

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

> CERTIFIED MAIL 7008 1140 0004 5420 5735 RETURN RECEIPT REQUESTED

July 13, 2009

In Reply Refer To: CWA-309(a)-09-024

Jessie Murillo, President Beo-Mag Plating 3313 West Harvard Street Santa Ana, California 92704

Dear Mr. Murillo:

This administrative order, issued under the authority of the Clean Water Act, establishes a schedule of corrective actions to achieve consistent compliance with federal standards. EPA made the initial findings in an inspection report issued on April 22, 2009.

The Order requires Beo-Mag Plating to achieve consistent compliance with the federal standards, to provide continuous monitoring for pH, and to self-monitor for one year. These requirements are necessary because the sample record documented violations of federal standards. The corrective actions laid out in your June 24, 2009 letter substantially address the causes of violation. This Order adds additional corrective actions to both ensure and measure consistent compliance with all federal standards in the future. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-309(a)-09-024
Upon Receipt	1. Deliver and treat all cyanide-bearing wastewaters through batch treatment.
08/01/09	 6-11. Begin one year of self-monitoring under this Order. Samples of each cyanide-bearing batch for amenable cyanide, volume. Daily pH measurements. Monthly samples for chrome, copper, nickel, zinc, amenable cyanide, flow. Twice per year samples for cadmium, lead, silver. Twice per year samples or self-certifications for total toxic organics. Continuous pH monitoring beginning in January 2010.
09/28/09	 Submit preliminary engineering plans for compliance with federal stds. Submit preliminary engineering plans for continuous pH monitoring.
12/28/09	 Achieve compliance with federal stds – submit a notice of completion. Install continuous pH monitoring – submit a notice of completion.
07/31/10	End self-monitoring under this 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). Section 309(a), (b), (d), and (g) of the Act, 33 U.S.C. Section 1319(a), (b), (d), and (g), provides administrative and/or civil judicial relief for failure to comply with the Act. In addition, Section 309(c) of the Act, 33 U.S.C. Section 1319(c), provides criminal sanctions for negligent or knowing violations of the Act, and for knowingly making false statements.

The request for information in the Administrative Order is not subject to review by the Office of Management and Budget under the Paperwork Reduction Act because it is not a "collection of information" within the meaning of 44 U.S.C. Sections 3502(3). It is directed to fewer than ten persons and is an exempt investigation under 44 U.S.C. Section 3518(c)(1) and 5 CFR Section 1320.4(a)(2).

EPA has promulgated regulations to protect the confidentiality of the business information it receives at 40 CFR Part 2, Subpart B. A claim of business confidentiality may be asserted in the manner specified by 40 CFR Section 2.203(b) for all or part 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. Beo-Mag Plating may not withhold from EPA any information on the grounds that it is confidential business information.

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 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)	
)	
Beo-Mag Plating)	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-309(a)-09-024
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 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 Beo-Mag Plating in Santa Ana, California 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:

- 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. Section 1317(b)], EPA promulgated the following general pretreatment regulations and categorical pretreatment standards:

- a. The federal categorical pretreatment standards for metal finishing in 40 CFR 433
 which require new source metal finishing facilities to comply with the dailymaximum and monthly-average standards for a number of pollutants in 40 CFR 433.17, including total cyanide, copper, and nickel;
- b. The general pretreatment standards in 40 CFR 403.5(d) for all industrial dischargers into the Orange County Sanitation District sewer system and wastewater treatment plant, which defines the local limits developed in accordance with the 40 CFR 403.5(c) to be Pretreatment Standards for the purposes of Section 307(d) of the Act [33 U.S.C. Section 1317(d)];
- c. The definitions in 40 CFR 403.3, which define the term, Pretreatment Standards, to mean any regulation containing pollutant discharge limits promulgated by EPA in accordance with Section 307(b) and (c) of the Act, [33 U.S.C. Section 1317(b) and (c)], including the specific prohibitions and local limits established pursuant to 40 CFR 403.5(b) and (d).
- 3. Beo-Mag Plating is a corporation and therefore a person within the meaning of Section 502(5) of the Act, [33 U.S.C. Section 1362(5)]. Beo-Mag Plating owns and operates a job-shop metal finishing shop at 3313 West Harvard Street in Santa Ana, California. Beo-Mag Plating 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 Orange County Sanitation District domestic sewer system and the Orange County Sanitation District Fountain Valley wastewater treatment plant, which together are a POTW within the meaning of Section 307(b) and the pretreatment regulations in 40 CFR 403.3(o). Beo-Mag 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 September 11, 2008, EPA, and the Orange County Sanitation District conducted a compliance evaluation inspection of Beo-Mag Plating, and determined the following:

