

**California Regional Water Quality Control Board**  
**San Francisco Bay Region**

**RESPONSE TO WRITTEN COMMENTS**

on April 2011 Tentative Order for  
USS POSCO Industries Pittsburg Plant  
900 Loveridge Road, Pittsburg, Contra Costa County

The Regional Water Board received written comments from the following parties on a tentative order distributed in April 2011 for public comment:

1. USS POSCO Industries, dated May 6, 2011
2. San Francisco Baykeeper, dated May 31, 2011

This response to their comments summarizes each comment in *italics* (quoted or paraphrased for clarity and brevity) followed by the Regional Water Board staff response. For the full content and context of each comment, refer to the comment letters. Regional Water Board staff also initiated a number of revisions to the tentative order. Revisions are shown in ~~strikeout~~ for deletions and underline for additions.

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**USS POSCO INDUSTRIES (UPI)**

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*UPI Comment 1*

*UPI requests that the Regional Water Board reconsider imposing Water Quality Based-Effluent Limitations (WQBELs) for aldrin based on a single unqualified sample result. This is obviously a laboratory false positive since aldrin was banned in the 1970s and is not a chemical present or used in any processes at the facility.*

Response to UPI Comment 1

We retained the aldrin WQBELs. They are necessary and appropriate because the effluent data show reasonable potential for aldrin to exceed water quality objectives based on State Implementation Policy (SIP) section 1.3. The maximum effluent concentration in one sample was greater than the water quality objective. Although UPI believes that the aldrin sample that triggered reasonable potential was a false positive, it has presented no evidence (such as laboratory quality assurance/quality control data or duplicate sample results) to substantiate its claim. Moreover, UPI certified in its March 2006 self-monitoring report that the value was true and accurate.

### UPI Comment 2

*UPI requests that the Regional Water Board reconsider imposing WQBELs for cadmium based on one value (1.2 µg/L) that exceeded the Lowest Criteria (C = 1.17 µg/L), which is a statistical outlier and likely a laboratory error. No other values were above water quality objectives, and the next highest reported value was 0.42 µg/L. All other values in the 57-value data set were lower than the detection limit. Recent effluent data are consistently below the detection limit of <0.1 µg/L. There is also an issue when comparing the maximum effluent concentration to a water quality objective with more significant digits, which would round to 1.2 µg/L.*

### Response to UPI Comment 2

We retained the cadmium WQBELs. As in the adrin case, cadmium WQBELs are necessary and appropriate because the effluent data show reasonable potential for cadmium to exceed water quality objectives (the maximum effluent concentration in one sample equals the water quality objective). Although UPI believes that the cadmium sample that triggered reasonable potential was a false positive, it has presented no evidence to substantiate its claim. Moreover, UPI certified in its November 2006 self-monitoring report that the value was true and accurate. The rounding of significant figures is irrelevant because SIP section 1.3 directs the Regional Water Board to find reasonable potential even when the maximum effluent concentration equals the water quality objective, which happens in this case after rounding.

### UPI Comment 3

*UPI requests that the Regional Water Board reconsider imposing WQBELs for Dioxin-TEQ based on a single quantified sample result, which is believed to be another laboratory false positive since dioxin is not a chemical present or used in any processes at the facility.*

### Response to UPI Comment 3

We retained the dioxin-TEQ WQBELs for the reasons set forth in Fact Sheet section IV.D.4.d.vi. As explained there, dioxin-TEQ WQBELs are necessary and appropriate because the effluent data show reasonable potential for dioxin-TEQ to exceed water quality objectives (the receiving water exceeds the narrative bioaccumulation objective for dioxins and furans, and dioxin congeners were detected in the effluent on one occasion). Although UPI believes that the sample that triggered reasonable potential was a false positive, it has presented no evidence to substantiate its claim, and it certified in its July 2009 self-monitoring report that the value was true and accurate. Dioxins and furans are ubiquitous and found in effluent from many facilities, including facilities that do not use dioxins and furans in any particular process.

