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FACT SHEET
for

NPDES PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR

KOBE PRECISION, INC.
HAYWARD, ALAMEDA COUNTY

NPDES PERMIT NO. CA0030112
ORDER NO. R2-2005-XXXX

PUBLIC NOTICE:

Written Comments

- Interested persons are invited to submit written comments concerning this draft permit.
- Comments must be submitted to the Regional Board no later than 5:00 p.m., September 9, 2005.
- Send comments to the attention of Ann M. Powell.

Public Hearing

- The draft permit will be considered for adoption by the Regional Board at a public hearing during the Board's regular monthly meeting at: Elihu Harris State Office Building, 1515 Clay Street, Oakland, CA; 1st floor Auditorium.
- This meeting will be held on: September 21, 2005, starting at 9:00 am.

Additional Information

- For additional information about this matter, interested persons should contact the Regional Water Board staff member: Mr. Daniel Leva
phone: (510) 622-2415
email: dleva@waterboards.ca.gov

This Fact Sheet contains information regarding the reissuance of waste discharge requirements and the National Pollutant Discharge Elimination System (NPDES) permit for Kobe Precision, Inc., Alameda County, for discharging reverse osmosis reject water, generated during production of high purity water, into the Alameda Flood Control and Water Conservation District Zone 3, Line D – an engineering flood control channel, which discharges into the Lower San Francisco Bay. The Fact Sheet describes the factual, legal, and methodological basis for the sections addressed in the proposed permit and provides supporting documentation to explain the rationale and assumptions used in deriving the effluent limitations.

I. INTRODUCTION

The Discharger applied for reissuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the NPDES program. The application and Report of Waste Discharge are dated April 10, 2001. Order No. R2-2005-xxxx regulates only the discharge of RO concentrate to the Alameda Flood Control and Water Conservation District flood control channel.

1. Facility Description

A description of the facility is provided in Finding 2 of this Order.

2. Wastewater Description

A description of the wastewater description is provided in Findings 5 through 12 of this Order.

3. Receiving Water Beneficial Uses

The beneficial uses are described in Finding 14 of this Order.

5. Receiving Water Salinity

The receiving water salinity is described in Findings 18 and 19 of this Order.

6. Receiving Water Hardness

The receiving water hardness is described in Findings 18 and 19 of this Order.

II. DESCRIPTION OF EFFLUENT

Order No. 97-141 established effluent limitations for chlorine, pH, and acute toxicity. Table A, below, presents a summary of self-monitoring data for pH, chlorine residual, and discharge flow rate generated over the period of January 2002 through September 2004.

Table A - Summary of Discharge Data

Parameter	Units	2002	2003	2004 ^[1]
Flow				
Avg Daily Discharge ^[2]	gpd	58,000	61,000	70,000
Max Daily Discharge	gpd	185,000	367,000	203,000
pH				
RO Unit No. 1	pH s.u.	6.1 – 9.9	6.5 – 8.3	6.8 – 8.2
RO Unit No.2	pH s.u.	6.1 – 9.4	6.5 – 8.4	6.9 – 8.3
Chlorine	Daily monitoring consistently showed no chlorine residual in RO concentrate discharged from Unit Nos. 1 and 2, a finding which is consistent with the addition of biosulfite, a reducing agent, to RO feedwater.			

^[1] Only self-monitoring data for January through September, 2004 was used in this summary.

^[2] Average daily discharge is based on the Discharger's reporting of flow, which shows that, typically, discharges occur on the weekdays. Figures in this table reflect operation 365 days per year; i.e., a flow of 0.0 gpd for days when there was no discharge was used to determine average daily flow rates.

Acute toxicity testing has been performed quarterly on effluent samples and has shown 100 percent survival of test organisms in all quarterly tests from February 2001 through August 2004.

