



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

CERTIFIED MAIL 7000 0520 0025 3711 8089
RETURN RECEIPT REQUESTED

February 10, 2006

In Reply Refer To: CWA-307-9-06-005

Randy Lance, Executive Vice President
Embee Incorporated
2136 South Hathaway Street
Santa Ana, California 92705

Dear Mr. Lance:

This administrative order formally establishes a schedule of corrective actions proposed by your company to achieve consistent compliance with Federal standards. EPA made the initial findings in an inspection report last October regarding the untreated nature of the overflow rinses at Embee and the resulting violation of the national prohibition against dilution as a substitute for treatment. Embee proposed the schedule established in this Order in response to our report.

The Order requires Embee to cease dilution as a substitute for treatment, to provide final pH adjustment, and to self-monitor for one year. These requirements are necessary because all past sampling is invalidated by dilution from the continuous operation of the overflow rinses. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-307-9-06-005
03/28/06	1. Submit preliminary engineering plans for retrofitting to on-demand rinsing and BAT treatment of the rinses. 4. Provide temporary pH adjustment of the rinses. 5. Submit preliminary engineering plans for final pH adjustment.
04/01/06	7-10. Begin one year of self-monitoring under this Order. Daily pH measurements of each discharge sampling point. Monthly sampling for metals, cyanide, oil and grease, and flow rate. Twice per year sampling or self-certification for total toxic organics. Continuous pH and flow monitoring beginning in November 2006.
06/28/06	2. Retrofit to on-demand rinsing – Submit a notice of completion.
10/28/06	3. Install treatment for rinses – Submit a notice of completion. 6. Install final pH adjustment and continuous monitoring – Submit notice.
03/31/07	End self-monitoring under this Administrative Order.
* * *	Self-monitoring reports are due on the 28th day of each month for the samples collected during the previous calendar month.

The enclosed Finding of Violation and Administrative Order is issued pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act ("the Act") as amended [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)]. Any violation of the terms of this Administrative Order or pretreatment standards could subject Embee to a civil action for appropriate relief pursuant to Section 309(b) of the Act [33 U.S.C. Section 1319(b)] and/or penalties under Section 309(d) of the Act [33 U.S.C. Section 1319(d)] of up to \$31,500 per day of violation. In addition, under Section 309(g) of the Act [33 U.S.C. Section 1319(g)], any violation of the pretreatment standards could also subject Embee to an administrative penalty action of up to \$12,000 per day of violation not to exceed \$157,500. Sections 309(c)(1), (c)(2) and (c)(4) of the Act [33 U.S.C. Section 1319(c)(1), (c)(2) and (c)(4)] also provide penalties for negligent violations, knowing violations and knowingly making false statements.

The request for information included in this Administrative Order is not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an "information collection request" within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Section 3502(4), 3502(11) and 5 CFR Section 1320.5(a)].

EPA has promulgated regulations to protect the confidentiality of the business information it receives. These regulations are set forth in 40 CFR Part 2, Subpart B and in the Federal Register at 41 F.R. 36902 (September 1, 1976) and 43 F.R. 40000 (September 8, 1978). A claim of business confidentiality may be asserted in the manner specified by 40 CFR Section 2.203(b) for part or all of the information requested. EPA will disclose business information covered by such a claim only as authorized under 40 CFR Part 2, Subpart B. If no claim accompanies the business information at the time EPA receives it, EPA may make it available to the public without further notice. Embee may not withhold from EPA any information on the grounds that it is confidential.

If you have any questions regarding this matter, please contact Greg V. Arthur of my staff at (415) 972-3504 or at arthur.greg@epa.gov.