UPI Comment 4

*Jeff Miller, PhD, DABT, President, Aqua-Science comments on UPI's behalf: "In reviewing your tentative NPDES Permit, I noticed the requirement to conduct your chronic toxicity tests using 'Dilution series 100%, 62.50%, 31.25%, 15.62%, 7.81%, 3.91%, where "%" is percent effluent as discharged, or as otherwise approved by the Executive Officer.' In our 30 years of experience in conducting chronic toxicity tests, I have never previously seen this requirement. In fact, this dilution series is not in agreement with USEPA recommendations (Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (USEPA 821-B-00-004, 2000 pp.5-1-3)). The USEPA document recommends a 0.5 dilution factor, e.g., 100, 50, 25, 12.5, and 6.25% effluent. This dilution factor would be appropriate for your toxicity tests since your chronic toxicity limit of 4 TUC (25%) is in the middle of this dilution series. I know of no justification for using the dilution factor stated in your tentative permit." UPI requests use of 100, 50, 25, 12.5, and 6.25% effluent dilution for chronic toxicity testing.*

Response to UPI Comment 4

We agree. We revised the dilution series in Monitoring and Reporting Program (Attachment E) section V.B.1.d as requested.

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**SAN FRANCISCO BAYKEEPER**

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Baykeeper Comment 1

*The Clean Water Act (CWA) anti-backsliding policy states, "A permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit." The Draft Permit violates this policy because it weakens the effluent limitations for four pollutants – zinc, naphthalene, tetrachloroethylene, and cyanide – without proper justification. To avoid violating the CWA's anti-backsliding policy, the Regional Water Board should make the effluent limitations at least as stringent as the limitations in the former permit.*

*At a minimum, the tentative order should justify the relaxed effluent limitations. The effluent limitations for zinc, naphthalene, and tetrachloroethylene are all based on the facility's estimated production levels, but the tentative order does not describe the Plant's production changes or confirm the need for increased limitations. Instead, the tentative order asserts that the proposed effluent limitations are "the same or more stringent than those in the previous permit" due to lower processing rates at the Plant.*

*In addition, the tentative order should specify which, if any, exception under the CWA allows the Regional Water Board to relax the effluent limitations. A full and detailed*

*justification of these changes would ensure the public that the Regional Water Board is in compliance with the CWA's anti-backsliding policy.*

#### Response to Baykeeper Comment 1

We revised the tentative order to retain the limits for zinc, naphthalene, and tetrachloroethylene from the previous permit. While the zinc, naphthalene, and tetrachloroethylene limitations in the April 2011 tentative order were consistent with the USEPA Effluent Limitation Guidelines based on current production rates, those limits were very high compared to the mass actually being discharged. Therefore, the higher limits are unnecessary and the revised tentative order retains the limits from the previous permit.

The April 2011 tentative order does not include technology-based cyanide effluent limits because the water quality-based effluent limitations are more stringent. Since the cyanide limits proposed are the same as those in the previous permit, there is no backsliding.

#### Baykeeper Comment 2

*According to the site-specific objectives for the San Francisco Bay, the maximum amount of cyanide that an entity may discharge into marine waters is, on average, 2.9 µg/L every 4 days and 9.4 µg/L every hour. In contrast, the tentative order allows the facility to discharge, on average, 6.8 µg/L of cyanide each month and a maximum of 14 µg/L of cyanide each day. Since the tentative order's cyanide effluent limitations are much more relaxed than the applicable site specific objectives, the Regional Water Board should revise the tentative order to make the cyanide effluent limitations at least as stringent as the site-specific objectives.*

*In addition, the tentative order's effluent limitations for copper are weaker than the most stringent water quality standards. According to the tentative order, "The most stringent applicable WQOs for copper are the Basin Plan's site-specific chronic and acute marine WQOs." This statement is inaccurate. Under the California Toxic Rule (CTR), the maximum amount of copper that an entity may discharge into saltwater is, on average, 3.1 µg/L every 4 days and 4.8 µg/L each day, making the CTR more stringent than the site-specific objectives. In contrast, the tentative order allows the facility to discharge, on average, 3.3 µg/L of copper each month and a maximum of 5.5 µg/L of copper each day. Since the CTR contains the most stringent water quality standards for copper in San Francisco Bay and the Sacramento-San Joaquin Delta, the Regional Water Board should base the tentative order's copper effluent limitations on the CTR. This change would be consistent with the rest of the tentative order because it repeatedly applies the most stringent water quality standards. At a minimum, the tentative order should justify the use of a less protective standard.*

*Even more, the tentative order impermissibly excludes discharges that have copper concentrations less than 15 µg/L from regulation, effectively rendering the effluent limitations for copper meaningless. Under this exemption, "Effluent sample*

*concentrations at Discharge Point No. 001 that exceed the copper limitations in Table 8 can, nevertheless, be considered in compliance with those limitations if the effluent copper concentration is also no greater than the intake water copper concentration [of 15 µg/L].” This unjustified exemption should be removed because the facility’s wastewater treatment plant could be used to remove copper from intake waters.*

#### Response to Baykeeper Comment 2

We did not revise the tentative order in response to this comment. The Basin Plan and the State Implementation Policy (SIP) allow consideration of dilution when calculating effluent limits. In accordance with Basin Plan Table 4-6, the appropriate dilution credit for this discharge is 2.25 (2.25 parts ambient water for each part discharge). Following the procedure set forth in SIP section 1.4 and accounting for dilution as allowed there results in the effluent limitations presented in the tentative order.

