UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX – PACIFIC SOUTHWEST REGION
75 Hawthorne Street
San Francisco, CA 94105-3901

Nov 24, 2010

In Reply Refer To: WTR-7

Mr. John Merritt
Facilities and Environmental Manager
Coast Plating, Inc.
128 W. 154th St.
Gardena, CA 90248

Re: August 26, 2010 Clean Water Act Inspection

Dear Mr. Carranza:

Enclosed is the November 22, 2010 report for our inspection of Coast Plating, Inc.'s facility at 417 W. 164th St. in Carson, CA.

The main findings are summarized below:

1. Due to its anodizing and chemical coating processes, this facility is subject to the federal categorical standard for electroplating, 40 CFR 413, and is subject to the limits as a facility discharging greater than 10,000 gallons per day.
2. The facility has had several violations of the federal chromium limit over the past couple of years. The facility has an onsite wastewater treatment system equivalent to best available technology economically achievable (BAT) for 40 CFR 433. Since the facility is subject to the less stringent limits of 40 CFR 413, it should not have difficulty consistently complying with its permit limits.
3. The facility plans to install, by next year, a new rinse system controlled by conductivity. This is another step the facility is taking to practice efficient water use.

By January 31, 2011, please submit a short response letter to the Summary of Findings in Section 3.0 of this report. Your letter should include an individual response to each of the numbered findings in Section 3.0.

Please send your letter to the attention of Anna Yen at EPA (and include the code "WTR-7" in the address above), with copies to the Sanitation Districts of Los Angeles Counties and the Los Angeles Regional Water Quality Control Board.

We would like to thank you for your cooperation during the inspection. If you have any questions, please call Anna Yen at (415) 972-3976 or e-mail her at yen.anna@epa.gov.

Sincerely,
<Original signed by>
Ken Greenberg
Chief, Clean Water Act Compliance Office

Enclosure

cc (enclosure by email):
Rob Wienke, Sanitation Districts of Los Angeles County
Rebecca Christmann, Regional Water Quality Control Board, Los Angeles Region

U.S. Environmental Protection Agency
Region 9
Clean Water Act Compliance Office

Industrial User Inspection Report

Industrial User:	Coast Plating, Inc.
Industrial User Address:	417 W. 164th St., Carson, CA 90248
Inspection Date:	August 26, 2010
EPA Region 9 Inspector:	Anna Yen, Environmental Engineer Water Division, CWA Compliance Office
Sanitation Districts of Los Angeles County Inspectors:	Fred Cannizzaro, Supervising Industrial Waste Inspector Barbara Jenkins, Industrial Waste Inspector
Facility Contacts During Inspection:	John Merritt, Facilities and Environmental Manager Greg Excell, VP Estimating and Engineering Bernard Moore (consultant to Coast Plating)
Report Date:	November 22, 2010

Report prepared by Anna Yen

1.0 Scope and Purpose

The purpose of the industrial user inspection on August 26, 2010 was to determine the pretreatment standards and requirements that apply to this facility and to ensure compliance with those standards and requirements. This inspection is part of a regionwide EPA effort, stemming from an environmental justice initiative, to focus inspections along the I-710 corridor in the Los Angeles area.

This facility is an industrial user which discharges to the local publicly owned treatment works (POTW), the Joint Water Pollution Control Plant (JWPCP).

1.1 General and Process Description

This facility, formerly owned by Anco, was constructed before 1982. The facility lay dormant for a while, and its pretreatment permit was voided in 1994. Coast Plating

purchased the site and began operations at this facility in 1997. Coast Plating owns and operates two facilities in Carson. Coast Plating performs anodizing, chemical coating, painting, and penetrant testing at both facilities, primarily for the aerospace industry. At this facility, however, Coast Plating processes parts that are larger in size, such as aircraft skins and wings.