Sincerely,

*Original signed by:
Alexis Strauss*

Alexis Strauss
Director, Water Division

Enclosure

cc: Roya Sohanaki, Orange County Sanitation District
Julio Lara, RWQCB-Santa Ana

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of)	
)	
Embee, Incorporated)	FINDING OF VIOLATION
Santa Ana, California)	
)	AND ORDER
Proceedings under Section 308(a) and 309(a)(3),)	
(a)(4) and (a)(5)(A) of the Clean Water Act, as)	Docket No. CWA-307-9-06-005
amended, 33 U.S.C. Section 1318(a) and)	
1319(a)(3), (a)(4) and (a)(5)(A))	

STATUTORY AUTHORITY

The following Finding of Violation and Order (Docket No. CWA-307-9-06-005) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)] (hereinafter the Act). This authority has been delegated by the Administrator and the Regional Administrator of EPA Region 9 to the Director of the Water Division of EPA Region 9.

FINDING OF VIOLATION

The Director of the Water Division of EPA Region 9 finds that Embee, Incorporated (“Embee”) in Santa Ana is in violation of Section 307(d) of the Act [33 U.S.C. Section 1317(d)]. This Finding is made on the basis of the following facts:

1. Section 307(d) of the Act [33 U.S.C. Section 1317(d)] prohibits any owner or operator of any source from introducing pollutants into publicly owned treatment works (POTWs) in violation of any effluent standard or prohibition or pretreatment standard promulgated under Section 307 of the Act.
2. Under Section 307(b) of the Act [33 U.S.C. 1317(b)], EPA promulgated the following general pretreatment regulations and categorical pretreatment standards:

- a. The Federal categorical pretreatment standards for job-shop electroplating in 40 CFR 413 which require existing source job-shop metal finishing facilities that perform common metals plating, precious metals plating, anodizing, chemical coating, chemical etching, or electroless plating, and discharge over 10,000 gallons per day (“gpd”), to comply with the daily-maximum and four-day-average standards for cadmium, chromium, copper, lead, nickel, silver, zinc, total cyanide, toxic organics, and total metals in 40 CFR 413.14(c)(g), through ... 74(c)(g);
- b. The Federal categorical pretreatment standards for metal finishing in 40 CFR 433 which require the new source metal finishing lines at facilities that perform electroplating, electroless plating, anodizing, chemical coating, or chemical etching, to comply with the daily-maximum and monthly-average standards for cadmium, chromium, copper, lead, nickel, silver, zinc, total or amenable cyanide, and toxic organics, in 40 CFR 433.17;
- c. The national pretreatment requirements in 40 CFR 403.6(e) for categorical industrial users into POTWs which requires alternative limits to be applied using the combined wastestream formula to combined effluents with dilution waters or wastewaters subject to differing Federal standards;
- d. The national pretreatment requirements in 40 CFR 403.6(d) for categorical industrial dischargers into POTWs which prohibits any increase in the use of process water or any other attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with standards;
- e. The national pretreatment standards in 40 CFR 403.12(e)(g) for all industrial dischargers into POTWs which require categorical industrial users to submit, at least twice per year, periodic reports of sampling that is representative of the discharge to the sewers and indicate both the concentration of the discharge for all Federally-regulated parameters and the flow rate of the discharge.