On the issue of copper, the site-specific copper objectives in the Basin Plan supersede those in the CTR; therefore, the CTR copper objectives do not apply. SIP section 5.2 allows the Regional Water Board to adopt site specific objectives in lieu of using CTR objectives. Also, federal regulations at 40 CFR §131.11(b) allow states to adopt water quality objectives that reflect site-specific conditions by using Clean Water Act section 304(a) guidance. Finally, the CTR preamble (65 FR 31686) explicitly states that California has the discretion to develop site specific objectives when statewide objectives (e.g., those in the CTR) appear to be over- or under-protective.

Furthermore, the tentative order allows intake water credits for copper consistent with SIP section 1.4.4 and, in doing so, does not penalize UPI for discharges with concentrations that are the same or lower than those in its intake water. As explained in Fact Sheet section IV.D.4.d.iv(d), the discharge meets SIP requirements for intake water credits. While UPI may be able to remove more copper through additional treatment, consistent with the SIP, we do not believe it is appropriate to require UPI to remove more copper than it adds during the course of its operations.

#### Baykeeper Comment 3

*The tentative order places effluent limitations on only two pollutants in the facility’s stormwater – pH and oil and grease. Since the facility is known to have a number of priority contaminants on its premises, including polychlorinated biphenols (PCBs), the tentative order must account for the other pollutants that could be present in the facility’s stormwater, including but not limited to total suspended solids, total organic carbon, and all priority pollutants. There are several uncovered areas within the facility that could easily contaminate stormwater with pollutants beyond just oil and grease, such as material storage, processing, and sludge disposal areas. Therefore, at a minimum, the Regional Water Board should (1) explain its rationale for placing only two effluent limitations on the facility’s stormwater, and (2) identify all contaminants with the potential for stormwater-borne discharges.*

*In addition, the tentative order is deficient because it requires UPI to test for priority pollutants in its stormwater from Discharge Point No. 002 only once every five years. Instead, the Regional Water Board should require UPI to test its stormwater for priority pollutants on an annual basis to ensure that the facility's stormwater is not causing further contamination of San Francisco Bay and the Sacramento-San Joaquin Delta.*

*The tentative order's Monitoring and Reporting Program should also require the Regional Water Board to conduct a reasonable potential analysis for all priority pollutants from Discharge Point No. 002 every year, rather than every five-year permit cycle. An annual reasonable potential analysis would be consistent with the tentative order's reopener provision, which allows the Regional Water Board to modify the Order before the end of a permit cycle if investigations show that a discharge has a reasonable potential to contribute to adverse water quality impacts.*

### Response to Baykeeper Comment 3

In response to this comment, we revised Fact Sheet sections IV.E and VI.B.2 to better explain the rationale for the stormwater limitations and monitoring requirements.

Most of the stormwater at the facility is routed to the treatment plant and discharged at Discharge Point E-001. Stormwater is only discharged at Discharge Point E-002 during relatively large storms, when the stormwater volume exceeds the pumping capacity or treatment plant capacity. This happened only five times during the term of the previous permit. As explained below, the stormwater effluent limits and monitoring requirements are based on the nature of facility operations and the resulting contaminants possibly in stormwater runoff.

The Discharger stores large quantities of unprocessed and processed steel rolls outdoors where they could be exposed to stormwater. There are about 10 PCB-containing transformers, but they are located in substations within buildings and not exposed to rain. Therefore, PCBs are not a significant concern for stormwater from Discharge Point E-002. Oil and grease and pH are of concern because the steel is exposed to oil and grease during processing and acids are used in electroplating processes. The oil and grease and pH limitations are retained from the previous permit and based on Basin Plan Table 4-2. Metals and other priority pollutants could also be of concern due to the Discharger's plating operations and use of cleaning solvents; however, data regarding such pollutants in the Discharger's stormwater are unavailable. The Monitoring and Reporting Program (Attachment E) requires monitoring for metals and other priority pollutants.

