



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105

CERTIFIED MAIL 7008 1140 0004 5420 5742
RETURN RECEIPT REQUESTED

July 24, 2009

In Reply Refer To: CWA-309(a)-09-025

Andrew Gerrick, Chief Engineer
ASTECH Engineered Products, Inc.
3030 Red Hill Avenue
Santa Ana, California 92705-5866

Dear Mr. Gerrick:

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 June 24, 2009.

The Order requires ASTECH to achieve consistent compliance with the federal standards, to provide continuous monitoring for pH, and to self-monitor at dual sample points for one year. These requirements are necessary because the sample record documented violations of federal standards for ammonia, fluoride, silver, and chromium. Remedies might involve reduced flow from ribbon forming and cleaning, dedicated treatment and alternate sampling for ammonia and fluoride, and the elimination of silver-bearing film development discharges. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-309(a)-09-025
08/30/09	1. Submit a short response to the June 24, 2009 EPA inspection report.
09/01/09	6-11. Begin one year of self-monitoring under this Order.
	Daily pH measurements.
	Daily flow rate determinations at the clarifier sample point.
	Monthly samples for silver, chromium, and discharge flow rate.
	Monthly samples for ammonia, and fluoride at the clarifier sample point.
	Twice per year samples for cadmium, copper, nickel, lead, zinc, cyanide.
10/30/09	Twice per year samples or self-certifications for total toxic organics.
	Continuous pH monitoring beginning in February 2010.
	2. Submit preliminary engineering plans for compliance with standards.
01/30/10	4. Submit preliminary engineering plans for continuous pH monitoring.
	3. Achieve compliance with standards – submit a notice of completion.
08/31/10	5. Install continuous pH monitoring – submit a notice of completion.
	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. ASTECH 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)	
)	
ASTECH Engineered Products, Inc.)	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)-09-025
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 ASTECH Engineered Products, Inc. in Santa Ana, California (“ASTECH”) 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. 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 daily-maximum and monthly-average standards for a number of pollutants in 40 CFR 433.17, including silver, and chromium;
 - b. The federal categorical pretreatment standards for titanium forming in 40 CFR 471 which require new source titanium forming facilities to comply with the daily-maximum and monthly-average production-based standards for a number of pollutants in 40 CFR 471.65, including ammonia, and fluoride;
 - c. 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)];
 - d. 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. ASTECH is a corporation and therefore a person within the meaning of Section 502(5) of the Act, [33 U.S.C. Section 1362(5)]. ASTECH owns and operates an aerospace and marine parts fabrication facility at 3030 Red Hill Avenue, Santa Ana, California.

ASTECH 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). ASTECH 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 ASTECH, and determined the following:

a. Facility Description: ASTECH owns and operates a manufacturing facility in Santa Ana that fabricates honeycomb paneling of titanium, inconel, and steel, for noise-suppression structures in aerospace and marine applications:

1. The manufacturing involves corrugated metal ribbon production, face sheet preparation, strip welding, and cleaning, to make the honeycomb panels, which are then fabricated into structures and parts;
2. Fabrication of the corrugation within the panels involves cold rolling of titanium, inconel, or steel, slit cutting into ribbon, alkaline strip cleaning, annealing, acid pickling, and press stamping the corrugation;
3. Fabrication of the face sheets involves shearing metal sheet, hole-punched perforating, alkaline cleaning, welding, sand deburring, final alkaline cleaning, and flash acid pickling;
4. Welding involves the production of electrodes conforming to the shape of corrugated ribbon, for the resistance welding of the ribbon to the bottom face sheets, followed by the welding on of the top face sheet;
5. The honeycomb panels undergo alkaline cleaning, cutting, machining, welding and forming to fabrication shape, and non-destructive testing (x-ray, magnaflux, dye penetrant);
6. Orange County Sanitation District issued permit No. 57-1-295 to ASTECH authorizing the discharge of treated wastewaters through one connection to the sewers;