Before performing anodizing or chemical coating, if the part is heavy with oil, Coast Plating solvent cleans the part by hand. The part is then placed on a rack to be lifted and lowered mechanically into and out of each tank in the anodize process or chem film process. Each tank is 27' x 3' x 8.5' in size. *See Photos 1 and 2 of Attachment 1.* The first part of the process line is alkaline cleaning, alkaline etching, and deoxidizing, with a water rinse between each step.

The next step is anodizing or chem film. The facility provides three types of anodizing: chromic acid, sulfuric acid, and hard anodizing. The facility also has a tank with boric sulfuric acid which provides the same type of anodizing as chromic acid but using a non-chromated compound, thus avoiding the harmful environmental effects of chromium. Coast Plating is waiting for approval from its customers before processing parts through this tank.

The rinse tanks have constantly flowing rinses. All rinses are conveyed through one common line to the wastewater treatment system.

Process and rinse tank contents undergo a weekly analysis to determine if solutions need to be added to or replaced. Water rinses are replaced approximately once a year. Certain plating bath solutions are replaced approximately once every 9 months to a year. For plating solutions, Coast Plating hires an outside company to vacuum out the solution and haul it offsite for proper disposal. For water rinses, Coast Plating uses its own pump to pump the water out and vacuum solids out of the bottom of the tank.

Once the part is taken through the anodizing or chem film steps, it is manually dried. The part then undergoes penetrant testing. Coast Plating applies fluorescent oil to the part, takes the part to the booth and washes the fluorescent oil off, and then turns on a black light. Any defects, such as a crack, will still have fluorescent oil clinging to it, and by the black light, any defects are easily spotted.

<u>Onsite Wastewater Treatment System</u>
See Section 1.3

1.2 Facility Wastewater Sources and Other Wastes

Coast Plating generates the following wastewaters:

- Rinses from the plating line
- Water + penetrant oil from the penetrant testing booth
- Air compressor condensate

The rinses from the plating line are conveyed through one common line to the onsite wastewater treatment system. The water and penetrant oil from penetrant testing is piped directly to the clarifier of the onsite wastewater treatment system.

Air compressor condensate that is collected is transferred, by person, to a tank that serves as an oil-water separator. *See Photo 3 of Attachment 1.* Oil from the top of the tank is skimmed off and hauled offsite. The water is transferred by person, using a bucket, to the onsite wastewater treatment system.

1.3 Facility Process Wastewater Treatment System

The facility's wastewater treatment system consists of pH adjustment, chromium reduction, precipitation, clarification, and solids removal. A two-stage tank system, located below the floor grating, allows for pH adjustment in two steps. The pH is controlled automatically, with a pH setpoint of 5 in the first stage and a setpoint of 8 in the second stage. The facility formerly added sodium metabisulfite for chromium reduction but has recently switched to a sulfide compound. The wastewater is pumped up to a lamella clarifier where flocculant is added at the front end. *See Photos 4 and 5 of Attachment 1.* The overflow from the lamella clarifier goes to an underground 3-stage clarifier, which is located at the building near the head of the anodize line. *See Photo 6 of Attachment 1.* The solids at the bottom of the lamella clarifier are pumped to a sludge thickening tank. *See Photo 7 of Attachment 1.* From there, the thickened solids are then dewatered through a filter press. *See Photo 8 of Attachment 1.* The filtrate is sent back to the first stage of the pH adjustment tank system. The filter cake is removed from the trough beneath the filter press on a daily basis and stored in a cubic yard storage box until it can be hauled away for offsite disposal. *See Photos 9 and 10 of Attachment 1.*

Samples are taken at a sample box downstream of the underground clarifier. Discharge from the clarifier flows to the local sewer system.

1.4 Wastewater Discharge

Wastewater from this facility discharges to the Joint Water Pollution Control Plant. The Sanitation Districts of Los Angeles County (“LACSD”) owns and operates the wastewater treatment plant, which is subject to requirements under an NPDES permit (No. CA0053813) issued by the Regional Water Quality Control Board.