The tentative order retains a requirement for daily total suspended solids (TSS) monitoring during stormwater discharges, but like the previous permit, it does not impose a TSS limit. Data collected during the term of the previous permit show an average stormwater TSS concentration of about 40 mg/L, with a maximum of about 100 mg/L. These stormwater data are on par with TSS concentrations at the two nearest Regional Monitoring Program monitoring stations, where the year-round average is about 33 mg/L,

with a maximum of about 170 mg/L. A TSS limit is unnecessary because the discharge is comparable to the receiving water and does not cause nuisance or adversely affect beneficial uses (the applicable Basin Plan water quality objective). Also, the maximum TSS concentration did not exceed the 100 mg/L benchmark value contained in U.S. EPA's NPDES Stormwater Multi-Sector General Permit for Industrial Activities, Federal Register Volume 65, Number 210, October 30, 2000.

We have no total organic carbon data, but since there are no applicable water quality objectives for total organic carbon and the tentative order already contains monitoring requirements for organic priority pollutants, we see no reason to require total organic carbon monitoring, much less impose a limit.

The Regional Water Board must undertake a reasonable potential analysis when determining what water quality-based limits are necessary for a reissued permit. Annual analyses are unlikely to show sufficient changes to trigger reasonable potential; however, the tentative order does allow the Regional Water Board to reopen a permit if reasonable potential is found. In lieu of the Regional Water Board conducting annual reasonable potential analyses and possibly reopening the permit, Provision VI.C.4 of the tentative order serves a similar purpose by requiring implementation of a stormwater pollution prevention plan. Specifically, the Discharger must submit an updated plan annually if there is a change in operations that could substantially affect stormwater quality. The Discharger must also submit an annual stormwater report covering data for the previous wet weather season. The report is to include a summary of all sampling results, a discussion of the annual results compared to historical results (emphasizing pollutants detected at values higher than historic averages), and a discussion of source identification and control programs for pollutants without effluent limitations. This requirement is sufficient to protect receiving water quality during extreme storms.

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## **TENTATIVE ORDER REVISIONS**

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The revisions to the tentative order below reflect our response to comments above and include additional changes staff initiated to correct errors, clarify findings and requirements, and provide consistency among recent NPDES permits and with provisions for statewide electronic reporting. Additionally, monitoring requirements for priority pollutants were eliminated from Tables E-3 and E-4, but the same requirements were added to the Effluent Characterization Study (Provision VI.C.2).

### **Findings, Section II.A Background**

...USS-POSCO Industries (hereinafter Discharger) currently discharges under Order No. R2-2006-0029 (hereinafter previous permit) and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005002. Order No. R2-2010-0056

amended the previous permit to implement cyanide site specific objectives.... The discharge is also currently regulated under Order No. 2007-0077 (NPDES Permit CA0038849), as amended, which supersedes all requirements on mercury and PCBs from wastewater discharges in the region. This Order does not affect the mercury and PCBs permit.

**Findings, Section III.L  
Stringency of Requirements for Individual Pollutants**

...WQBELs have been derived to implement water quality objectives that protect beneficial uses.... The procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which USEPA approved on May 18, 2000. ~~All~~ Most beneficial uses and water quality objectives in the Basin Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000....

**Effluent Limitations and Discharge Specification, Section IV.A.1.a**

**Table 6. Production-Based Mass Emissions Limitations at Discharge Point No. 001.**

Parameter	Average Monthly (lbs/day)	Maximum Daily (lbs/day)
Total Suspended Solids	2,200	4,700
Oil and Grease	880	2,100
Lead	14	30
Zinc	<del>36</del> <u>5.6</u>	<del>71</del> <u>17</u>
Naphthalene	--	<del>0.98</del> <u>0.68</u>
Tetrachloroethylene	--	<del>1.5</del> <u>1.0</u>
Chromium	35	57
Silver	4.9	8.8

**Provisions, Section VI.C.2  
Effluent Characterization Study and Report – Discharge Point No. 001**

2. Effluent Characterization Study and Report ~~– Discharge Point No. 001~~

a. Study Elements

The Discharger shall continue to characterize and evaluate discharge from the following discharge points to verify that the “no” or “cannot determine” reasonable potential analysis conclusions of this Order remain valid and to inform the next permit reissuance. The Discharger shall collect representative samples of the discharges as set forth below with locations as defined MRP (Attachment E).