- a. <u>Facility Description</u>: Beo-Mag Plating owns and operates a job-shop metal finishing facility in Santa Ana:
 - The metal finishing operations in the nickel/chromium room comprise alkaline cleaning, alkaline electrocleaning, hydrochloric-acid activation, bright nickel plating, dull nickel plating, chromium plating, electroless nickel plating, alkaline chromium strip, and nitric-acid nickel/copper strip;
 - The metal finishing operations in the cyanide room comprise cyanide-gold plating, electroless nickel plating, bright nickel plating, cyanide-copper strike, acid-copper plating, alkaline degreasing, alkaline electrocleaning, anti-tarnishing, zincate coating, deoxidation, and aluminum etching;
 - 3. The operations began in 1985;
 - Orange County Sanitation District issued permit No. 51-1-370 to Beo-Mag Plating authorizing the discharge of treated wastewaters through one connection to the sewers;
 - The permit set federal standards, local limits, and self-monitoring requirements. The permit did not require continuous pH self-monitoring.
- <u>Wastewater Discharges</u>: Beo-Mag Plating discharges process-related wastewaters into the domestic sewers feeding the Orange County Sanitation District Fountain Valley wastewater treatment plant for discharge into the Pacific Ocean:
 - 1. The metal finishing lines generate spents, rinses, and solids;
 - The process-related wastewaters from Beo-Mag Plating discharge through a single connection to the sewers;
 - 3. The process-related wastewaters discharged to the sewers consist of treated wastewater from an industrial wastewater treatment unit that provides both batch treatment of spents solutions (cyanide destruction,

chromium reduction, filter press) and continuous treatment of rinses and treated spents (metals precipitation, flocculation, settling, filter press);

- Acidic and alkaline wastewaters, which greatly vary in pH, feed into the continuous treatment for rinses. As a result, compliance with limits for pH depends on the successful treatment since there is no final pH adjustment;
- The Orange County Sanitation District permit issued to Beo-Mag Plating listed an average discharge flow rate of less than 5,000 gallons per day ("gpd"). Measured flow rates averaged 2,525 gpd from 2005 to 2009;
- The discharges of process-related wastewater to the sewers are monitored for all regulated pollutants and parameters except total cyanide at a sample point established after treatment, designated in this Order and the April 22, 2009 EPA inspection report by permit number as IWD-511370;
- The discharges of cyanide-bearing wastewaters to the sewers are monitored for total cyanide at a separate sample point after cyanide treatment, designated in this Order and the April 22, 2009 EPA inspection report as IWD-511370CN;
- <u>Categorical Standards:</u> The federal categorical pretreatment standards in 40 CFR
 433 for new source metal finishers apply to all of the process-related wastewater
 discharges from Beo-Mag Plating:
 - <u>40 CFR 433 Applicability</u>: Because Beo-Mag Plating performs the core operations of electroplating, electroless plating, chemical coating, and etching, the federal categorical pretreatment standards in 40 CFR 433.17 apply to all process wastewaters from the core operations or any other onsite operations, such as cleaning, associated with metal finishing and specifically listed in 40 CFR 433.10(a);

