DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

A293131218

FACILITY: DIAMOND CHROME PLATING INC		**SRN / ID:** A2931
LOCATION: 604 S MICHIGAN, HOWELL		**DISTRICT:** Lansing
CITY: HOWELL		**COUNTY:** LIVINGSTON
CONTACT: John Wagner , Director - Health, Safety & Environmental Affairs		**ACTIVITY DATE:** 09/16/2015
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

On 9/16/2015, the Department of Environmental Quality, Air Quality Division, conducted an unannounced, scheduled inspection of Diamond Chrome Plating (DCP).

PTI, rule, or requirement	Emission unit description	Control device	Scrubber location	Operating status
PTI No. 367-83B; 40 CFR Part 63 Subparts A & N; First Amended Consent Decree (FACD)	Open surface chrome plating tank nos. 9, 11, and 12 (10 and 13 have been removed), aka Dept. 2	Scrubber system #3; a Ceilcote vertical composite mesh pad (CMP) scrubber; *Tank 8 now exhausts to scrubber #3	South scrubber on east roof	Compliance
PTI No. 367-83B; 40 CFR Part 63 Subparts A & N; FACD	Open surface chrome plating tank nos. 1-4, 6, and 8*, aka Dept. 1 *Tank 8 now exhausts to scrubber #3	Scrubber system #4; a Ceilcote vertical composite mesh pad (CMP) scrubber	North scrubber on east roof	Compliance
PTI No. 386-85A; 40 CFR Part 63 Subparts A and N; FACD	Open surface chrome plating tank nos. 5 (recently relocated from Dept. 1), 7, 15, 17; west side of plant	Scrubber system #5; a Ceilcote vertical wet scrubber with kimre mesh pad, fume suppressant	SW portion of bldg., inside plant, exhausts outdoors	Compliance
PTI No. 386-85A; 40 CFR Part 63 Subparts A and N; FACD	Not in use; open surface chrome plating tanks 19-21	Not in use; scrubber #6, a Ceilcote packed bed/CMP scrubber with kimre mesh pad	NW of building, on outside ground	Has not been used in recent years
40 CFR Part 63 Subpart T	Batch vapor degreaser, uses TCE	Freeboard refrigeration, dwell, reduced draft		Compliance
PTI No. 489-91; 40 CFR Part 61 Subpart E	Sludge dryer	Cyclone collector		Removed
PTI No. 672-88	Chrome redox tank	MAPCO mist eliminator		Pending
PTI No. 673-88; 40 CFR Part 63, Subpart WWWWWW	Metal cleaning and electroless nickel plating operation	Scrubber	South of plant, on ground	Compliance
PTI No. 675-88A; 40 CFR Part 63, Subpart WWWWWW	Cadmium plating line (two tanks)	Wet scrubber	Inside plant, some ductwork on plant exterior	Compliance
PTI No. 676-88	Two alkaline chrome strip tanks	In-line mesh pad in stack, exhausts to outside air		Compliance
Rule 285(r)	Two alkaline strip tanks which exhaust indoors			Did not observe
PTI No. 677-88	Cooling tower			Compliance
Rule 285(r)	Pickling tanks			Not observed
Rule 285(r)	Phosphate wash tanks			Not observed
Rule 285(l)(vi)(B)	Small sandblasters	Exhaust to wet scrubber	SW portion of bldg.	Compliance
Rule 282	6 electric ovens			Compliance
Rule 285(g); 40 CFR Part 60 Subpart JJJJ, and possibly 40 CFR Part 63 Subpart ZZZZ	Emergency generator; natural gas-fired;150 kW			Not operating

Environmental contacts:

John D. Wagner, PE, REM, CSP, Director of Health, Safety & Environmental Affairs; 517-546-0150; env@diamondchromeplating.com

Tom Poplawski; Laboratory Manager; 517-546-0150; labdcp@ameritech.net

Facility description:

DCP is a hard chromium electroplater, which also conducts cadmium and nickel plating. They are a job shop, and plate aircraft landing gear, commercial hydraulics, industrial dies, and miscellaneous parts.

Regulatory overview:

The 2006 multi-media Joint Consent Decree (JCD) for this facility has been replaced, as of 8/5/2015, by a First Amended Consent Decree (FACD). The purpose of the JCD was to address not only air issues, but also contamination of soil, storm water, and ground water. The FACD is an updated document, reflecting changes in circumstances and regulations, since the JCD was written.