Coast Plating stated that it is in the midst of having a new deionized water rinse system for which the inlet water flow will be controlled by using a conductivity meter to measure metal salts in the rinse tank. Coast Plating stated that all the engineering has been done, and Coast Plating expects to have it in place by next year.

EPA notes Coast Plating’s positive practices of efficient water use such as having drip guards between tanks and moving towards a soon-to-be-installed new rinse system. In addition, the facility’s practice of weekly analyzing its process and rinse tank contents

enables the facility to add the appropriate amounts of solution or replace tank contents on an appropriate schedule.

2.0 Compliance with Federal Categorical Standards

This facility is subject to the federal categorical standard for electroplating, 40 CFR 413, and subject to the limits for facilities discharging greater than 10,000 gallons per day. Therefore, it is a categorical industrial user (CIU). The anodizing and chemical coating processes performed at this facility trigger applicability of this categorical standard.

Coast Plating bought this facility previously owned by Anco, made renovations to the facility, and began operations in 1997, which is after August 31, 1982. A facility is subject to 40 CFR 433 as a new source if construction commenced after August 31, 1982 - the publication date of the proposed rule for 40 CFR 433 - and if the physical changes made at the facility meet the criteria listed under the definition of "new source" at 40 CFR 403.3(m)(1). Based on LACSD's investigation into the matter, Coast Plating's renovation work did not include physical changes meeting those criteria and, therefore, did not trigger applicability of 40 CFR 433.

The facility has had several violations of the federal chromium limit over the past couple of years. EPA reviewed monitoring records of July 2008 through April 2010 and found four violations, with one measurement as high as 63.1 mg/L. *See table in Attachment 2.* Coast Plating stated during the inspection that they believe that the violations were due to solids overflowing to the underground clarifier when staff manually activate the valve at the bottom of the lamella clarifier. Coast Plating plans to install an automatically controlled valve at the bottom of the lamella clarifier to facilitate more gradual opening of the valve.

Based on EPA's review of correspondence between Coast Plating and LACSD, Coast Plating stated different reasons for violations in June 2009 and March 2010. For the June 2009 violation, the facility had just switched to a sulfide precipitation system for reducing hexavalent chromium in the wastewater and experienced some operator error. For the March 2010 violation, which is the most recent violation during the time period EPA reviewed, the facility had experienced a work load increase, and its staff were not cleaning the tanks and dragout sufficiently. Coast Plating stated that it would be implementing a cleaning regiment of all tanks once per month. Coast Plating took corrective action in both cases and returned to compliance with the chromium limit.

The facility's wastewater treatment system is equivalent to the best available technology economically achievable (BAT) identified for 40 CFR 433. Since Coast Plating is subject to the less stringent limits of 40 CFR 413, it should be able to achieve consistent compliance with the federal limits assuming that the facility's wastewater treatment system is operated and maintained correctly.

2.1 Compliance with Other Federal Pretreatment Requirements

This facility is a significant industrial user (SIU) because it is subject to a federal categorical standard. Like any industrial user, it must comply with pretreatment requirements in 40 CFR 403, including, but not limited to, national prohibitions in 40 CFR 403.5 and reporting requirements in 40 CFR 403.12. Note that some requirements in 40 CFR 403 are applicable specifically to SIUs and some even more specifically to CIUs.

2.2 Compliance with Local Limits

The facility's most recent pretreatment permit issued by LACSD is Permit No. 20326. The facility's sample point, as indicated in its permit, is the sample box directly downstream of the clarifier. The facility's permit requires Coast Plating to sample once per six months.

3.0 Summary of Findings

1. This facility is subject to the federal categorical standard for electroplating, 40 CFR 413, as a facility discharging greater than 10,000 gallons per day. The anodizing and chemical coating processes performed at this facility trigger applicability of this categorical standard.
2. This facility is an SIU and a CIU. The facility is subject to applicable pretreatment requirements in 40 CFR 403.
3. The facility has had several violations of the federal chromium limit over the past couple of years. The facility has taken corrective actions in the past and has a plan to resolve a current operational issue with the wastewater treatment system.
4. The facility has an onsite wastewater treatment system equivalent to BAT for 40 CFR 433. Since the facility is subject to the less stringent limits of 40 CFR 413, it should not have difficulty consistently complying with its permit limits.
5. The facility plans to install, by next year, a new rinse system controlled by conductivity. EPA recognizes that Coast Plating is taking another step to increase its efficiency in water use.