Table B - Summary of Acute Toxicity Data

Acute Toxicity Monitoring Results	
Test Period	Results (% Survival)
February 13 – 17, 2001	100
August 8 – September 1, 2001	100
December 14 – 18, 2001	100
January 4 – 8, 2002	100
February 15 – 19, 2002	100
May 10 – 14, 2002	100
August 20 – 24, 2002	100
December 5 – 9, 2002	100
February 14 – 18, 2003	100
June 7 – 11, 2003	100
September 6 – 10, 2003	100
November 25 – 29, 2003	100
December 2 – 6, 2003	100
February 5 – 9, 2004	100
May 11 – 15, 2004	100
August 6 – 10, 2004	100

On February 1, 2001, samples of wastewater (RO concentrate) from Unit No. 2 were collected and submitted for analysis for the priority pollutants. Results are presented in Table E of this Fact Sheet in the discussion of the reasonable potential analysis. Effluent samples collected on February 1, 2001 were also analyzed for conventional and non-conventional parameters with the following results.

Table C - Summary of Conventional and Non-Conventional Data

Parameter	Results
Chemical Oxygen Demand	< 20 mg/L
Biochemical Oxygen Demand	100 mg/L (estimated)
Oil and Grease	< 5.0 mg/L
Total Phosphorous	0.95 mg/L
Sulfide	< 1.0 mg/L
Sulfite	< 1.0 mg/L
Total Organic Carbon	4.1 mg/L
Total Suspended Solids	< 5.0 mg/L
Bromide	< 2.5 mg/L
Fluoride	2.5 mg/L
Nitrite	< 0.5 mg/L
Nitrate	< 0.5 mg/L as N
Ammonia	< 0.1 mg/L as N
Kjeldahl Nitrogen	< 0.1 mg/L as N
Sulfate	27 mg/L
MBAS	< 0.1 mg/L
Total Coliform Bacteria	< 2 per 100 mL
Fecal Coliform Bacteria	< 2 per 100 mL

III. GENERAL RATIONALE AND REGULATORY BASES

- the Federal *Water Pollution Control Act*, Sections 301 through 305, and 307, and amendments thereto, as applicable (the Clean Water Act – the CWA);
- the Board’s June 21, 1995 *Water Quality Control Plan San Francisco Bay Basin (Region 2)* (the Basin Plan), and amendments thereto, as subsequently approved by the State Water Resources Control Board (the State Board), the Office of Administrative Law (OAL) and the U.S. EPA;
- the State Water Resource Control Board’s (the State Board’s) March 2, 2000 *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (the State Implementation Plan - the SIP), as subsequently approved by the OAL and the U.S. EPA;
- the U.S. EPA’s May 18, 2000 *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (the California Toxics Rule – the CTR);
- the U.S. EPA’s National Toxics Rule as promulgated [Federal Register Volume 57, 22 December 1992, page 60848] and subsequently amended (the NTR);
- the U.S. EPA’s *Quality Criteria for Water* [EPA 440/5-86-001, 1986], and subsequent amendments, (the U.S. EPA Gold Book);
- applicable Federal Regulations [40 CFR Parts 122 and 131];

- 40 CFR Part 131.36(b) and amended [Federal Register Volume 60, Number 86, 4 May 1995, pages 22229-22237];
- the U.S. EPA’s December 10, 1998 *National Recommended Water Quality Criteria* compilation [Federal Register Vol. 63, No. 237, pp. 68354-68364];
- the U.S. EPA’s December 27, 2002 *Revision of National Recommended Water Quality Criteria* compilation [Federal Register Vol. 67, No. 249, pp. 79091-79095]; and
- guidance provided with State Board actions remanding permits to the Board for further consideration.

IV. SPECIFIC RATIONALE

Several specific factors influenced the development of limitations and requirements in the proposed Order.

1. Recent Facility Performance

Section 402 (o) of the Clean Water Act (CWA) and 40 CFR 122.44 (l) require that water quality-based effluent limitations (WQBELs) in re-issued permits be at least as stringent as in the previous permit. The SIP specifies that interim effluent limitations, if required, must be based on current facility performance or on previous permit limitations whichever is more stringent (unless anti-backsliding requirements are met). In determining what constitutes “recent plant performance,” best professional judgment (BPJ) was used. Effluent data collected from 2001 through 2004 for conventional and toxic pollutants are considered representative of recent plant performance.