3. Embee is a corporation and therefore a person within the meaning of Section 502(5) of the Act, [33 U.S.C. Section 1362(5)]. Embee owns and operates a job-shop metal finishing shop operating on the 2100 block of South Hathaway Street near the terminus of Santa Fe Street in Santa Ana, California. Embee is a non-domestic source and introduces pollutants within the meaning of Section 502(6) of the Act [33 U.S.C. Section 1362(6)], into the City of Santa Ana domestic sewer system and Orange County wastewater treatment plants, which together are a POTW within the meaning of Section 307(b) and the pretreatment regulations in 40 CFR 403.3(o). Embee is therefore subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq., including Section 307, 33 U.S.C. Section 1317].
4. On June 20, 2005, EPA, the Regional Water Quality Control Board (“RWQCB-Santa Ana”), and the Orange County Sanitation District (“Orange County”) conducted a compliance evaluation inspection of Embee, and determined the following:
 - a. Facility Description: Embee owns and operates a job-shop metal finishing business in seven buildings in Santa Ana:
 1. The metal finishing operations in Bldg 2144 comprise alkaline soap degreasing, alkaline cleaning, caustic etching, iron phosphating, magnesium phosphating, zinc phosphating, derust, acid activation, acid desmut, nickel strike, sulfamate-nickel plating, electroless-nickel plating, acid-tin plating, acid-copper plating, chromium plating, chromate seal, zincate coating, black oxide coating, and acid stripping;
 2. The metal finishing operations in Bldg 2148 comprise alkaline soap degreasing, alkaline cleaning, acid desmut, caustic electrocleaning, caustic etching, hex-chromium passivation, nitric/chromic-acid passivation, nitric-acid passivation, nitric/fluoric-acid etching, dye penetrant testing, nitric-acid deoxidation, chromic-acid deoxidation, chromate sealing, chromic-

- acid anodizing, alodine chrome conversion coating, and acid stripping;
3. The metal finishing operations in Bldg 2139 comprise alkaline soap degreasing, acid pickling, caustic electrocleaning, caustic etching, acid derust, cyanide-cadmium plating, titanium cyanide-cadmium plating, cyanide-copper plating, cyanide-silver strike, nickel strike, cyanide-silver plating, chromium conversion coating, nickel nitrate sealing, acid etching, and cyanide stripping;
 4. The metal finishing operations in Bldg 2150 comprise vacuum cadmium deposition, ion vapor aluminum deposition, and painting;
 5. The operations in Bldg 2155, Bldg 2136, and Bldg 2158 comprise CNC grinding, dry-booth powder coating, a laboratory, maintenance shop, shipping, receiving, warehousing, and administration;
 6. The operations began in 1967, however, significant changes in the configuration and capabilities have been instituted since 1983. In particular, the Bldg 2144 degreaser preparation line was added in 1998; the Bldg 2144 new nickel plating line was installed in 2004; the Bldg 2139 copper heat treatment line was moved in 1995; and the Bldg 2148 hard anodizing line was added in 2004;
- b. Wastewater Discharges to the Sewer: Embee discharges process-related wastewater into the domestic sewers feeding into the Orange County wastewater treatment plants for discharge into the Pacific Ocean and for reuse and reclaim:
1. The metal finishing lines in Bldg 2144, Bldg 2139, and Bldg 2148 generate metal finishing spents, rinses, and sump-captured drainages, as well as fume scrubber blowdown, boiler blowdown, spent ion exchange columns, and dye penetrant wash water;
 2. Bldg 2155 generates spent machining coolants;

3. Bldg 2150 generates painting booth and vapor deposition blowdowns;
4. The process-related wastewaters from Embee discharge through three sewer connections, designated in this Order by building address as IWD-2139, IWD-2148, and IWD-2144, under Orange County permits Nos. 1-1-026, 1-1-025, and 1-1-027, respectively;
5. The process-related wastewaters that discharge through IWD-2139 consist of untreated rinses commingled with treated spents from a small batch treatment unit (cyanide destruction, metals precipitation, coagulation, flocculation, settling, and sludge dewatering);
6. The process-related wastewaters that discharge through IWD-2148 consist of untreated rinses and blowdowns commingled with treated spents from a second small batch treatment unit (chromium reduction, metals precipitation, coagulation, flocculation, settling, and sludge dewatering);
7. The process-related wastewaters that discharge through IWD-2144 consist of untreated rinses and blowdowns;
8. The two small batch treatment units comprise the treatment provided on site. The commingled untreated and batch treated wastewater discharges through IWD-2139, IWD-2148, and IWD-2144 undergo no further treatment, including no pH adjustment, prior to discharge to the sewers;
9. Embee reports that the flow rates of treated and untreated process-related wastewater discharges to the sewers average ~15,000, ~65,000, and ~25,000 gpd from IWD-2139, IWD-2148, and IWD-2144, respectively;
10. The discharges of process-related wastewater to the sewers are monitored at sampling vaults located within the respective buildings, designated in this Order and the September 30, 2005 EPA inspection report by sample points IWD-2139, IWD-2148, and IWD-2144;