7. The permit set federal standards, local limits, and self-monitoring requirements. The permit did not require continuous pH self-monitoring;
 8. The operations began in 2000;
- b. Wastewater Discharges: ASTECH 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 rolling, forming, perforation, cleaning, annealing, welding, fabrication, and testing steps generate spents, rinses, cooling waters, blowdown, and residuals;
 2. A single non-domestic connection to the sewers receives process-related wastewaters circulated through treatment, untreated cooling waters, and non-destructive test waters;
 3. Most process-related wastewaters are skimmed from the final clarifier, through carbon adsorption and ion exchange, and circulated back to the same clarifier for discharge to the sewers;
 4. Untreated cooling waters and non-destructive testing rinses discharge to a sump for delivery to the sewers downstream of the final clarifier;
 5. The process-related wastewaters from panel cleaning are evaporated on-site and thus not discharged to the sewers;
 6. The non-destruction testing rinses from x-ray film development undergo silver recovery prior to discharge to the sewers;
 7. Acidic and alkaline wastewaters, which greatly vary in pH, feed into the final clarifier and sewer discharge. As a result, compliance with limits for pH depends on the uncontrolled mixing of acidic and alkaline wastewaters since there is no final pH adjustment;

8. The Orange County Sanitation District permit issued to ASTECH listed an average discharge flow rate of less than 26,000 gallons per day ("gpd").
Measured flow rates averaged 28,845 gpd from 2005 to 2009;
- c. Categorical Standards: The federal categorical pretreatment standards in 40 CFR 471 for new source titanium formers and 40 CFR 433 for new source metal finishers apply together to all of the process-related wastewater discharges from ASTECH to the sewers:
 1. 40 CFR 471 Applicability: Under 40 CFR 471.60, titanium forming standards in 40 CFR 471.65 for new source titanium forming apply to specific waste streams from certain titanium forming process operations, in particular including surface treatment rinses, alkaline cleaning rinses, and miscellaneous wastewaters. At ASTECH, the waste streams associated with titanium forming are those generated by the rolling process and the associated ribbon can washing, but only when these processes involve titanium;
 2. 40 CFR 433 Applicability: Because ASTECH performs the core operations of etching, the federal categorical pretreatment standards in 40 CFR 433.17 for new source metal finishing apply to process wastewaters from the core operations or any other on-site operations, such as cleaning, machining, polishing, heat treating, welding, shearing, assembly, deburring, calibration, and testing associated with metal finishing and specifically listed in 40 CFR 433.10(a). Under 40 CFR 433.10(b), the metal finishing standards apply to all process wastewater discharges to the sewers, except the titanium forming wastewaters regulated under 40 CFR

471.65, and non-contact cooling waters unregulated under any federal regulation;

3. Adjustments: The federal standards for metal finishing and titanium forming are combined following treatment to apply to a single point, IWD-571295, or to dual points, IWD-571295-1 and IWD-571295-2, using the combined wastestream formula for alternate mass limits in 40 CFR 403.6(e). Under 40 CFR 433.12(c), the federal categorical pretreatment standards in 40 CFR 433 for cyanide do not need to be adjusted to account for dilution from non-cyanide bearing wastewaters since there are no cyanide-bearing waste streams;
4. Certifications: ASTECH has not submitted or received approval of a solvent management plan as allowed under 40 CFR 433.12, and so cannot certify in lieu of self-monitoring for toxic organics;
- d. Permit Compliance Sampling: The Orange County Sanitation District permit establishes compliance sampling requirements for the overall combined discharges to the sewers for all regulated pollutants and parameters at a single point, designated in this Order and the June 24, 2009 EPA inspection report by permit number as IWD-571295.
- e. Alternate Compliance Sampling: The EPA inspection report establishes alternate compliance sampling requirements for two points, designated in this Order and the June 24, 2009 EPA inspection report at IWD-571295-1 and IWD-571295-2:
 1. Alternate sample point IWD-571295-1 for ammonia, fluoride, and flow would cover the process-related wastewaters immediately after treatment but before commingling with the untreated cooling waters and non-destructive testing wastewaters;