2. Impaired Water Bodies on 303 (d) List

CWA Section 303 (d) requires states to identify waters for which implementation of technology-based effluent limitations has not been stringent enough to attain water quality standards for those waters. On June 6, 2003 the U.S. EPA approved the State’s updated list of 303 (d) impaired waters. Alameda Creek and the Lower San Francisco Bay are both listed as impaired waterbodies. Alameda Creek is impaired by diazinon, a household pesticide. The Regional Board does not expect the Discharger to be a source of diazinon to Alameda Creek. Alameda Creek is a tributary to Lower San Francisco Bay and may thus contribute to its impairments. The pollutants impairing Lower San Francisco Bay include mercury, nickel, total PCBs, dioxin and furan compounds, chlordane, DDT, dieldrin, diazinon, dioxin TEQ-like PCBs, and exotic species.

The SIP requires final effluent limitations for all 303 (d)-listed pollutants to be based on total maximum daily loads (TMDLs) and associated waste load allocations (WLAs). Based on the 303 (d) list of pollutants impairing Alameda Creek and the Lower San Francisco Bay, the Board plans to adopt TMDLs for these pollutants no later than 2010, with the exception of dioxin and furan compounds. The Board is deferring development of the TMDLs for dioxin and furan compounds to the U.S. EPA. Future review of the 303 (d) list for Alameda Creek and Lower San Francisco Bay may result in revision of the schedules and/or provide schedules for other pollutants.

The SIP and U.S. EPA regulations also require that final concentration-based WQBELs be included for all pollutants having reasonable potential to cause or contribute to an exceedance of applicable water quality standards (having reasonable potential or RP). The SIP requires that

where the Discharger has demonstrated infeasibility to meet the final WQBELs, interim performance-based limitations (IPBLs) or previous permit limitations (whichever is more stringent) be established in the permit, together with a compliance schedule that shall remain in effect until final effluent limitations are adopted. The SIP also requires the inclusion of appropriate provisions for waste minimization and source control where interim limitations are established.

3. Basis for Prohibitions

- a. Discharge Prohibition A.1. [no discharge at a location or in a manner different from that described]: This prohibition is retained based on the Clean Water Act and implementing regulations, which require an NPDES permit for the discharge of pollutants from any discrete location. Discharges not contemplated by the Order are therefore prohibited.
- b. Discharge Prohibition A.2. [no average monthly discharge flow greater than 200,000 gpd]: The previous Order did not include a formal flow limit. To ensure adequate control of discharges and limit pollutant loadings, the Board generally includes flow limits in Orders. Any further increase in the allowable discharge flow would have to be requested by the Discharger, along with a justification and description of the additional flow volumes.

4. Basis for Effluent Limitations

a. Effluent Limitations B. 1, B. 2, and B. 3 (Chlorine, pH, and Acute Toxicity)

Effluent discharged to the ACFCWCD flood channel shall not exceed the following limitations:

Table D – Effluent Limitations

Limitation No.	Constituent	Effluent Limitation
B. 1	Total Residual Chlorine	0.0 mg/L (instantaneous maximum)
B. 2	pH	6.5 – 8.5 (at all times)
B. 3	Acute Toxicity	The survival of bioassay test organisms in 96-hour bioassays of undiluted effluent shall be: (1) a three-sample median value of not less than 90 percent survival; and (2) a single value of not less than 70 percent survival.

Effluent limitations B. 1 and B. 2 are technology-based limits retained from Order No. 97-141. These limitations also reflect WQOs from Chapter 3 of the Basin Plan expressed as end-of-pipe effluent limitations.