- 2. <u>Adjustments</u>: The federal categorical pretreatment standards in 40 CFR 433 do not need to be adjusted to account for dilution or multiple categories since all discharges through IWD-511370 qualify for regulation under 40 CFR 433. Under 40 CFR 433.12(c), the federal categorical pretreatment standards in 40 CFR 433 for cyanide also do not need to be adjusted to account for dilution from non-cyanide bearing wastewaters since Beo-Mag Plating and Orange County Sanitation District indicate that all discharges at IWD-511370CN were sampled for total cyanide only when the batch treatment unit handled cyanide-bearing wastewaters;
- <u>Certifications</u>: Beo-Mag Plating has not submitted or received approval of a solvent management plan as allowed under 40 CFR 413.03, and so cannot certify in lieu of self-monitoring for toxic organics;
- 4. Domestic sewage discharges into the sewers downstream of IWD-511370.
- 5. Beo-Mag Plating violated Section 307(d) of the Act [33 U.S.C. Section 1317(d)] in that:
 - a. The following federal categorical pretreatment standards and local limits apply to the discharges from Beo-Mag Plating at IWD-511370 and IWD-511370CN:

pollutants of concern at IWD-511370	fed stds (d-max)	fed stds (mo-avg)	local limits (instant)	local limits (d-max)	
arsenic (mg/l)	-	-	2.00	0.083 🕲	
cadmium (mg/l)	0.11	0.07	1.00	0.005 2	
chromium (mg/l)	2.77	1.71	2.00	0.083 🛛	
copper (mg/l)	3.38	2.07	3.00	0.125 🕲	
lead (mg/l)	0.69	0.43	2.00	0.029 2	
mercury (mg/l)	-	-	0.030	0.001 2	
nickel (mg/l)	3.98	2.38	10.00	0.166 🖉	
silver (mg/l)	0.43	0.24	5.00	0.018 🖉	
zinc (mg/l)	2.61	1.48	10.00	0.109 🖉	
cyanide – total (mg/l)	1.20 ①	0.65 ①	5.00	0.050 2	
cyanide – amenable (mg/l)	0.86 D	0.32 🛈	1.00	0.042 🖉	
① Sampled for cyanide-bearing flows at IWD-511370CN					
^② Loading limits in lbs/day, based on baseline minimum flow rate of 5,000 gpd					

pollutants of concern (continued)	fed stds (d-max)	fed stds (mo-avg)	local limits (instant)	local limits (d-max)
total toxic organics (mg/l)	2.13	-	0.58	-
oil+grease - mineral (mg/l)	-	-	100	-
pH (s.u.)	-	-	6.0-12.0	-
biochem oxy demand (lbs/d)	-	-	-	15000
total sulfides (mg/l)	-	-	5.00	-
dissolved sulfides (mg/l)	-	-	0.50	-
PCBs (mg/l)	-	-	0.010	-
pesticides (mg/l)	-	-	0.010	-

b. EPA reviewed the July 2005 to March 2009 Orange County Sanitation District

sample record for Beo-Mag Plating and determined that Beo-Mag Plating violated the federal standards and local limits on at least the 12 occasions listed below, resulting in 243 days of violation under the Clean Water Act (no day is doublecounted by pollutant).