c. Categorical Standards: The Federal categorical pretreatment standards in 40 CFR 433 for new source metal finishing operations apply to all of the process-related wastewater discharges from the metal finishing lines at Embee installed, rebuilt, moved, or converted to do new operations after August 31, 1982. The Federal categorical pretreatment standards in 40 CFR 413 for existing source job-shop electroplating operations discharging more than 10,000 gpd apply to all of the remaining process-related wastewater discharges from metal finishing lines at Embee operating unchanged in configuration since August 31, 1982:

1. 40 CFR 433 Applicability: Because Embee performs the core operations of electroplating, electroless plating, anodizing, chemical coating, and etching, the Federal categorical pretreatment standards in 40 CFR 433 apply to all process wastewaters from the new source metal finishing lines installed, rebuilt, moved or converted to do new operations since August 31, 1982. The new source metal finishing standards apply to the new source metal finishing lines that perform the core operations or any other on-site operation, such as cleaning, associated with metal finishing and specifically listed in 40 CFR 433.10(a);
2. 40 CFR 413 Applicability: Because Embee does not own more than 50% of the parts processed, the Federal job-shop electroplating standards in 40 CFR 413 apply to all process wastewaters from the metal finishing lines at Embee involving common metals plating, precious metals plating, anodizing, chemical coating, chemical etching, electroless plating, and their related operations of alkaline cleaning, stripping, sealing, and coloring, that were in operation in their present configuration before August 31, 1982, and that together discharge more than 10,000 gpd;

3. Adjustments: The Federal categorical pretreatment standards in 40 CFR 413 and 40 CFR 433 must be adjusted in a number of ways using the combined wastestream formula in 40 CFR 403.6(e) in order to be applied at Embee to the discharges into the sewers:
 - i. The Federal standards applied to IWD-2139, IWD-2148, and IWD-2144, must be adjusted to account for dual Federal regulation under 40 CFR 433 and 40 CFR 413;
 - ii. The Federal standards applied to IWD-2144, must be adjusted to account for dilution of the Federally-regulated wastewater discharges with the dilution waters, such as boiler blowdown, specifically listed in 40 CFR 403.6(e);
 - iii. The Federal standards applied to IWD-2139 and IWD-2148 do not need to be adjusted to account for dilution since all of the wastewaters discharging through these compliance sampling points qualify as Federally-regulated under 40 CFR 413 or 40 CFR 433;
 - iv. The Federal cyanide standards in 40 CFR 433 for the discharges from new source metal finishing lines, applied to IWD-2139, IWD-2148, and IWD-2144, must be adjusted to account for dilution from non-cyanide bearing waste streams;
 - v. Domestic sewage discharges into the Santa Ana sewers downstream of the compliance sampling points.

5. Embee violated Section 307(d) of the Act [33 U.S.C. Section 1317(d)] in that:
 - a. The following Federal categorical pretreatment standards apply to the discharges from Embee at IWD-2139, IWD-2148, and IWD-2144:

Federal Categorical Standards	@ IWD-2139		@ IWD-2148		@IWD-2144	
	d-max	mo-av	d-max	mo-av	d-max	mo-av
Cd cadmium	1.18	0.49	0.93	0.39	0.64	0.27
Cr chromium	6.92	2.48	5.94	2.30	4.47	1.85
Cu copper	4.48	1.81	4.22	1.87	3.43	1.62
Pb lead	0.60	0.30	0.62	0.33	0.54	0.30
Ni nickel	4.10	1.81	4.07	1.95	3.44	1.73
Ag silver	1.18	0.49	1.01	0.44	0.75	0.49
Zn zinc	4.17	1.79	3.80	1.72	3.01	0.33
CNt total cyanide	1.86	0.54	1.43	0.41	0.95	0.28
CNa amenable CN	0.86	0.32	0.86	0.32	0.73	0.27
TM total metals	10.5	6.8	10.5	6.80	8.93	5.78
TTO toxic organics	2.13	-	2.13	-	1.81	-