In addition, DCP has several air use permits, and state and federal air regulations apply to various emission units. The chrome plating processes are subject to 40 CFR Part 63 Subpart A, General Provisions, and Subpart N, the National Emissions Standards for Hazardous Air Pollutants for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chrome NESHAP). DCP considers their facility to be a *large hard chromium electroplating facility*, under the NESHAP, and they plate in open surface chrome tanks. They also have a large batch vapor degreaser, which is subject to 40 CFR Part 63 Subpart T, the National Emissions Standards for Halogenated Solvent Cleaning. Additionally, 40 CFR Part 63 Subpart WWWWWW, the NESHAP for Area Source Standards for Plating and Polishing Operations applies to their nickel plating and cadmium plating processes, but AQD does not have delegated authority from the Environmental Protection Agency to regulate this Area Source MACT. They have a small emergency generator onsite, which is exempt from the requirement of Rule 201 to obtain a permit to install (PTI). The generator may be subject to 40 CFR Part 63, Subpart ZZZZ, the National Emissions Standards for Stationary Reciprocating Internal Combustion Engines, also known as the RICE MACT, but AQD does not have delegation of authority for this Area Source MACT standard.

Fee status:

Because it is subject to a MACT standard (the chromium NESHAP), DCP is classified as a Category III fee source, and pays $250.00 annually to the AQD. The facility reports each year to the Michigan Air Emission Reporting System, though the company expressed interest, in May 2014, in being removed from MAERS. AQD's Emissions Reporting & Assessment (ERA) Unit has indicated that statewide, about 2/3 of chrome platers report to MAERS, and the decision is typically left to the AQD district offices. Facilities with past compliance issues are usually required to report to MAERS.

Location:

The facility is located on the south side of the City of Howell. It was established in 1954. Immediately north of the plant are a DCP parking lot, and some residences. To the immediate east are additional residences. To the west is a community park, and a residential area. To the south is the CSX railroad line, with industrial and commercial facilities to the south and southeast.

Stack testing:

On 9/10 and 9/11/2014, DCP stack tested scrubbers #3 and 4 (the south and north scrubbers, respectively, on the east roof). Total chromium emissions from each scrubber, were 0.001 mg/dscm, less than 10% of the limit under the NESHAP. DCP is now considering itself a large rather than small hard chromium electroplating facility with open tanks, subject to NESHAP limit of 0.011 mg/dscm, whereas they have previously considered themselves to be a small hard chromium electroplating facility with open tanks, subject to a post 9/19/2014 NESHAP limit of 0.015 mg/dscm. In addition, chromic acid emissions complied with the permitted limit in PTI 367-83B. The Lansing District has determined DCP

hard chromium electroplating facility with open tanks, subject to NESHAP limit of 0.011 mg/dscm, whereas they have previously considered themselves to be a small hard chromium electroplating facility with open tanks, subject to a post 9/19/2014 NESHAP limit of 0.015 mg/dscm. In addition, chromic acid emissions complied with the permitted limit in PTI 367-83B. The Lansing District has determined DCP was operating at maximum routine operating conditions, as required, during the stack testing. Stack test observations are documented in separate activity reports.

Recent history:

From 2013-2015, DCP several surfactants free of perfluorooctane sulfonic acid (PFOS), to see if they could reduce the generation of chromic acid mist, while providing product quality for their plated parts. The purpose of reducing chromic acid mist would be to reduce the amount of chromic acid condensing in rooftop ductwork, and thereby reduce potential for leaks from the ducts. However, the surfactants had some product quality issues which they could not resolve, and were discontinued. The chrome plating NESHAP prohibits use of surfactants which contain PFOS, after 9/21/2015.

On 3/16/2015, DCP e-mailed to AQD a 3/9/2015 PTE demonstration prepared by Derenzo and Associates, Inc. (DAI) for the halogenated batch solvent vapor degreaser, which uses trichloroethylene (TCE). This was done to respond to AQD's request for an updated PTE demonstration. AQD had observed that yearly TCE emissions, as reported to MAERS and the Toxic Release Inventory (TRI), frequently exceeded the estimated TCE emissions in the original 1998 PTE demonstration for the current batch vapor degreaser. The new demonstration showed that estimated maximum potential emissions for TCE would still be below the 10 TPY major source threshold for a single HAP.