<u>Discharge Point</u>	<u>Monitoring Station</u>	<u>Minimum Frequency</u>
<u>001</u>	<u>EFF-001</u>	<u>Once per calendar year</u>

<u>002</u>	<u>EFF-002</u>	<u>Once per 5 years, within 12 months of the due date for application for permit reissuance</u>
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The samples shall be analyzed for the priority pollutants listed in Table C of the Regional Standard Provisions (Attachment G), except for those priority pollutants with effluent limitations where the MRP already requires monitoring. Compliance with this requirement shall be achieved in accordance with the specifications of Regional Standard Provisions (Attachment G) sections III.A.1 and III.A.2.

The Discharger shall evaluate on an annual basis if concentrations of any priority pollutant increase over past performance. The Discharger shall investigate the cause of any increase. The investigation may include, but need not be limited to, an increase in monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. This requirement may be satisfied through identification of the constituent as a “pollutant of concern” in the Discharger’s Pollutant Minimization Program, described in Provision VI.C.3.

b. Reporting Requirements

i. Routine Reporting

The Discharger shall, within 30 days of receipt of analytical results, report in the transmittal letter for the appropriate monthly self-monitoring report the following:

- a. Indication that a sample or samples for this characterization study was or were collected; and
- b. Identity of any and all priority pollutants detected above or within one order of magnitude of their applicable water quality criteria (see Fact Sheet [Attachment F] Table F-12 for the criteria), together with the detected concentrations of those pollutants.

ii. Annual Reporting

The Discharger shall provide a summary of the annual data evaluation and source investigation in the annual self-monitoring report.

iii. Final Report

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

The Discharger shall continue to monitor and evaluate the discharge from the Facility at Monitoring Location EFF-001 for the constituents listed in the Regional Standard Provisions (Attachment G) according to the sampling frequency specified in the MRP (Attachment E). Compliance with this requirement shall be achieved in accordance with the specifications stated in the Regional Standard Provisions.

The Discharger shall evaluate on an annual basis if concentrations of any constituent increase over past performance. The Discharger shall investigate the cause of any such increase. The investigation may include, but need not be limited to, an increase in the effluent monitoring frequency, monitoring of internal process streams, and monitoring of intake sources. This requirement may be satisfied through identification of these constituents as “pollutants of concern” in the Discharger’s Pollutant Minimization Program described in Provision VI.C.3, below. A summary of the annual evaluation of data and source investigation activities shall also be reported in the annual self-monitoring report.

A final report that presents all the data shall be submitted to the Regional Water Board no later than 180 days prior to the Order expiration date. This final report shall be submitted with the application for permit reissuance.

**Monitoring and Reporting Program (Attachment E), Section III, Table E-2  
Footnote 1**

<sup>††</sup> The Discharger shall report analytical results in its eSMR by manual entry or EDF/CDF (not as an attached file).

**Monitoring and Reporting Program (Attachment E), Section IV.A, Table E-3**

**Table E-3. Effluent Monitoring at Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>††</sup>
Flow Rate <sup>[1]†2</sup>	MG and MGD	Continuous	Continuous
pH <sup>[2]†3</sup>	standard units	Continuous	Continuous
Temperature <sup>[3]†4</sup>	°F	Continuous	Continuous
Total Suspended Solids (TSS)	mg/L & lbs/day	C-24	1/Month
Settleable Matter	ml/l/hr	Grab	1/Month
Oil and Grease <sup>[4]†5</sup>	mg/L & lbs/day	Grab	1/Month
Lead	µg/l & lbs/day	C-24	1/Month
Zinc	µg/l & lbs/day	C-24	1/Month
Silver	µg/l & lbs/day	C-24	1/Month
Cadmium	µg/L	C-24	1/Month
Chromium	µg/L & lbs/day	C-24	1/Month
Copper	µg/L	C-24	1/Month
Nickel	µg/L	C-24	1/Month
Cyanide <sup>[5]†6</sup>	µg/L	Grab	1/Month
Dioxin-TEQ	µg/L	Grab	1/Year

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Carbon Tetrachloride	µg/L	C-24	1/Month
Tetrachloroethylene	µg/L & lbs/day	Grab	1/Month
Naphthalene	µg/L & lbs/day	C-24	1/Month
Aldrin	µg/L	C-24	1/Month
Tributyltin <sup>[6][7]</sup>	µg/L	Grab	1/Year
<del>Other Priority Pollutants</del>	<del>µg/L</del>	<del>Grab</del>	<del>1/Year</del>
Standard Observations <sup>[7][8]</sup>	--	--	1/Day
Acute Toxicity <sup>[8][9]</sup>	% Survival	C-24	1/2 Weeks
Chronic Toxicity <sup>[9][10]</sup>	TU <sub>c</sub>	C-24	1/Quarter

Footnotes to Table E-3:

<sup>[1]</sup> ~~The Discharger shall report analytical results in its eSMR by manual entry or EDF/CDF (not as an attached file).~~

<sup>[2]</sup> The minimum ...