2. Alternate sample point IWD-571295-2 for cadmium, chromium, copper, lead, nickel, silver, zinc, total cyanide, total toxic organics, discharge flow rate, and pH would cover the combined discharges to the sewers. This alternate sample point is sited at the same location as IWD-571295;
 3. Domestic sewage discharges into the sewers downstream of IWD-571295.
5. ASTECH 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 ASTECH at IWD-571295:

Federal Standards and Local Limits for ASTECH @ IWD-571295				
pollutants of concern	fed stds (d-max)	fed stds (mo-avg)	local limits (instant)	local limits (d-max) ①
arsenic	-	-	2.00	0.347
ammonia	0.832	0.366	-	0.143
cadmium	0.028	0.018	1.00	0.217
chromium	0.696	0.430	2.00	0.434
copper	0.849	0.520	3.00	0.651
fluoride	0.372	0.165	-	0.064
lead	0.143	0.089	2.00	0.025
mercury	-	-	0.030	0.005
nickel	0.999	0.598	10.00	2.168
silver	0.108	0.060	5.00	1.084
zinc	0.539	0.306	10.00	0.093
cyanide - total	0.248	0.134	5.00	0.043
cyanide - amenable	-	-	1.00	0.173
total toxic organics	0.535	-	0.58	-
oil+grease - mineral	-	-	100	-
pH (s.u.)	-	-	6.0-12.0	-
biochem oxy demand	-	-	-	15000
total sulfides	-	-	5.00	-
dissolved sulfides	-	-	0.50	-
PCBs	-	-	0.010	-
pesticides	-	-	0.010	-

① Loading limits in lbs/day, based on baseline a flow rate of 26,000 gpd.

- b. EPA reviewed the July 2005 to March 2009 Orange County Sanitation District sample record for ASTECH and determined that ASTECH violated the federal

standards for ammonia on at least the 35 occasions listed below, resulting in 546 days of violation under the Clean Water Act;

Federal Standard Violations for Ammonia @ IWD-571295					
sample dates	sampler	federal standards ①		viols	days
11/20/08	IU	ammonia - fed d-max	0.832 mg/l	4.5	30
Nov 2008	IU + POTW	ammonia - fed mo-avg	0.366 mg/l	2.43	
09/25/08	POTW	ammonia - fed d-max	0.832 mg/l	5.06	30
Sep 2008	POTW	ammonia - fed mo-avg	0.366 mg/l	5.06	
08/18/08	IU	ammonia - fed d-max	0.832 mg/l	3.2	31
Aug 2008	IU	ammonia - fed mo-avg	0.366 mg/l	3.2	
06/25/08	POTW	ammonia - fed d-max	0.832 mg/l	2.26	30
Jun 2008	POTW	ammonia - fed mo-avg	0.366 mg/l	2.26	
05/19/08	IU	ammonia - fed d-max	0.832 mg/l	1.8	31
May 2008	IU	ammonia - fed mo-avg	0.366 mg/l	1.8	
03/13/08	POTW	ammonia - fed d-max	0.832 mg/l	12.5	31
Mar 2008	POTW	ammonia - fed mo-avg	0.366 mg/l	12.5	
02/14/08	IU	ammonia - fed d-max	0.832 mg/l	2.8	29
Feb 2008	IU	ammonia - fed mo-avg	0.366 mg/l	2.8	
12/05/07	IU	ammonia - fed d-max	0.832 mg/l	7.7	31
Dec 2007	IU	ammonia - fed mo-avg	0.366 mg/l	7.7	
10/26/07	POTW	ammonia - fed d-max	0.832 mg/l	2.61	31
Oct 2007	POTW	ammonia - fed mo-avg	0.366 mg/l	2.61	
08/22/07	POTW	ammonia - fed d-max	0.832 mg/l	1.44	31
Aug 2007	IU + POTW	ammonia - fed mo-avg	0.366 mg/l	0.75	
05/21/07	IU	ammonia - fed d-max	0.832 mg/l	4.4	31
May 2007	IU	ammonia - fed mo-avg	0.366 mg/l	4.4	
03/26/07	POTW	ammonia - fed d-max	0.832 mg/l	6.54	31
Mar 2007	POTW	ammonia - fed mo-avg	0.366 mg/l	6.54	
02/21/07	IU	ammonia - fed d-max	0.832 mg/l	1.1	28
Feb 2007	IU	ammonia - fed mo-avg	0.366 mg/l	1.1	
11/16/06	IU	ammonia - fed d-max	0.832 mg/l	1.9	30
Nov 2006	IU	ammonia - fed mo-avg	0.366 mg/l	1.9	
10/26/06	POTW	ammonia - fed d-max	0.832 mg/l	3.27	31
Oct 2006	POTW	ammonia - fed mo-avg	0.366 mg/l	3.27	
Aug 2006	IU	ammonia - fed mo-avg	0.366 mg/l	0.65	31
05/22/06	IU	ammonia - fed d-max	0.832 mg/l	0.9	
May 2006	IU	ammonia - fed mo-avg	0.366 mg/l	0.9	31
02/13/06	IU	ammonia - fed d-max	0.832 mg/l	1.1	
Feb 2006	IU	ammonia - fed mo-avg	0.366 mg/l	1.1	28