- b. EPA reviewed the 2003-2005 Orange County sample record for Embee of grabs and 24-hour composite samples collected at IWD-2139, IWD-2148, and IWD-2144 and determined that Embee violated Federal standards in 40 CFR 433 and 40 CFR 413 on at least the following three occasions:

Violations of Effluent Limits 2003-2005 Embee @ IWD-2179						
sample date	type	sampler	Fed standards	violation	days	
Feb 2003	24-hr	Embee	Cd mo-avg 0.49 mg/l	0.66	28	
June 2004	24-hr	OCSD	Cd mo-avg 0.49 mg/l	0.58	30	
May 2005	24-hr	OCSD	Cd mo-avg 0.49 mg/l	0.65	31	
<u>Index Key</u>						
mo-avg • Monthly-averages are calculated by averaging all samples in a calendar month, even if there is just one.						

- c. Dilution as a Substitute for Treatment: Embee failed to comply with the Federal prohibition against dilution of the Federally-regulated waste streams as a substitute for treatment, in that:
- The following overflow rinses were observed by the EPA inspector during the June 20, 2005 inspection to be operating continuously without parts processing:

- Bldg 2144 alkaline soap degreasing - 1° overflow rinse
 - Bldg 2144 alkaline soap soaking - 1° overflow rinse
 - Bldg 2144 iron phosphating - 1° overflow rinse
 - Bldg 2144 alkaline cleaning - 1° overflow rinse
 - Bldg 2144 electroless nickel plating - 2° overflow rinse
 - Bldg 2144 sulfamate-nickel plating - 2° overflow rinse
 - Bldg 2139 alkaline soap degreasing - 1° overflow rinse
 - Bldg 2139 alkaline sour dip pickling - 1° overflow rinse
 - Bldg 2148 alkaline soap degreasing - 1° overflow rinse
 - Bldg 2148 alkaline sour dip pickling - 1° overflow rinse
 - Bldg 2148 alodining - 2° overflow rinse
2. All overflowing rinses, including those identified in Finding 5(a)(1) above, discharge without treatment for metals, cyanide, or final pH. In 2005, untreated rinses account for an estimated 98%, 97% and 100% of the overall discharge to the sewers at IWD-2139, IWD-2148, and IWD-2144, respectively. Consequently, the untreated rinses account for an estimated 85%, 85%, and 100% of the Federally-regulated pollutant loads discharged to the sewers at IWD-2139, IWD-2148, and IWD-2144;
 3. As a result, the untreated metal finishing wastewaters are diluted by excess make-up water, which renders the samples collected from Embee at IWD-2139, IWD-2148, and IWD-2144 unusable for the determination of compliance with the Federal categorical pretreatment standards;
 4. The OCSD permits require Embee to self-monitor four times per year at IWD-2139, IWD-2148, and IWD-2144. As a result, the untreated metal finishing wastewaters diluted by excess make-up water rendered all samples collected in 2003-2005 unusable for the determination of compliance with the Federal categorical pretreatment standards, resulting in at least 10 days of violation at each sampling point, for a total of at least 30 days of violation.

6. The October 3, 2005 EPA report of the inspection of Embee is by reference made part of this Finding of Violation and Administrative Order.
7. The November 29, 2005 Embee response to the EPA inspection report stated:
 - a. Untreated Rinses: “Embee intends to have a vendor for the new treatment system under contract by December 2005 and a system installed by October of 2006”;
 - b. pH Adjustment: “Embee is currently installing a pH adjustment tank for those rinses requiring pH adjustment prior to discharge. Once a full treatment system is in place, a pH neutralization system will be installed to adjust running rinse wastewater pH”.