Federal Standard Violations for Total Cyanide @ IWD-511370CN						
sample dates	type	sampler	federal standards ①		viols	days
08/08/06	grab	IU	fed d-max - CN(total)	1.20 mg/l	3.76	31
Aug 2006	grab	IU	fed mo-avg - CN(total)	0.65 mg/l	3.76	31
Jan 2007	grab	IU	fed mo-avg - CN(total)	0.65 mg/l	0.70	31
07/25/07	grab	IU	fed d-max - CN(total)	1.20 mg/l	1.81	31
Jul 2007	grab	IU	fed mo-avg - CN(total)	0.65 mg/l	1.81	31
Nov 2007	grab	IU	fed mo-avg - CN(total)	0.65 mg/l	1.12	30
02/23/09	grab	POTW	fed d-max - CN(total)	1.20 mg/l	2.48	28
Feb 2009	grab	POTW	fed mo-avg - CN(total)	0.65 mg/l	2.48	28
Federal Standard Violations for Metals @ IWD-511370						
sample dates	type	sampler	federal standards ①		viols	days
Apr 2006	24-hr	IU	fed mo-avg - copper	2.07 mg/l	3.19	30
Jul 2007	24-hr	IU	fed mo-avg - nickel	2.38 mg/l	3.77	31
Oct 2007	24-hr	POTW	fed mo-avg - nickel	2.38 mg/l	2.79	31
Local Limit Violations @ IWD-511370						
sample dates	type	sampler	local limits		viols	days
04/19/06	24-hr	IU	local instant - copper	3.0 mg/l	3.19	-
${f 0}$ Mo-avgs calculated by calendar month of all self-monitoring and OCSD sampling.						

6. The April 22, 2009 EPA inspection report of Beo-Mag Plating is by reference made part of this Finding of Violation and Administrative Order.

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 Beo-Mag Plating comply with the following requirements:

Consistent Compliance with Federal Standards

- 1. **UPON RECEIPT OF THIS ORDER**, Beo-Mag Plating shall ensure that all cyanidebearing wastewaters generated on-site are delivered and batch treated for cyanide.
- 2. By **SEPTEMBER 28, 2009**, Beo-Mag Plating shall submit a preliminary engineering plan of any further steps to be taken in order to achieve consistent compliance with all federal standards (metals and cyanide). This preliminary engineering plan shall include:
 - A detailed description of all plant, equipment, hardware, upgrades, management plans, and operating procedures to be used to achieve consistent compliance with the federal standards;
 - A schedule of all corrective actions to be made in order to achieve consistent compliance with the federal standards, not to extend beyond the deadline specified in Item 3 of this Order.
- 3. By **DECEMBER 28, 2009**, Beo-Mag Plating shall complete the steps necessary to achieve consistent compliance with federal standards, and submit a notice of completion.

Final pH Monitoring

4. By **SEPTEMBER 28, 2009**, Beo-Mag Plating shall submit a preliminary engineering plan of the steps to be taken to provide continuous pH monitoring of all process-related

wastewater discharges to the sewers. This preliminary engineering plan shall include:

- A description of all equipment and procedures to be used to provide continuous
 pH monitoring of all process-related wastewater discharges to the sewers;
- A schedule of all corrective actions to provide continuous pH monitoring of all process-related wastewater discharges to the sewers, not to extend beyond the deadline specified in Item 5 of this Order.
- 5. By **DECEMBER 28, 2009**, Beo-Mag Plating shall complete the steps necessary to provide continuous pH monitoring of all process-related wastewater discharges to the sewers, and submit a notice of completion.

Self-Monitoring

- <u>Cyanide Sampling Schedule</u>: From AUGUST 1, 2009 THROUGH JULY 30, 2010, for
 EACH CYANIDE-BEARING BATCH, Beo-Mag Plating shall self-monitor after batch treatment at the cyanide sampling point for amenable cyanide, and discharge volume;
- Final Discharge Sampling Schedule: From AUGUST 1, 2009 THROUGH JULY 30,
 2010, Beo-Mag Plating shall self-monitor the process-related wastewater discharges at the final compliance sampling point in accordance with the following schedule:
 - a. **ONCE EVERY DAY**, Beo-Mag Plating shall self-monitor the process-related wastewater discharges to the sewers for pH;
 - b. **ONCE EVERY MONTH**, Beo-Mag Plating shall self-monitor all process-related wastewater discharges to the sewers for copper, chromium, nickel, amenable cyanide, zinc, and discharge flow rate;
 - c. ONCE EVERY SIX MONTHS (once before December 31 and once between January 1 and June 30), Beo-Mag Plating shall self-monitor the process-related wastewater discharges to the sewers for cadmium, lead, silver, and toxic organics;