Effluent limitation B.3 is also retained from Order No. 97-141 and reflects the WQO for acute toxicity from Chapter 3 of the Basin Plan. This limitation is also established to maintain the narrative toxicity objective of the Basin Plan which requires that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alternations in population, community ecology, or receiving water biota. These effluent toxicity limitations are necessary to ensure that this objective is protected. The whole effluent acute toxicity limitations

for an 3-sample median and an single sample maximum are consistent with the previous permit and are based on the Basin Plan (Table 4-4, pg. 4–70).

b. Effluent Limitation B. 4 (Toxics):

The Order finds that only one toxic pollutant, copper, demonstrates reasonable potential. However, the final effluent limitation for copper will not become effective during the term of this Order. The rationale is described below:

1) Reasonable Potential Analysis (RPA)

40 CFR Part 122.44 (d) (1) (i) specifies that permits must include WQBELs for all pollutants “which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard” (have Reasonable Potential or RP). Thus, assessing whether a pollutant has RP is the fundamental step in determining whether or not a WQBEL is required. The following text describe the RPA and the results of such an analysis for the pollutants identified in the Basin Plan and the CTR.

- i) *WQOs and WQC*: The RPA uses Basin Plan WQOs and applicable WQC in the CTR/NTR, and site-specific objectives (SSOs), if available, after adjusting for site-specific hardness and translators, if applicable. The governing WQOs/WQC are shown in **Attachment 3** of this Fact Sheet.
- ii) *Methodology*: The RPA uses the methods and procedures prescribed in Section 1.3 of the SIP. Board staff has analyzed the effluent and background data and the nature of facility operations to determine if the discharge shows reasonable potential with respect to the governing WQOs or WQC. **Attachment 3** of this Fact Sheet shows the step-wise process described in Section 1.3 of the SIP.
- iii) *Effluent and Background Data*: The RPA is based on effluent analyses from samples collected in 2001 and 2003. The Discharger has not collected background data. Background data for this RPA are available from Bottling Group, LLC from sampling performed in March and October 2003.
- iv) *RPA Determination*: The RPA results are shown below in Table E and **Attachment 3** of this Fact Sheet. The only pollutant that exhibits reasonable potential is copper.

Table E - Summary of Reasonable Potential Results

CTR No.	Priority Pollutants	Applicable WQO/WQC	MEC or Minimum DL ^[1] (µg/L)	Maximum Background or Minimum DL ^[1] (µg/L)	RP Determination
1	Antimony	4300	0.3	0.86	No
2	Arsenic	36	1.8	5.0	No
3	Beryllium	No Criteria	0.04	0.08	Uo
4	Cadmium	1.5	0.03	0.23	No
5a	Chromium (III)	284	0.2	9.1	No
5b	Chromium (VI)	11.4	5.0	5.0	No