On 7/27/2015, DCP's consultant, now called Derenzo Environmental Services (DES), submitted a permit exemption demonstration, for replacing a section of 54 inch wide, sectioned polyvinyl chloride (PVC) ductwork leading to scrubber No. 4 with narrower, extruded ductwork, to reduce the number of joints, which can be leak prone. This narrower ductwork would be 24 inches in diameter, and there would be twin parallel ducts, instead of the single larger duct. It would be manufactured and installed by Midwest Air Products Company, Inc., the manufacturer of scrubbers Nos. 3 and 4, and the 54 inch diameter ductwork. AQD district staff and AQD Permit Engineer Jeff Rathbun reviewed the exemption demonstration. In an 8/17/2015 e-mail (please see plant file), I advised DES and DCP that AQD does not grant or approve exemptions, but the proposed replacement, as described, appeared to meet the intent of the Rule 285(a) exemption. They were also informed that a demonstration in the form of a stack test may be required, in the future.

Arrival:

This was an unannounced inspection. I was accompanied by AQD's newest inspector in the Lansing District office, Environmental Engineer Julie Brunner. J. Brunner very recently transferred to the field, after working for AQD for 15 years as a permit engineer.

We drove around the block on which DCP is located, to check for visible emissions and/or odors. At 9;34 AM, J. Brunner detected a barely detectable, unknown odor to the west of the plant, on South Walnut Road. On the second drive, I noticed a barely detectable, unknown odor on Brooks Street, just east of the intersection with South Walnut. We drove around the block again, detecting no further odors.

We parked in the parking lot immediately north of the west plant. No visible emissions were detected coming from the exhaust stacks of scrubbers #3 and 4, or the cooling tower. Weather conditions were sunny, clear, and 64 degrees F, with winds out of the south southeast at 0-5 miles per hour.

We signed in at the plant, and met with Mr. Wagner. We provided our identification/credentials, and a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, per AQD procedures.

We informed DCP staff of the odors that we detected offsite. It was not certain what was the source of these odors. The odors were not found to be in violation of Rule 901(b), which prohibits the emission of

air contaminants which cause unreasonable interference with the comfortable enjoyment of life and property.

There has been a personnel change at the plant, in that Mr. Monroe Huckaby, Lab Assistant, is no longer with the company. His work on the roof to check for leaks is now being conducted by Mr. Otis Moore.

Mr. Wagner provided us with a copy of an updated diagram of the ductwork on the east roof of the plant. This copy had been written on, so he offered to replace it with a clean copy, by e-mail. This was e-mailed on 9/21/2015. Please see the attached clean copy, for reference. This reflects changes made to the ductwork in 2014.

Under the FACD, DCP was to provide AQD with a copy of a diagram of the ductwork on the rooftop, measured out in 10 foot intervals. Later this same day, Mr. Wagner e-mailed to me a copy of a 5/15/2015 diagram of the ductwork, measured in inches. This appears to satisfy the FACD requirement of Paragraph 5.3(a). It is my understanding that there had been some confusion, previously, on whether the company had to provide this document to the DEQ, or just maintain it onsite.

We were advised that there will be a further updated diagram, once the large section of 54 inch diameter PVC ductwork associated with scrubber #4 (north scrubber) has been replaced by two longer, extruded sections of 24 inch diameter PVC ductwork. The ductwork will be replaced on an upcoming weekend, in October.

Under the NESHAP, Mr. Wagner explained, there are two options which regulated facilities may choose from, for compliance. These are the use of surfactants, or the use of a control device. DCP is using surfactants as the option for the west half of the plant, with scrubber #5 removing fumes from the workplace environment, while using control devices (scrubber #3 and 4) as the option for the east half of the plant.

The chrome NESHAP prohibits the use of PFOS-containing surfactants after 9/21/2015. Mr. Wagner explained that they ceased using surfactants with PFOS in the west plant during the course of 2015. The last of the surfactants in the west plant which contained PFOS was phased out about 4 months ago, we were informed. Another surfactant with PFOS was phased out a couple months earlier, we were told. DCP is now using a PFOS-free surfactant, Mist Suppressant PF NF, in the west plant. Per request, we were provided with a copy of the specification sheet from the manufacturer, MAR-Tech Holdings Inc., and with a copy of the Safety Data Sheet (SDS). Please see attached.

We were also advised that use of chrome plating tank Cr-12 as a trial tank for surfactant in the east plant has ceased, so no surfactants are being utilized in the east plant. The east half of the plant is where aviation parts are plated. DCP's aviation customers are very exacting in their standards for the quality of the part finish, AQD has been informed, and so DCP does not want to use surfactant in the east plant, as it could cause bubbles or pitting in the chrome finish. The FACD does not require the use of surfactants, unless the DEQ identifies on 3 separate dates within any 3 year period that releases from ductwork were not identified, documented, or repaired as required under FACD paragraph 5.3(b). Then, under 5.3Cc), DCP would be required to submit evidence that it has done one of a number of optional corrective actions.