- d. ONCE EVERY SIX MONTHS (once before December 31 and once between January 1 and June 30), the sampling required by Items 6(b) of this Order above must also account for and be representative of the contributions from the intermittent discharge of treated wastewaters from the batch treatment unit.
- e. **CONTINUOUSLY BEGINNING JANUARY 1, 2010**, Beo-Mag Plating shall self-monitor the process-related wastewater discharges for pH;
- 8. <u>pH Self-Monitoring Summaries</u>: **ONCE EACH MONTH**, Beo-Mag Plating shall prepare summaries of the pH self-monitoring required by Items 7(a) and 7(e) of this Order above, for IWD-511370, in accordance with the following schedule:
 - a. **THROUGH DECEMBER 30, 2009**, Beo-Mag Plating shall summarize all pH measurements by date, time, and sampling location;
 - b. **BEGINNING JANUARY 1, 2010**, Beo-Mag Plating shall summarize continuous pH meter strip charts by date and sampling location to reflect the following:
 - i. The number of minutes each day in which the pH is below 2.0;
 - ii. The number of minutes each day in which the pH is below 5.0;
 - iii. The number of minutes each day in which the pH is below 6.0;
 - iv. The number of minutes each day in which the pH is above 12.0;
 - v. The number of minutes each day in which the pH is above 12.5.
- 9. <u>Sampling Locations</u>: There are two designated compliance sampling locations:
 - a. The cyanide sampling point, designated in this Order and the April 22, 2009 EPA inspection report by permit number as IWD-511370CN, is established (1) to follow the batch treatment of all cyanide-bearing wastewaters, (2) to account for only the treated contents released from the batch treatment, (3) prior to release into the continuous treatment;

- b. The final discharge sampling point, designated in this Order and the April 22,
 2009 EPA inspection report by permit number as IWD-511370, is established (1)
 to follow after all continuous treatment steps, (2) prior to discharge into the sewers.
- <u>Sampling and Analysis</u>: Beo-Mag Plating 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
amenable cyanide	24-hour manual composited grabs	10 µg/l
total toxic organics	grab	10 µg/l
discharge flow rate (gpd)	water meter or measured volume	-
pH (s.u.)	field grabs (continuous after 12/01/10)	0.1 s.u.

 <u>Self-Certifications</u>: The toxic organics self-monitoring required by Item 7(c), above, may be replaced by self-certifications after approval, by the Orange County Sanitation District, of toxic organics management plans as provided for in 40 CFR 413.03(a).

Submittals

12. By the **TWENTY-EIGHTH** (**28**th) **DAY OF EACH MONTH**, Beo-Mag Plating shall submit all self-monitoring results for the previous month. The first monthly report is due on September 28, 2009 for the August 2009 self-monitoring. The 12th-and-last monthly report is due on August 28, 2010 for the July 2010 self-monitoring.

- 13. For each sample, Beo-Mag Plating shall record the following:
 - a. The sample results;
 - b. Type of sample (ie. 24-hour composite or grab);
 - c. The name of the laboratory used;
 - d. The EPA analytical methods used;
 - e. The date, time, location of sampling, and sampling point (ie: IWD-5117370);
 - f. Whether the sample accounts for contributions from batch treatment;
 - g. Self-certifications in lieu of self-monitoring as allowed by Item 11 of this Order.
- 14. All reports submitted pursuant to this Order shall be signed by a principal executive

officer of Beo-Mag Plating 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.

- 15. 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 Sanitation District or RWQCB sewer discharge permit under 40 CFR 403.8(f)(iii), nor shall it in any way relieve Beo-Mag Plating of obligations imposed by the Act, or any other federal, state or local law, including the Orange County sewer use ordinances.
- 16. 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 P.O. Box 8127 Fountain Valley, California 92728-8127 Attn: Roya Sohanaki

17. This Order takes effect upon signature.

Original signed by:

July 13, 2009

Alexis Strauss Director, Water Division Dated