CTR No.	Priority Pollutants	Applicable WQO/WQC	MEC or Minimum DL ^[1] (µg/L)	Maximum Background or Minimum DL ^[1] (µg/L)	RP Determination
6	Copper	7.4	2.0	14	Yes
7	Lead	5.2	0.46	9.3	No
8	Mercury	0.025	0.00001	0.0328	No
9	Nickel	8.3	0.5	10	No
10	Selenium	5	0.3	15	No
11	Silver	2.2	0.09	0.12	No
12	Thallium	6.3	0.2	0.2	No
13	Zinc	85.6	9.0	110	No
14	Cyanide	1	3.0	5.0	No
15	Asbestos	No Criteria	0.21	NA	Uo
16	TCDD TEQ	1.4×10^{-8}	$<1.68 \times 10^{-6}$	1.26×10^{-7}	No
17	Acrolein	780	NA	5.0	Ud
18	Acrylonitrile	0.66	NA	2.0	Ud
19	Benzene	71	0.15	0.15	No
20	Bromoform	360	0.33	0.33	No
21	Carbon Tetrachloride	4.4	0.48	0.48	No
22	Chlorobenzene	21000	0.13	0.13	No
23	Chlorodibromomethane	34	0.36	0.25	No
24	Chloroethane	No Criteria	0.29	0.29	Uo
25	2-Chloroethylvinyl ether	No Criteria	NA	0.5	Ud
26	Chloroform	No Criteria	18	22	Uo
27	Dichlorobromomethane	46	1.9	1.9	No
28	1,1-Dichloroethane	No Criteria	0.28	0.28	Uo
29	1,2-Dichloroethane	99	0.24	0.24	No
30	1,1-Dichloroethylene	3.2	0.3	0.3	No
31	1,2-Dichloropropane	39	0.16	0.5	No
32	1,3-Dichloropropylene	1700	NA	NA	Ud
33	Ethylbenzene	29000	0.2	0.2	No
34	Methyl Bromide	4000	0.4	NA	No
35	Methyl Chloride	No Criteria	0.34	NA	Uo
36	Methylene Chloride	1600	0.88	2.1	No
37	1,1,2,2-Tetrachloroethane	11	0.16	0.16	No
38	Tetrachloroethylene	8.85	0.15	0.15	No
39	Toluene	200000	0.4	0.4	No
40	1,2-Trans-Dichloroethylene	140000	0.2	0.2	No
41	1,1,1-Trichloroethane	No Criteria	0.28	0.28	Uo
42	1,1,2-Trichloroethane	42	0.24	0.24	No
43	Trichloroethylene	81	0.3	0.3	No
44	Vinyl Chloride	525	0.32	0.32	No
45	2-Chlorophenol	400	0.8	0.8	No
46	2,4-Dichlorophenol	790	0.6	0.6	No
47	2,4-Dimethylphenol	2300	1.0	1.0	No
48	2-Methyl- 4,6-Dinitrophenol	765	1.0	1.0	No
49	2,4-Dinitrophenol	14000	2.0	2.0	No

CTR No.	Priority Pollutants	Applicable WQO/WQC	MEC or Minimum DL ^[1] (µg/L)	Maximum Background or Minimum DL ^[1] (µg/L)	RP Determination
50	2-Nitrophenol	No Criteria	1.0	1.0	Uo
51	4-Nitrophenol	No Criteria	2.0	2.0	Uo
52	3-Methyl 4-Chlorophenol	No Criteria	0.5	0.5	Uo
53	Pentachlorophenol	7.9	4.8	0.2	No
54	Phenol	4600000	0.5	0.5	No
55	2,4,6-Trichlorophenol	6.5	1.0	1.0	No
56	Acenaphthene	2700	0.23	0.5	No
57	Acenaphthylene	No Criteria	1.8	1.0	Uo
58	Anthracene	110000	1.8	0.05	No
59	Benzidine	0.00054	1.0	1.0	No
60	Benzo(a)Anthracene	0.049	3.3	0.05	No
61	Benzo(a)Pyrene	0.049	1.8	0.05	No
62	Benzo(b)Fluoranthene	0.049	2.9	0.05	No
63	Benzo(ghi)Perylene	No Criteria	1.8	0.1	Uo
64	Benzo(k)Fluoranthene	0.049	0.2	0.05	No
65	Bis(2-Chloroethoxy)Methane	No Criteria	1.0	1.0	Uo
66	Bis(2-Chloroethyl)Ether	1.4	0.5	0.05	No
67	Bis(2-Chloroisopropyl)Ether	170000	0.5	0.05	No
68	Bis(2-Ethylhexyl)Phthalate	5.9	2.0	3.0	No
69	4-Bromophenyl Phenyl Ether	No Criteria	1.0	1.0	Uo
70	Butylbenzyl Phthalate	5200	1.0	1.0	No
71	2-Chloronaphthalene	4300	1.0	1.0	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	1.0	1.0	Uo
73	Chrysene	0.049	3.3	0.05	No
74	Dibenzo(a,h)Anthracene	0.049	0.59	0.1	No
75	1,2-Dichlorobenzene	17000	0.21	0.21	No
76	1,3-Dichlorobenzene	2600	0.27	0.27	No
77	1,4-Dichlorobenzene	2600	0.2	0.2	No
78	3,3 Dichlorobenzidine	0.077	1.0	1.0	No
79	Diethyl Phthalate	120000	1.0	1.0	No
80	Dimethyl Phthalate	2900000	1.0	1.0	No
81	Di-n-Butyl Phthalate	12000	1.0	1.0	No
82	2,4-Dinitrotoluene	9.1	1.0	1.0	No
83	2,6-Dinitrotoluene	No Criteria	1.0	1.0	Uo
84	Di-n-Octyl Phthalate	No Criteria	1.0	1.0	Uo
85	1,2-Diphenylhydrazine	0.54	0.5	0.5	No
86	Fluoranthene	370	2.5	0.05	No
87	Fluorene	14000	2.6	0.05	No
88	Hexachlorobenzene	0.00077	0.5	0.5	No
89	Hexachlorobutadiene	50	0.23	0.23	No
90	Hexachlorocyclopentadiene	17000	1.0	1.0	No
91	Hexachloroethane	8.9	0.5	0.5	No
92	Indeno(1,2,3-cd)Pyrene	0.049	4.4	0.5	No
93	Isophorone	600	0.5	0.5	No