① Mo-avgs calculated by calendar month of all self-monitoring and OCSD sampling.

- c. EPA reviewed the July 2005 to March 2009 Orange County Sanitation District sample record for ASTECH and determined that ASTECH violated the federal standards for fluoride on at least the 33 occasions listed below, resulting in 486 days of violation under the Clean Water Act;

Federal Standard Violations for Fluoride @ IWD-571295					
sample dates	sampler	federal standards ①		viols	days
11/20/08	IU	fluoride - fed d-max	0.372 mg/l	19.0	30
Nov 2008	IU	fluoride - fed mo-avg	0.165 mg/l	19.0	
08/18/08	IU	fluoride - fed d-max	0.372 mg/l	4.1	31
Aug 2008	IU	fluoride - fed mo-avg	0.165 mg/l	4.1	
06/25/08	POTW	fluoride - fed d-max	0.372 mg/l	2.37	30
Jun 2008	POTW	fluoride - fed mo-avg	0.165 mg/l	2.37	
05/19/08	IU	fluoride - fed d-max	0.372 mg/l	21.0	31
May 2008	IU	fluoride - fed mo-avg	0.165 mg/l	21.0	
03/13/08	POTW	fluoride - fed d-max	0.372 mg/l	7.7	31
Mar 2008	POTW	fluoride - fed mo-avg	0.165 mg/l	7.7	
02/14/08	IU	fluoride - fed d-max	0.372 mg/l	3.7	29
Feb 2008	IU	fluoride - fed mo-avg	0.165 mg/l	3.7	
12/11/07	POTW	fluoride - fed d-max	0.372 mg/l	5.02	31
12/05/07	IU	fluoride - fed d-max	0.372 mg/l	10.0	
Dec 2007	IU + POTW	fluoride - fed mo-avg	0.165 mg/l	7.5	31
10/26/07	POTW	fluoride - fed d-max	0.372 mg/l	2.07	
Oct 2007	POTW	fluoride - fed mo-avg	0.165 mg/l	2.07	31
08/22/07	POTW	fluoride - fed d-max	0.372 mg/l	38.0	
Aug 2007	IU + POTW	fluoride - fed mo-avg	0.165 mg/l	38.0	31
05/21/07	IU	fluoride - fed d-max	0.372 mg/l	6.6	
May 2007	IU	fluoride - fed mo-avg	0.165 mg/l	6.6	28
02/21/07	IU	fluoride - fed d-max	0.372 mg/l	3.4	
Feb 2007	IU	fluoride - fed mo-avg	0.165 mg/l	3.4	31
12/20/06	IU	fluoride - fed d-max	0.372 mg/l	8.63	
Dec 2006	IU	fluoride - fed mo-avg	0.165 mg/l	8.63	31
10/26/06	POTW	fluoride - fed d-max	0.372 mg/l	1.3	
Oct 2006	POTW	fluoride - fed mo-avg	0.165 mg/l	1.3	31
08/14/06	IU	fluoride - fed d-max	0.372 mg/l	2.1	
Aug 2006	IU	fluoride - fed mo-avg	0.165 mg/l	2.1	31
05/22/06	IU	fluoride - fed d-max	0.372 mg/l	4.7	
May 2006	IU	fluoride - fed mo-avg	0.165 mg/l	4.7	28
02/13/06	IU	fluoride - fed d-max	0.372 mg/l	1.1	
Feb 2006	IU	fluoride - fed mo-avg	0.165 mg/l	1.1	