#### Monitoring and Reporting Program (Attachment E), Section IV.B, Table E-4

**Table E-4. Storm Water Monitoring at Monitoring Location EFF-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Flow Rate <sup>[2]</sup>	MG	Estimate	1/Day
Flow Duration	Minutes	Estimate	1/Day
pH	standard units	Grab	1/Day
Total Suspended Solids (TSS)	mg/L	Grab	1/Day
Oil and Grease	mg/L	Grab	1/Day
<del>Other Priority Pollutants</del>	<del>µg/L</del>	<del>Grab</del>	<del>1/Year</del>
Standard Observations	--	--	1/Day

#### Monitoring and Reporting Program (Attachment E), Section V.B.1 Whole Effluent Chronic Toxicity, Monitoring Requirements

d. *Dilution Series.* The Discharger shall conduct tests at 100%, ~~62.50~~ 50 %, ~~31.25~~ 25 %, ~~15.62~~ 12.5 %, and ~~7.81~~ 6.25 %, ~~3.91~~ %. The "%" represents percent effluent as discharged.

e. *Frequency.* The frequency of routine and accelerated chronic toxicity monitoring shall be as specified below.

(1) Routine Monitoring: Quarterly.

(2) Accelerated Monitoring: Monthly

The Discharger shall accelerate monitoring to monthly after exceeding a three-sample median of 4 TU<sub>c</sub><sup>1</sup> or a single sample maximum of 8 TU<sub>c</sub>. The Executive Officer may specify a different frequency for accelerated monitoring based on the TU<sub>c</sub> results.

- (3) Return to routine monitoring if accelerated monitoring does not exceed either “trigger” in (2), above.
- (4) If accelerated monitoring confirms consistent toxicity in excess of either “trigger” in (2), above, continue accelerated monitoring and initiate toxicity reduction evaluation (TRE) procedures in accordance with section B.3, below.
- (5) Return to routine monitoring after implementing appropriate elements of the TRE, and either the toxicity drops below both “triggers” in (2), above, or, based on the TRE results, the Executive Officer authorizes a return to routine monitoring.

Monitoring conducted pursuant to a TRE effort shall satisfy the requirements for routine and accelerated monitoring while the TRE investigation is underway.

- ~~e. *Accelerated Monitoring.* The Discharger shall accelerate monitoring to occur monthly when either of the following conditions is exceeded:~~
  - ~~i. Three sample median value of 4.0 chronic toxicity units (TUE).~~
  - ~~ii. Single sample maximum value of 8.0 TUE.~~

### **Monitoring and Reporting Program (Attachment E), Section VIII.B Self Monitoring Reports (SMRs)**

- 1. SMR Format for SMRs. At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit paper SMRs. The CIWQS website will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal.
- 2. SMR Due Dates and Contents. The Discharger shall submit SMRs by the due dates specified below:
  - a. Monthly SMR — Monthly SMRs shall be due 30 days after the end of each calendar month, covering that calendar month. The monthly SMR shall contain the applicable items described in V.B. and V.C. of both Attachments D and G of

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<sup>1</sup> A TU<sub>c</sub> equals 100 divided by the no observable effect level (NOEL). The NOEL is determined from IC<sub>25</sub>, EC<sub>25</sub>, or NOEC values. These terms, their usage, and other chronic toxicity monitoring program requirements are defined in the MRP (Attachment E).

this Order. See Provision VI.C.6 (Effluent Characterization Study and Report) of this Order for information that must also be reported with the monthly SMR.

- b. Annual SMR — Annual SMRs shall be due February 1 of each year, covering the previous calendar year. The annual SMR shall contain the items described in section V.C.1.f. of the Regional Standard Provisions (Attachment G). See also Provisions VI.C.2 (Effluent Characterization Study and Report — Discharge Point No. 001), I.C.4 (Stormwater Pollution Prevention Plan updates and annual reports), VI.C.5.c. (Main Wastewater Treatment Plant Reliability Assurance status reports), and VI.C.5.d. (Thermal Plume Biological Impact Study status reports) for requirements to submit reports with the annual the content of the Annual SMR.
- c. Additional Specifications for Submitting SMRs to CIWQS — If the Discharger submits SMRs to CIWQS, it shall submit analytical results and other information using one of the following methods:

**Table E-6. SMR Reporting for CIWQS**

<u>Parameter</u>	<u>Method of Reporting</u>	
	<u>EDF/CDF data upload or manual entry</u>	<u>Attached File</u>
<u>All parameters identified in influent, effluent, and receiving water monitoring tables (except Dissolved Oxygen and Temperature)</u>	<u>Required for All Results</u>	
<u>Dissolved Oxygen Temperature</u>	<u>Required for Monthly Maximum and Minimum Results Only <sup>(1)</sup></u>	<u>Discharger may use this method for all results or keep records</u>
<u>Cyanide Arsenic Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Zinc Dioxins and Furans (by U.S. EPA Method 1613)</u>	<u>Required for All Results <sup>(2)</sup></u>	
<u>Antimony Beryllium Thallium Pollutants by U.S. EPA Methods 601, 602, 608, 610, 614, 624, and 625</u>	<u>Not Required (unless identified in influent, effluent, or receiving water monitoring tables). But Encouraged <sup>(1)</sup></u>	<u>Discharger may use this method and submit results with application for permit reissuance, unless data submitted by CDF/EDF upload</u>
<u>Analytical Method</u>	<u>Not Required (Discharger may select “data unavailable”) <sup>(1)</sup></u>	
<u>Collection Time</u>	<u>Not Required</u>	

<u>Analysis Time</u>	<u>(Discharger may select “0:00”) <sup>(1)</sup></u>	
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Footnotes for Table E-6:

- (1) The Discharger shall continue to monitor at the minimum frequency specified in the monitoring tables, keep records of the measurements, and make the records available upon request.
- (2) These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this MRP or other provisions of this Order (except for biosolids, sludge, or ash provisions).

- 3. Monitoring Periods. Monitoring periods for all required monitoring shall be completed as set forth in the table below according to the following schedule:

Table E-7 6. Monitoring Periods and Reporting Schedule

<b>Sampling Frequency</b>	<b>Monitoring Period Begins On...</b>	<b>Monitoring Period</b>
Continuous	Day after permit effective date	All
1/Hour	Day after permit effective date	Hourly
1/Day	Day after permit effective date	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
1/Week	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday
1/Month	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
2/Year	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31
1/Year	January 1 following (or on) permit effective date	January 1 through December 31
<u>1/5 Years or “once per permit term”</u>	<u>Day after permit effective date</u>	<u>Once during the permit term within 12 months prior to applying for permit reissuance.</u>
1/Discharge Event	Anytime during the discharge event or as soon as possible after aware of the event	At a time when sampling can characterize the discharge event

- 4. ML and MDL Reporting of ML and MDL. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL); as determined by the procedure in 40 CFR 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified" or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers ~~considered~~ appropriate ~~by the laboratory~~.
- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected" or ND.
- d. The Dischargers ~~is~~ ~~are~~ to instruct laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

**Fact Sheet (Attachment F), Section IV.C.3  
Technology-Based Effluent Limitations, Limitations Calculations**

...The technology-based limitations in this Order are the same or more stringent than those in the previous permit. They are more stringent due to lower process rates than in the past. For zinc, naphthalene, and tetrachloroethylene, this Order retained the limits from the previous permit because they are more stringent than the newly-calculated limits. This Order does ~~did~~ not apply the technology-based limitations for cadmium, copper, nickel, and cyanide because the water quality-based limitations discussed in fact sheet section IV.D are more stringent. This Order also did not apply the technology-based limitation for total toxic organics because the discharge has very low concentrations of total toxic organics compared to the technology-based limitation. The highest total toxic organics concentration from 2006 through 2010 was 6.2  $\mu\text{g/L}$ , or about 0.29% of the ELG (2130  $\mu\text{g/L}$ ).

**Fact Sheet (Attachment F), Section IV.E  
Effluent Limitations – Discharge Point No. 002**

Most Facility storm water is routed to the treatment plant and discharged at Discharge Point E-001. Storm water is only discharged at Discharge Point E-002 during relatively large storms, when the storm water volume exceeds the pumping capacity or treatment plant capacity. This happened only five times during the term of the previous permit.