CTR No.	Priority Pollutants	Applicable WQO/WQC	MEC or Minimum DL ^[1] (µg/L)	Maximum Background or Minimum DL ^[1] (µg/L)	RP Determination
94	Naphthalene	No Criteria	0.74	0.74	Uo
95	Nitrobenzene	1900	0.5	0.5	No
96	N-Nitrosodimethylamine	8.1	0.5	0.5	No
97	N-Nitrosodi-n-Propylamine	1.4	1.0	1.0	No
98	N-Nitrosodiphenylamine	16	0.5	0.5	No
99	Phenanthrene	No Criteria	1.5	0.05	Uo
100	Pyrene	11000	3.6	0.05	No
101	1,2,4-Trichlorobenzene	No Criteria	0.33	0.33	Uo
102	Aldrin	0.00014	0.002	0.002	No
103	alpha-BHC	0.013	0.005	0.005	No
104	beta-BHC	0.046	0.002	0.002	No
105	gamma-BHC	0.063	0.005	0.005	No
106	delta-BHC	No Criteria	0.002	0.002	Uo
107	Chlordane (303d listed)	0.00059	0.01	0.01	No
108	4,4'-DDT (303d listed)	0.00059	0.005	0.005	No
109	4,4'-DDE (linked to DDT)	0.00059	0.005	0.005	No
110	4,4'-DDD	0.00084	0.01	0.01	No
111	Dieldrin	0.00014	0.005	0.005	No
112	alpha-Endosulfan	0.0087	0.005	0.005	No
113	beta-Endosulfan	0.0087	0.005	0.005	No
114	Endosulfan Sulfate	240	0.01	0.01	No
115	Endrin	0.0023	0.005	0.005	No
116	Endrin Aldehyde	0.81	0.005	0.005	No
117	Heptachlor	0.00021	0.005	0.005	No
118	Heptachlor Epoxide	0.00011	0.005	0.005	No
119-125	PCBs sum [2]	0.00017	0.1	0.1	No
126	Toxaphene	0.0002	0.1	0.1	No
	Tributyltin	0.0074	NA	NA	No
	Total PAHs	15	NA	NA	No

[1] Values for MEC or maximum background in bold are the actual detected concentrations, otherwise the values shown are the minimum detection levels.

NA = Not Available (there is no monitoring data or WQO/WQC for this constituent).

[2] RP =Yes, if (1) MEC > WQO/WQC, or (2) B > WQO/WQC and MEC is not non-detect.

RP = Uo (undetermined if no objective promulgated).

RP = Ud (undetermined due to lack of effluent data).