ADMINISTRATIVE ORDER

Taking these Findings into consideration and considering the potential environmental and human health effects of the violations and all good faith efforts to comply, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to Section 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Act [33 U.S.C. Section 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], IT IS HEREBY ORDERED that Embee comply with the following requirements:

Cease Dilution as a Substitute for Treatment

1. By **MARCH 28, 2006**, Embee shall submit a preliminary engineering plan of the steps to be taken in order to cease dilution as a substitute for treatment as required in 40 CFR 403.6(d) through retrofitting to on-demand rinsing practices and the installation of a new treatment system for all rinses. This preliminary engineering plan shall include:
 - a. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to cease dilution as a substitute for treatment through retrofitting to on-demand rinsing practices;

- b. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to cease dilution as a substitute for treatment through the installation and operation of best-available-technology treatment or its equivalent;
 - c. A schedule of all corrective actions to be made in order to cease dilution as a substitute for treatment, not to extend beyond the deadlines specified in Items 2 and 3 of this Order.
2. By **JUNE 28, 2006**, Embee shall complete the steps necessary to cease dilution as a substitute for treatment through retrofitting to on-demand rinsing practices, and submit a notice of completion.
3. By **OCTOBER 28, 2006**, Embee shall complete the necessary steps to cease dilution as a substitute for treatment through the installation and operation of best-available-technology treatment or its equivalent, and submit a notice of completion.

Final pH Adjustment

4. By **MARCH 28, 2006**, Embee shall complete the steps necessary to provide temporary pH adjustment of the rinses prior to discharge, and submit a notice of completion.
5. By **MARCH 28, 2006**, Embee shall submit a preliminary engineering plan of the steps to be taken in order to provide final pH adjustment of all process-related wastewater discharges to the sewers. This preliminary engineering plan shall include:
 - a. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to provide final pH adjustment of all process-related wastewater discharges to the sewers;
 - b. A description of all equipment, and operating procedures to be used to provide continuous pH and flow rate monitoring of all process-related wastewater discharges to the sewers;

- c. A schedule of all corrective actions to be made to provide pH adjustment and continuous pH and flow rate monitoring of all process-related wastewater discharges to the sewers, not to extend beyond the deadline specified in Item 6 of this Order.
6. By **OCTOBER 28, 2006**, Embee shall complete the steps necessary to provide pH adjustment and continuous monitoring for pH and discharge flow rate of all process-related wastewater discharges to the sewers, submit a notice of completion.

Self-Monitoring

7. Sampling Schedule: For a year, from **APRIL 1, 2006 THROUGH MARCH 31, 2007**, Embee shall self-monitor the process-related wastewater discharges at the designated compliance sampling points, IWD-2139, IWD-2148, and IWD-2144, as well as at any consolidated compliance points established in the future with written Orange County or EPA approval, in accordance with the following schedule:
 - a. **ONCE EVERY DAY**, Embee shall self-monitor the process-related wastewater discharges to the sewers for pH;
 - b. **ONCE EVERY MONTH**, Embee shall self-monitor all process-related wastewater discharges to the sewers for cadmium, chromium, copper, lead, nickel, silver, zinc, total cyanide, total metals, discharge flow rate, and oil and grease;
 - c. **ONCE EVERY SIX MONTHS** (before June 28, 2006 and December 28, 2006, Embee shall self-monitor the process-related wastewater discharges to the sewers for total toxic organics;
 - d. **CONTINUOUSLY BEGINNING NOVEMBER 1, 2006**, Embee shall self-monitor the process-related wastewater discharges for pH and discharge flow rate.
8. pH Self-Monitoring Summaries: **ONCE EACH MONTH**, Embee shall prepare summaries of the pH self-monitoring required by Items 7(a) and 7(d) of this Order above, for each of the designated compliance sampling points, IWD-2139, IWD-2148, and IWD-