① Mo-avgs calculated by calendar month of all self-monitoring and OCSD sampling.

- d. EPA reviewed the July 2005 to March 2009 Orange County Sanitation District sample record for ASTECH and determined that ASTECH violated the federal standards for metals on at least the 22 occasions listed below, resulting in 366 days of violation under the Clean Water Act.

Federal Standard Violations for Metals @ IWD-571295					
sample dates	sampler	federal standards ①		viols	days
11/20/08	IU	silver - fed d-max	0.108 mg/l	0.199	30
Nov 2008	IU + POTW	silver - fed mo-avg	0.060 mg/l	0.129	
08/18/08	IU	silver - fed d-max	0.108 mg/l	0.110	31
Aug 2008	IU	silver - fed mo-avg	0.060 mg/l	0.110	
06/25/08	POTW	silver - fed d-max	0.108 mg/l	0.137	30
Jun 2008	POTW	silver - fed mo-avg	0.060 mg/l	0.137	
03/13/08	POTW	silver - fed d-max	0.108 mg/l	0.342	31
Mar 2008	POTW	silver - fed mo-avg	0.060 mg/l	0.342	
Feb 2008	IU	silver - fed mo-avg	0.060 mg/l	0.100	29
12/05/07	IU	silver - fed d-max	0.108 mg/l	0.220	31
Dec 2007	IU	silver - fed mo-avg	0.060 mg/l	0.220	
10/26/07	POTW	silver - fed d-max	0.108 mg/l	0.216	31
Oct 2007	POTW	silver - fed mo-avg	0.060 mg/l	0.216	
08/22/07	POTW	silver - fed d-max	0.108 mg/l	0.154	31
Aug 2007	IU + POTW	silver - fed mo-avg	0.060 mg/l	0.083	
May 2007	IU	silver - fed mo-avg	0.060 mg/l	0.098	31
03/26/07	POTW	chromium - fed d-max	0.696 mg/l	0.760	31
Mar 2007	POTW	chromium - fed mo-avg	0.430 mg/l	0.760	
09/25/06	POTW	silver - fed d-max	0.108 mg/l	0.660	30
Sep 2006	POTW	silver - fed mo-avg	0.060 mg/l	0.660	
09/20/05	POTW	silver - fed d-max	0.108 mg/l	0.230	30
Sep 2006	POTW	silver - fed mo-avg	0.060 mg/l	0.230	
① Mo-avgs calculated by calendar month of all self-monitoring and OCSD sampling.					

- e. Overall from July 2005 to March 2009, ASTECH violated the federal standards for ammonia, fluoride, and metals on at least 90 occasions listed in Items 5.b, 5.c, and 5.d, resulting in 1398 days of violation under the Clean Water Act.
6. The June 24, 2009 EPA inspection report of ASTECH 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 ASTECH comply with the following requirements:

Consistent Compliance with Federal Standards

1. By **AUGUST 30, 2009**, ASTECH shall submit short responses to the findings in Sections 2.0 through 2.6, 3.0 through 3.3, 4.0, and 5.0 of the June 24, 2009 EPA inspection report.
2. By **OCTOBER 30, 2009**, ASTECH shall submit a preliminary engineering plan of any steps to be taken in order to achieve consistent compliance with the federal standards for ammonia, fluoride, silver, and chrome. This preliminary engineering plan shall include:
 - a. 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;
 - b. A detailed description of any flow reductions to be used to achieve consistent compliance with the federal standards;
 - c. 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 **JANUARY 30, 2010**, ASTECH shall complete the steps necessary to achieve consistent compliance with federal standards, and submit a notice of completion. If these steps involve flow reductions, the notice of completion shall include the recalculation of

the federal standards (following the methodology in the Appendix 1 of the June 24, 2009 EPA inspection report).