Attachment 1: Photos

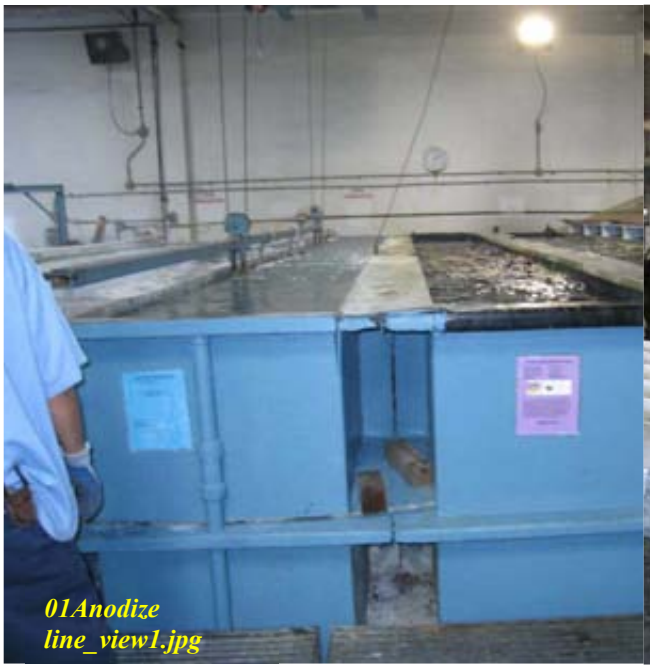

Photo 1

Taken by Anna Yen on August 26, 2010

Photo 2

Taken by Anna Yen on August 26, 2010

Process Tank Line for Anodizing or Chem Film Coating

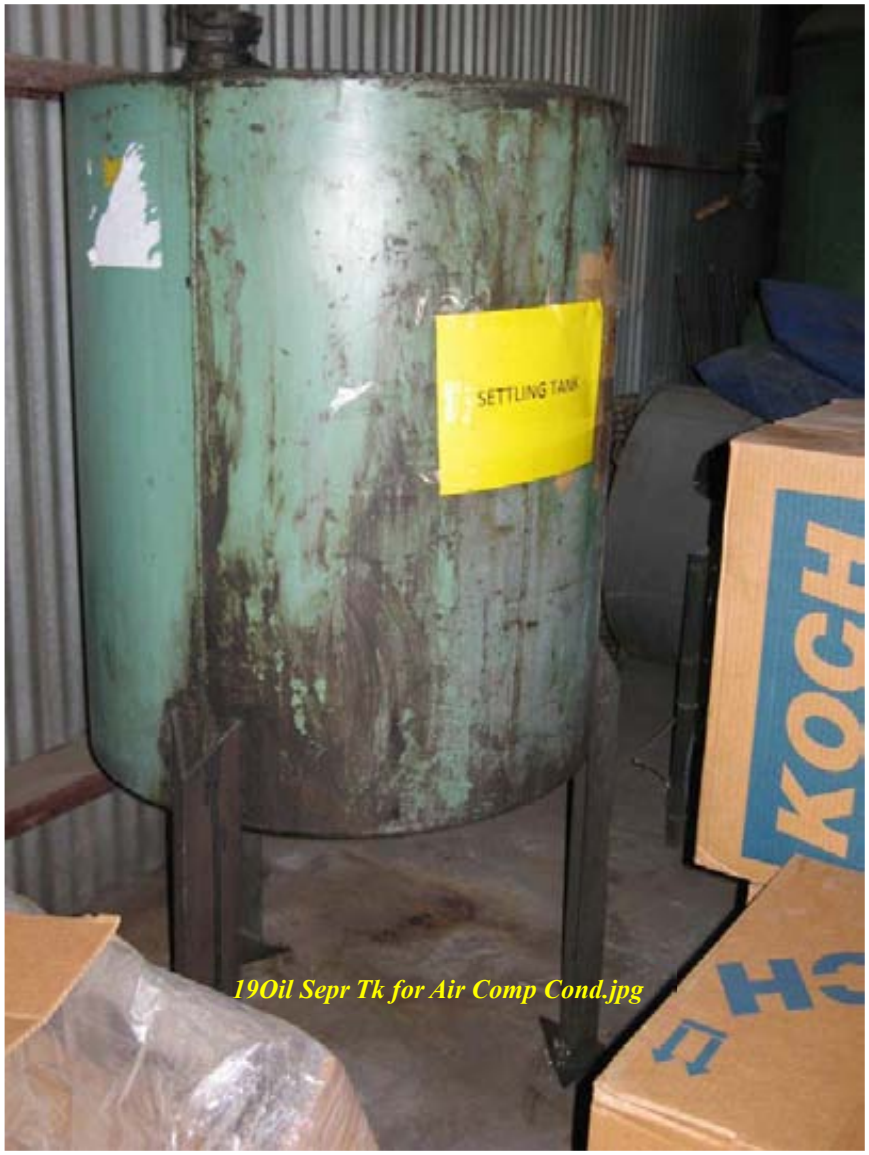

Photo 3

Tank which serves as an oil-water separator for air compressor condensate
Taken by Anna Yen on August 26, 2010