- v) *Pollutants with no reasonable potential:* WQBELs are not included in the Order for constituents that do not have reasonable potential to cause or contribute to exceedance of applicable WQOs or WQC. Monitoring for those pollutants is still required, however, under the provisions of the Board's August 6, 2001 letter pursuant to Section 13267 of the California Water Code. If concentrations of these constituents are found to increase significantly, the Discharger will be required to investigate the source(s) of the increase(s). Remedial measures are required if the increases pose a threat to water quality in the receiving water. If the Discharger has fulfilled the sampling requirements according to its approved sampling plan submitted per the August 6, 2001 letter, the

Discharger shall perform a minimum of one sampling event in receiving water and effluent for all 126 priority pollutants during the life of the permit, and submit the results at least 180 days prior to permit expiration (with the permit renewal application).

- vi) *Permit reopener*: The permit includes a reopener provision to allow numeric effluent limitations to be added for any constituent that in the future exhibits reasonable potential to cause or contribute to exceedance of a WQO or WQC. This determination, based on monitoring results, will be made by the Board.

2) Dilution

With insufficient information regarding the flow within the receiving water, the ACFCWCD Flood Channel, dilution credit and a mixing zone are not appropriate.

3) Applicable WQOs/WQC for WQBEL Calculation

Toxic substances are regulated by WQBELs derived from Tables 3-3 and 3-4 of the Basin Plan, the CTR, the NTR, and/or best professional judgment (BPJ). WQBELs in this Order are revised and updated from the limits in the previous Order, and their presence in this Order is based on the evaluation of the Discharger’s data. Numeric WQBELs are required for all constituents that have a reasonable potential to cause or contribute to an excursion above any State water quality standard. Reasonable potential is determined and final WQBELs are developed using the methodology outlined in the SIP. If the Discharger demonstrates that the final limits will be infeasible to meet and provides justification for a compliance schedule, then interim limits are established, with a compliance schedule to achieve the final limits. The WQOs or WQC used for each pollutant with Reasonable Potential is indicated in Table F below as well as in **Attachment 3** of the Fact Sheet.

Table F - Water Quality Objectives/Criteria for Pollutants with Reasonable Potential

Pollutant	Chronic WQO/WQC (µg/L)	Acute WQO/WQC (µg/L)	Human Health WQC (µg/L)	Basis of Lowest WQO /WQC Used in RP[1]
Copper	2.9	3.8	-	BP, fw, H = 25

4) Interim Limitations

The SIP and the Basin Plan authorize compliance schedules in a permit if an existing discharger cannot immediately comply with a new and more stringent effluent limitation. Compliance schedules for limitations derived from CTR or the NTR WQC are based on Section 2.2 of the SIP, and compliance schedules for limitations derived from Basin Plan WQOs are based on the Basin Plan. Both the SIP and the Basin Plan require the discharger to demonstrate the infeasibility of achieving immediate compliance with the new limitation to qualify for a compliance schedule.

On June 3, 2005, the Discharger submitted a feasibility study, asserting it is infeasible to immediately comply with the WQBELs, calculated according to SIP Section 1.4, for copper. The Board concurs and therefore, this Order establishes a compliance schedule for copper. The Basin Plan provides for 10-year compliance schedules. This provision has been construed as authorizing compliance schedules for new interpretations of existing standards

(such as the numeric WQOs specified in the Basin Plan) resulting in more stringent limitations than those in the previous permit. For copper, the compliance schedule extends until December 31, 2014, i.e., 10 years from the 2004 Basin Plan amendment when the new fresh water WQOs for copper became effective.

Because it is infeasible for the Discharger to immediately comply with the copper WQBELs, an interim limitation is needed. Traditionally, the interim limitation is based on the 99.87th percentile of the recent performance data. There are, however, insufficient data to establish a performance-based limit at this time and the previous permit did not include a copper limitation. When more data is available, the permit can be reopened, as appropriate, to include an interim limitation. This Order establishes interim requirements in a provision for development and/or improvement of a Pollution Prevention and Minimization Program to reduce pollutant loadings to the facility, and for submittal of annual reports on this Program.