The storm water effluent limits are based on the nature of Facility operations and the resulting contaminants possibly in storm water runoff. The Discharger stores large quantities of unprocessed and processed steel rolls outdoors where they could be exposed to storm water. Oil and grease and pH are of concern because the steel is exposed to oil and grease during processing and acids are used in electroplating processes. The oil and grease and pH limitations in the table below are retained from the previous permit and based on Basin Plan Table 4-2. Metals and other priority pollutants could also be of concern due to the Discharger's plating operations and use of cleaning solvents; however, data regarding such pollutants in the Discharger's stormwater are unavailable. The Monitoring and Reporting Program (Attachment E) requires monitoring for metals and other priority pollutants. For storm water, technology based effluent limitations for pH and oil and grease are based on Table 4-2 and are summarized in the Table F-12:

#### **Fact Sheet (Attachment F), Section IV.F Anti-Backsliding and Antidegradation**

40 CFR 131.12 requires that State water quality standards include an antidegradation policy consistent with federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, which incorporates federal policy where federal policy applies. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both State and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16.

This Order continues the status quo with respect to the level of discharge authorized in the previous permit and thus there will be no change in water quality beyond the level authorized in the last permit. The limitations in this Order comply with antidegradation requirements because they hold the Discharger to performance levels that will neither cause nor contribute to water quality impairment, nor further water quality degradation. This is because this Order does not provide for an increase in the permitted design flow, allow for a reduced level of treatment, or increase effluent limitations.

~~The standards setting processes for copper and cyanide addressed antidegradation. The copper and cyanide limits in this Order are consistent with the antidegradation analyses prepared for these site specific objectives. The Basin Plan requires that permits based on the copper and cyanide site specific objectives also require copper and cyanide action plans. This Order includes such plans (see Sections VI.C.5.a and b).~~

Because antidegradation requirements are met, there will be no lowering of water quality beyond the current level authorized in the previous permit, which is the baseline by which to measure whether degradation will occur. Therefore, further analysis in this permit is unnecessary, and findings authorizing degradation are thus unnecessary. The discharge is consistent with 40 CFR 131.12 and State Water Board Resolution No. 68-16.

#### 1. Technology-Based Limitations at Discharge Point 001

- a. ~~Less Stringent Limitations. There are no technology-based limitations for zinc, naphthalene, and tetrachloroethylene less stringent than the previous permit. The derivation of technology-based limits depends on the Facility's production rate for each process. Production rates for certain plant processes increased, resulting in higher effluent limitations for certain pollutants. Such a change in effluent limitations is consistent with CWA section 402(o)(2)(A), which allows a reissued permit to include less stringent limitations when a material and substantial alteration to the permitted facility has occurred after the previous limitations became effective. In these circumstances, technology-based effluent limitations are still consistent with applicable requirements of 40 CFR 420 and 40 CFR 433.~~
  - b. More Stringent Limitations....
  - c. Limitations Retained from the Previous Permit....
  - d. Limitations Not Retained from the Previous Permit....
2. WQBELs at Discharge Point 001
- a. Less Stringent Limitations. There are no WQBELs less stringent than the previous permit.
  - b a. WQBELs Retained from the Previous Permit....
  - c b. New WQBELs....
  - d e. WQBELs Not Retained from the Previous Permit. This Order does not retain WQBELs for chlorodibromomethane, dichlorobromomethane, and mercury. This Order does not retain chlorodibromomethane and dichlorobromomethane WQBELs because the RPA did not show reasonable potential for these pollutants to violate WQOs. Elimination of WQBELs for these pollutants is consistent with State Water Board Order No. WQ-2001-16, and does not violate anti-backsliding policies. It is also consistent with antidegradation policies because the reasonable potential analysis shows these pollutants have no bearing on New York Slough water quality. This Order does not retain mercury WQBELs because mercury is now regulated under Regional Water Board Order No. R2-2007-0077.

**Fact Sheet (Attachment F), Section VI.B.2  
Effluent Monitoring Requirements, Discharge Point No. 002**

This Order carries over most of the existing monitoring requirements ~~for all parameters~~ from the previous permit. Monitoring requirements for priority pollutants have been added to this Order so that an RPA can be performed for the next permit cycle.

Monitoring requirements for standard observations have been added to this Order to be consistent with similar facilities in the region. Monitoring for specific conductance has been eliminated because it is unnecessary. Specific conductance measurements provide an estimate of salinity. No salinity would be expected at Discharge Point No. 002 because it is storm water.

**Fact Sheet (Attachment F), Section VII.B  
Monitoring and Reporting Requirements (Provision VI.B)**

The Discharger is required to monitor the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the MRP (**Attachment E**), Standard Provisions (Attachment D), and the Regional Standard Provisions (**Attachment G**). This provision requires compliance with these documents and is authorized by based on 40 CFR 122.41(h) and (j) ~~122.63~~, and CWC sections 13267 and 13383.