2144, as well as at any consolidated compliance points established in the future with written Orange County or EPA approval, in accordance with the following schedule:

- a. **THROUGH OCTOBER 31, 2006**, Embee shall summarize all pH measurements by date, time, and sampling location;
- b. **BEGINNING NOVEMBER 1, 2006**, Embee shall summarize continuous pH meter strip charts by date and sampling location to reflect the following:
 - 1. The number of minutes each day in which the pH is below 2.0;
 - 2. The number of minutes each day in which the pH is below 5.0;
 - 3. The number of minutes each day in which the pH is below 6.0;
 - 4. The number of minutes each day in which the pH is above 12.0;
 - 5. The number of minutes each day in which the pH is above 12.5.

9. Sampling and Analysis: Embee shall self-monitor and analyze using the sampling protocols listed below, and the EPA approved analytical methods (or equivalent) necessary to achieve the detection limits indicated below:

parameters and pollutants	sampling method protocols	detection limits
cadmium	24-hour composite	10 µg/l
chromium	24-hour composite	10 µg/l
copper	24-hour composite	10 µg/l
lead	24-hour composite	10 µg/l
nickel	24-hour composite	10 µg/l
silver	24-hour composite	10 µg/l
zinc	24-hour composite	10 µg/l
total cyanide	24-hour manual composite grabs	10 µg/l
total toxic organics	grab	10 µg/l
toxic metals	calculated sum of Cr, Cu, Ni, and Zn	10 µg/l
oil and grease – petroleum	grab	1 mg/l
discharge flow rate (gpd)	water meter (continuous after 11/01)	-
pH (s.u.)	field grabs (continuous after 11/01)	0.1 s.u.

10. Self-Certifications: The toxic organics self-monitoring required by Item 7(b), above, may be replaced by self-certifications after approval, by EPA or Orange County, of toxic organics management plans as provided for in 40 CFR 433.12(a) and 40 CFR 413.03(a).

Submittals

11. By the **TWENTY-EIGHTH (28th) DAY OF EACH MONTH**, Embee shall submit all self-monitoring results for the previous month. The first monthly report is due on May 28, 2006 for the April 2006 self-monitoring. The 12th-and-last monthly report is due on April 28, 2007 for the March 2007 self-monitoring.

12. For each sample, Embee shall record the following:

- a. The sample results;
- b. The EPA analytical methods used;
- c. The date, time, location of sampling, and sampling point (ie: IWD-2139, etc.);
- e. The type of sample (ie. 24-hour composite, grab);
- f. The name of the laboratory used; and
- g. Self-certifications in lieu of self-monitoring as allowed by Item 10 of this Order.

13. All reports submitted pursuant to this Order shall be signed by a principal executive officer of Embee and shall include the following self-certifying statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

14. This Order is not and shall not be interpreted to be an NPDES permit under Section 402 of the Act [33 U.S.C. Section 1342], nor an Orange County or RWQCB-Santa Ana sewer discharge permit under 40 CFR 403.8(f)(iii), nor shall it in any way relieve Embee of obligations imposed by the Act, or any other Federal, State or local law, including the Orange County sewer use ordinances.

15. All submittals shall be mailed to the following addresses:

U.S. ENVIRONMENTAL PROTECTION AGENCY
75 Hawthorne Street
San Francisco, California 94105
Attn: Greg V. Arthur (WTR-7)

REGIONAL WATER QUALITY CONTROL BOARD
3737 Main Street, Suite 500
Riverside, California 92501-3348
Attn: Julio Lara

ORANGE COUNTY SANITATION DISTRICT
10844 Ellis Avenue
Fountain Valley, California 92708-7018
Attn: Roya Sohanaki

16. This Order takes effect upon signature.

Original signed by:
Alexis Strauss

Alexis Strauss
Director, Water Division

February 10, 2006

Dated