CDO

Response 1.

See Response to Comment 1 to the Tentative CDO.

BFI Comment 2.

Page 15, Item C.2a Characterization of Receiving Water and Effluent for Toxic Pollutants. “The Discharger shall continue to monitor and evaluate receiving water and the discharge for Discharge Point 001 (measured at M-001) for the constituents listed in Enclosure A ...”

The Discharge Point 001 is currently designated as EFFL-1. This sentence should be revised as follows:

“The Discharger shall continue to monitor and evaluate receiving water and the discharge for Discharge Point 001 (measured at EFFL-1) for the constituents listed in Enclosure A ...”

Response 2.

The TO has been revised as requested.

BFI Comment 3.

Page C-1, Attachment C – Flow Schematic.

a. See comment #1 to the Tentative CDO

- b. *Subsequent to treatment through GAC and prior to the discharge to the Corinda Los Trancos creek, treated groundwater flows through a sedimentation basin, which also accepts surface water runoff from the landfill (covered under a different NPDES permit).*

Response 3.

Attachment C has been revised to include an updated flow schematic.

BFI Comment 4.

Page E-3, Attachment E, Sections II, III, IV, V, VIII. See comment #2 to the Tentative CDO.

Response 4.

Please see Response to Comment 2 on the Tentative CDO.

BFI Comment 5.

Page F-4, Attachment F, Section II, Item A, last paragraph. See comment #1 to the Tentative CDO.

Response 5.

Please see Response to Comment 1 on the Tentative CDO.

BFI Comment 6.

Page F-5, Table F-2. See comment #2 to the Tentative CDO.

Response 6.

Please see Response to Comment 2 on the Tentative CDO.

BFI Comment 7.

Pages F-18 through F-23, item b: (1) Copper, (3) Nickel and (5) Silver.

“Regional Water Board staff conducted an RPA for this facility using a background/ receiving water hardness of 73 mg/L CaCO₃, which is the lowest observed hardness concentration in the receiving water (at sampling station E-002) in 13 samples collected between April 17, 2002 and December 19, 2003. The average hardness in those 13 samples is 102 mg/L CaCO₃.”

As presented on the attached Table 7, there are no data for either April 17, 2002 or December 19, 2003 for sampling location E-002. Sampling dates for years 2002-2003 were in March, May-June, September and October-November. For these two years, hardness varied from 90 to 152 mg/L with an average of 115 mg/L, based on eight (8) measurements. Furthermore, the RPA for the effluent constituents (metals, VOCs, etc.) was performed for the period from approximately February 2001 through May 2006 (page F-13, item 3.a). Therefore, hardness data should be evaluated for at least the same period of time, which would result in a finding of hardness values between 82 and 152 mg/L with an average of 113 mg/L, based on 22 measurements. Since the start of monitoring in 1988, average hardness at sampling location E-002 was 114 mg/L. A statistical evaluation included in Attachment B indicates that hardness values of 73 mg/L and 102 mg/L are outside of the 95% confidence interval for the available 50 data points.

However, calculation of water quality based effluent limitation (WQBELs) using a hardness value of 114 mg/L, may still result in a finding of reasonable potential for copper and silver due to the potential exceedances of the average monthly effluent limits (AMELs). Because derivation of the revised WQBELs can not be accomplished prior to the timely adoption of the Orders, it is in the best interest of both the BFI and the Regional Water Board to establish the interim effluent limitations for copper, nickel and silver as proposed in Comment #3 to the Tentative Order, i.e., 11.8 mg/L for copper, 160 mg/L for nickel and 4 mg/L for silver.

Response 7.

Please see the response to comment 3 on the TO.

BFI Comment 8.

Page F-22, item (4) Selenium. Correct typographical error in paragraph (a): replace “nickel” with “selenium”

Response 8.

The typographical error has been corrected as requested.

BFI Comment 9.

Page F-26, Table F-6.

- a. Correct typographical error of background silver concentration from 16 µg/L to 1.6 µg/L.*
- b. Please note that due to the calculation of average values that includes usage of one-half of the method detection limit (MDL) in lieu of a detection, the calculated average of the effluent data points for mercury of 0.13 µg/L and corresponding standard deviation of 0.127 µg/L exceed the detected maximum effluent concentration (MEC) of 0.12 µg/L. This further underscores the need for a comprehensive monitoring program, which is anticipated to include sampling and testing methods, which will provide for significantly reduced MDLs.*

Response 9.

- a. The typographical error has been corrected as requested.
- b. This comment is noted.

BFI Comment 10.

Pages F-29 through F-31. See comment #2 to the Tentative CDO regarding re-designation of sampling locations.

Response 10.

Please see Response to Comment 2 on the Tentative CDO.

II. Editorial Changes to the Tentative CDO

Page 1, Table 1: Title changed as follows:

Table 1: Permit Effluent Limits ~~and Final Compliance Dates in this Order~~

III. Editorial Changes to the TO

Fact Sheet, Section VI.A, Influent Monitoring: Text deleted as follows:

- ~~The influent monitoring station is now identified as “INF 001”.~~

Fact Sheet, Section VI.B, Effluent Monitoring: Text deleted as follows:

- ~~The effluent monitoring station is now identified as “EFF 001”.~~