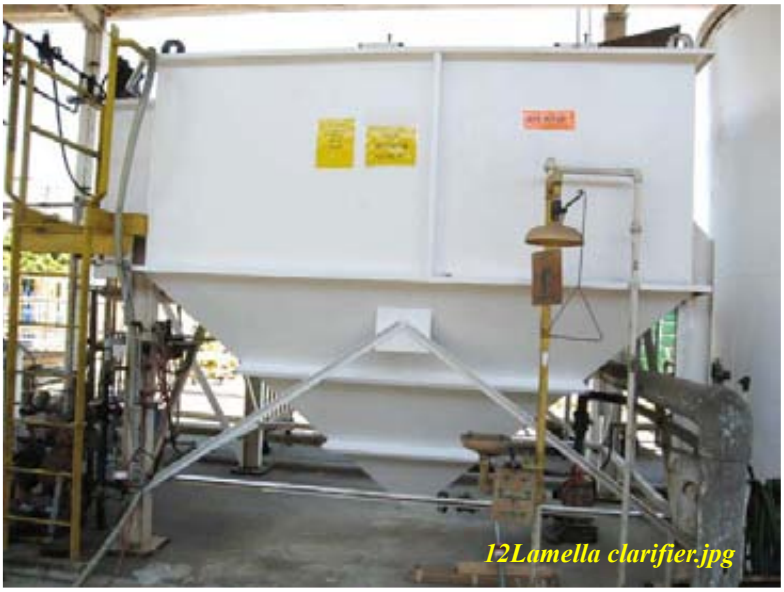

Photo 4

Lamella clarifier
Taken by Anna Yen on August 26, 2010

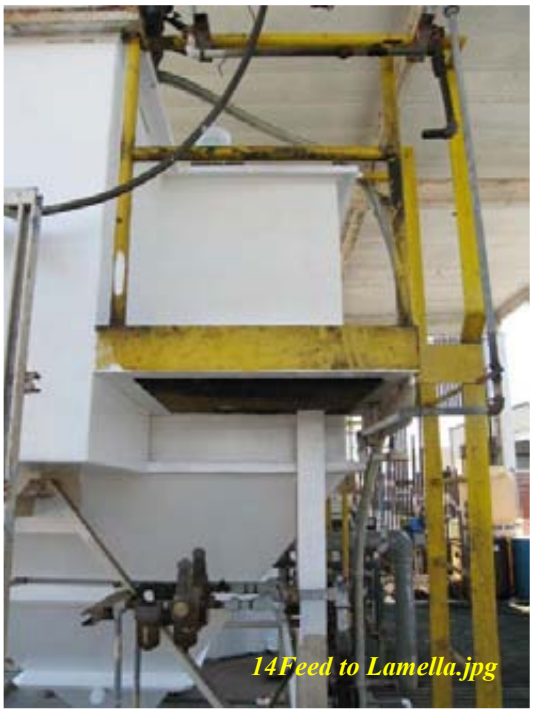

Photo 5

Lamella clarifier – feed end
Taken by Anna Yen on August 26, 2010

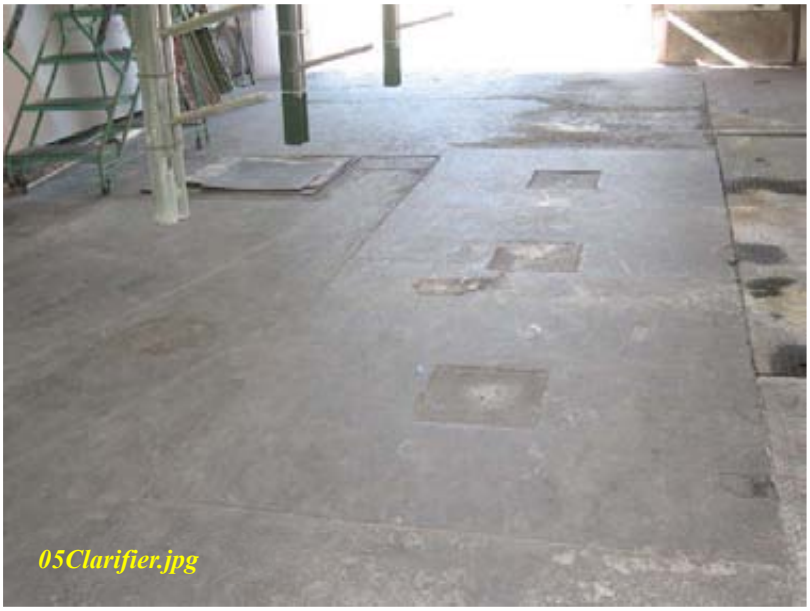

Photo 6

Underground 3-stage clarifier
Taken by Anna Yen on August 26, 2010

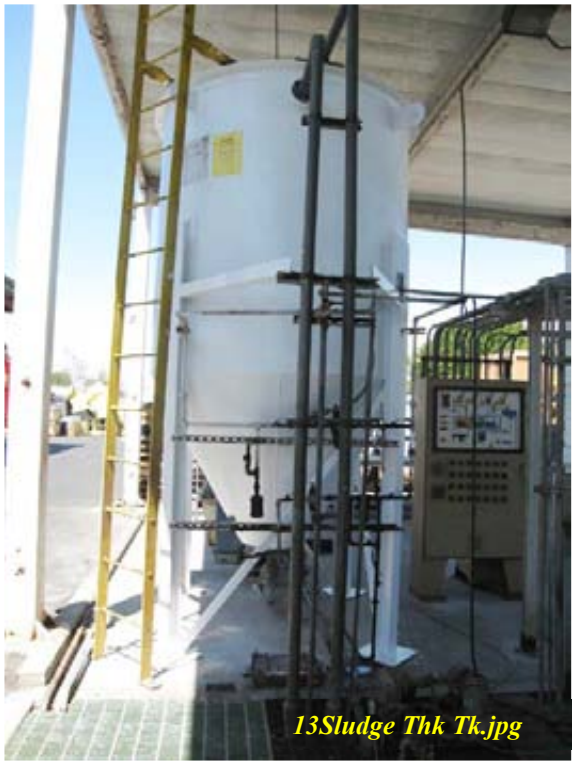

Photo 7

Sludge thickening tank
Taken by Anna Yen on August 26, 2010