Final pH Monitoring

4. By **OCTOBER 30, 2009**, ASTECH 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. A description of all equipment and procedures to be used to provide continuous pH monitoring of all process-related wastewater discharges to the sewers;
 - b. 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 **JANUARY 30, 2010**, ASTECH 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

6. Clarifier Sampling Schedule: From **SEPTEMBER 1, 2009 THROUGH AUGUST 31, 2010**, ASTECH shall self-monitor from the final clarifier after treatment in accordance with the following schedule:
 - a. **ONCE EACH DAY**, ASTECH shall determine the discharge flow rate for the process-related wastewater discharges from the final clarifier;
 - b. **ONCE EVERY MONTH**, ASTECH shall self-monitor the process-related wastewater discharges from the final clarifier for ammonia, and fluoride;
7. Final Discharge Sampling Schedule: From **SEPTEMBER 1, 2009 THROUGH AUGUST 31, 2010**, ASTECH shall self-monitor the combined process-related

wastewater discharges to the sewers at the final compliance sampling point in accordance with the following schedule:

- a. **ONCE EVERY DAY**, ASTECH shall self-monitor the combined wastewater discharges to the sewers for pH;
 - b. **ONCE EVERY MONTH**, ASTECH shall self-monitor the combined wastewater discharges to the sewers for silver, chromium, and discharge flow rate;
 - c. **ONCE EVERY SIX MONTHS** (once before December 31 and once between January 1 and June 30), ASTECH shall self-monitor the combined wastewater discharges to the sewers for cadmium, copper, nickel, zinc, total cyanide, and total toxic organics;
 - d. **CONTINUOUSLY BEGINNING FEBRUARY 1, 2010**, ASTECH shall self-monitor the combined wastewater discharges to the sewers for pH;
8. pH Self-Monitoring Summaries: **ONCE EACH MONTH**, ASTECH shall prepare summaries of the pH self-monitoring required by Items 6(a) and 6(d) of this Order above, for the final discharge sampling point, in accordance with the following schedule:
- a. **THROUGH JANUARY 31, 2010**, ASTECH shall summarize all pH measurements by date, time, and sampling location;
 - b. **BEGINNING FEBRUARY 1, 2010**, ASTECH 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. Sampling Locations: There are two designated compliance sampling locations:
- The final clarifier sampling point, designated in this Order and the June 24, 2009 EPA inspection report by permit number as IWD-571295-1, is established (1) to follow treatment of the process-related wastewaters, (2) to account for all flows regulated under the titanium forming rule in 40 CFR 471, (3) prior to release into the sewer line upstream of the contributions of welding cooling water and non-destructive testing rinses;
 - The final discharge sampling point, designated in this Order and the June 24, 2009 EPA inspection report by permit number as IWD-571295-2, is established (1) to account for all process-related wastewaters, cooling waters, and non-destructive testing waters, (2) prior to discharge into the sewers.
10. Sampling and Analysis: ASTECH 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
ammonia	24-hour composite	100 µg/l
cadmium	24-hour composite	10 µg/l
chromium	24-hour composite	10 µg/l
copper	24-hour composite	10 µg/l
fluoride	24-hour composite	100 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 02/01/10)	0.1 s.u.

11. Self-Certifications: 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 433.03(a).

Submittals

12. By the **TWENTY-EIGHTH (28th) DAY OF EACH MONTH**, ASTECH shall submit all self-monitoring results for the previous month. The first monthly report is due on October 28, 2009 for the September 2009 self-monitoring. The 12th-and-last monthly report is due on September 28, 2010 for the August 2010 self-monitoring.
13. For each sample, ASTECH 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-571295-2);
 - f. 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 ASTECH 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 ASTECH 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:

Alexis Strauss
Director, Water Division

July 24, 2009

Dated