7. Basis for Receiving Water Limitations

- (a) Receiving Water Limitations C.1 and C.2. These are based on water quality objectives for physical, chemical, and biological characteristics from Chapter III of the Basin Plan.
- (b) Receiving Water Limitation C.3. This limitation is in the existing permit and is self-explanatory, as it prohibits discharges from the facility from contributing to violations of applicable water quality criteria for receiving water.

8. Basis for Self-Monitoring Requirements

The Self-Monitoring Program includes monitoring requirements at the outfall for conventional, non-conventional, toxic pollutants, and acute toxicity. The basis for the monitoring requirements are described in Finding 55 of this Order.

9. Basis for Provisions

- a) Provision D.1. (Permit Compliance and Rescission of Previous Permit): Time of compliance is based on 40 CFR 122. The basis of this Order superseding and rescinding the previous permit is based on 40 CFR 122.46.
- b) Provision D.2 (Effluent Characterization for Selected Constituents): This provision is based on the Basin Plan and the SIP.
- c) Provision D.3 (Ambient Background Receiving Water Study): This provision is based on the Basin Plan and the SIP.
- d) Provision D.4 (Copper Compliance Schedule Requirements): This provision is based on Section 2.1 of the SIP.
- e) Provision D.5 (Optional Metal Translator Study): This provision allows the Discharger to conduct an optional copper translator study, based on BPJ and the SIP. This provision is based on the need to gather site-specific information in order to apply a different translator from the default translator specified in the CTR and SIP. Without site-specific data, the default translators from CTR have been used to translate the dissolved WQC/WQOs for copper to total standards in recoverable copper.

- f) Provision D.6 (Optional Hardness Study): This provision is based on the need to express some WQC/WQOs for metals from the CTR and Basin Plan, as a function of hardness.
- g) Provision D.7 (Pollutant Prevention and Minimization Program): This provision is based on the Basin Plan, pages 4-25 – 4-28, and the SIP, Section 2.1
- h) Provision D.8 (Operations and Maintenance Manual): This provision is based on 40 CFR 122.41(e) and Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits (August 1993).
- i) Provision D.9 (Self Monitoring Program): The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the Self Monitoring Program (SMP) of the Permit. This provision requires compliance with the SMP, and is based on 40 CFR 122.63. The SMP is a standard requirement in almost all NPDES permits issued by the Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Board's policies. The SMP also contains a sampling program specific for the facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of RPAs for them.
- j) Provision D.10 (Standard Provisions and Reporting Requirements): The purpose of this provision is to require compliance with the standard provisions and reporting requirements given in this Board's document titled *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (the Standard Provisions), or any amendments thereafter. That document is incorporated in the permit as an attachment to it. Where provisions or reporting requirements specified in the permit are different from equivalent or related provisions or reporting requirements given in the Standard Provisions, the permit specifications shall apply. The standard provisions and reporting requirements given in the above document are based on various state and federal regulations with specific references cited therein.
- k) Provision D.11 (Change in Control or Ownership): This provision is based on 40 CFR 122.61.
- l) Provision D.12 (Permit Reopener): This provision is based on 40 CFR 123.
- m) Provision D.13 (NPDES Permit): This provision is based on 40 CFR 123.
- n) Provisions D.14 (Order Expiration and Reapplication): This provision is based on 40 CFR 122.46(a).

V. WASTE DISCHARGE REQUIREMENT APPEALS

Any person may petition the State Water Resources Control Board to review the decision of the Board regarding the Waste Discharge Requirements. A petition must be made within 30 days of the Board public hearing.

VI. ATTACHMENTS

- Attachment 1:** RPA Results for Priority Pollutants
- Attachment 2:** Calculation of Final Copper WQBEL
- Attachment 3:** Effluent Data

Attachment 1

RPA Results for Priority Pollutants

Attachment 2

Calculation of Copper WQBEL

Attachment 3

Effluent Data