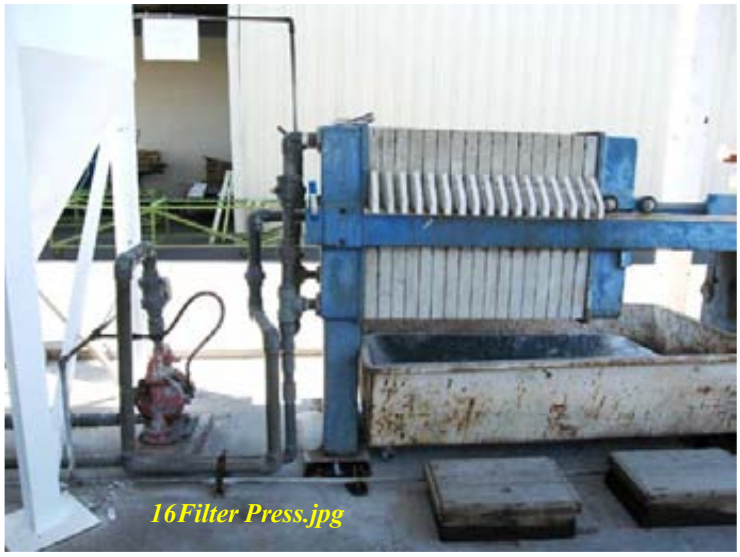

Photo 8

Filter press
Taken by Anna Yen on August 26, 2010

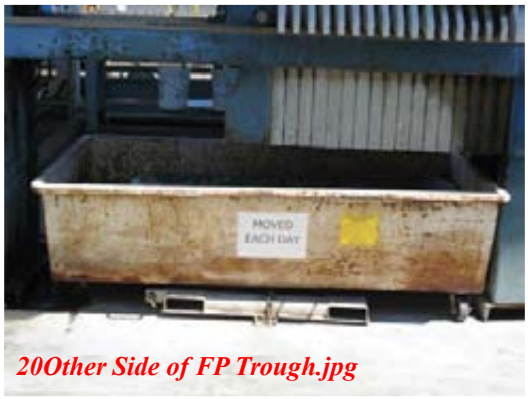

Photo 9

Filter press and labeled side of trough
Taken by Anna Yen on August 26, 2010

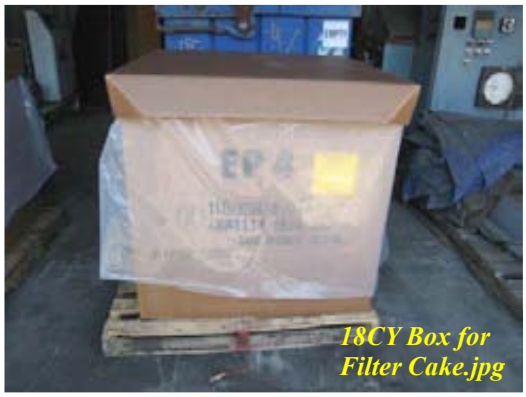

Photo 10

Storage box for filter cake
Taken by Anna Yen on August 26, 2010

Attachment 2: Compliance Monitoring Records Review

Permit Limits in mg/L (Federal Categorical Limits):	**Chromium**
Daily	7.0
4-Day	4.0

	Measured Levels (mg/L)
Sample Date (1^{st} day of composite sample)	**Chromium**
4/20/10	0.39
3/30/10	0.54
3/29/10	0.21
3/2/10	**9.37**
10/12/09	0.13
10/9/09	**9.16**
10/6/09	0.43
8/12/09	1.02
7/21/09	0.78
7/12/09	0.99
6/29/09	**13.8**
4/20/09	0.099
4/13/09	1.32
1/20/09	**63.1**
7/24/08	0.39

Key:

xxx Out of compliance with federal daily and/or 4-day limit of 40 CFR 413