We were informed that all rooftop exhaust points, both active and sealed over, have been numbered, to aid in identification. These numbers have been pasted into a satellite image of the roof, and we were given a resulting four page document, with each page showing a different quarter of the roof. Please see attached.

Inspection:

Chrome plating departments 1 and 2; PTI No. 367-83B:

After discussing recent changes, we walked out onto the plant's east roof. Scrubbers #3 and 4 had no visible emissions. The scrubbers showed no indications of any chromic acid leaks. At 11:55 AM,

scrubber #3 pressure drop was 2.9 inches water column (w.c.), and scrubber #4 pressure drop was 2.8 inches, w.c.

DCP keeps written logs of the maintenance performed on each scrubber. Copies of these are provided in each DCP quarterly Compliance Progress Report. The latest Quarterly Progress Report has been reviewed by AQD.

All of the ductwork on the roof appeared clean, and free of leaks or "weeps." Please see attached photos. I looked on the underside of the rooftop ductwork., as well I could not find signs of any wet or dried leaks. I also looked in the catch trays underneath the ducts, and could not find any puddles of chromic acid. The catch trays have hoses which would route collected liquids into the plant and into the pits underneath the chrome plating tanks. Side shields or wind baffles along the ducts and catch trays were intended to offer shelter from wind and/or rain, to prevent re-entrainment of any collected chromic acid liquids that might be in the catch trays. I could not see any chromic acid stains visible on the asphalt-covered roof.

We were shown the section of 54 inch diameter segmented ductwork which will be replaced with two longer, parallel, extruded ducts, each 24 inches in diameter. The ductwork to be replaced is, at present, the most maintenance intensive, in terms of finding, cleaning, and repairing leaks/weeps.

We also saw the current preferred method for repairing leaks or weeps on the ductwork, which is plastic welding of PVC patches onto the ductwork, with a hot air gun. Please see photograph number 6 at the end of this report.

On the inside of the plant, I observed the interior ductwork for chrome plating tanks in both the east and west sides of the plant. The interior ductwork for chrome tanks was almost completely painted brown, other than some metal overhead ductwork in the west side of the plant which the four chrome tanks of Department 3 connected to. There were a moderate number of weeps, mostly dried, visible on the ductwork, overall. Some dried stains of individual drips were noted, see notes below.

Chrome tank no. 1 was plating. All of the chrome tanks in the plant have pits beneath them, I was informed. There were 3 small dried weeps on the vertical ductwork inside the plant.

Chrome tank no.2 was plating. There were two parallel drips on the vertical ductwork inside the plant.

Chrome tank no. 3: This titanium steel tank was relocated in 2014 to where tank no. 5 used to be. Titanium steel is inert against chromic acid, Mr. Wagner has explained, and is therefore superior to ordinary steel. The pit beneath tank 3's current location has historically been a source of concern for the DEQ. It has been reworked, so that it is now shallower. Where tank no. 3 used to be, there is nothing, I was shown. Tank 3 was plating, at the time of the inspection. There was some dried splashed out chromic acid around the base of the duct and rim of the tank, but no signs of leaks. The splash out likely came from parts being raised from the plating bath, or rinsed off with water, I was informed.

Chrome tank no. 4 was not plating I examined the brown PVC ductwork for leaks, and found a single tiny drip, which may have been caused by splash out from the tank, instead of a leak.

Chrome tank no. 6 was not plating any parts at the moment. This is a titanium tank, which is more resistant to corrosion from chromic acid than ordinary steel. Gray PVC ductwork was installed in either 2013 or 2014, where the exhaust is ducted through the roof. On the older PVC ductwork, which is painted brown, there was a single dried trickle of chromic acid. There was a containment system at the base of the exhaust duct, to route any liquid that might make it that far into the pit beneath the tank.

Chrome tank no. 8 was plating. The brown painted ductwork was free of leaks. The brown paint is a distinctly lighter shade of brown than the chromic acid itself is, so leaks or dried stains would be visible. .

Chrome tank no. 9 was plating. There were some drips from leaks on the brown painted ductwork, inside the plant. I could not tell if the leaks were dried or fresh. This ductwork was inside the plant, however, and not on the roof. There was some splashout on the rim of the tank. .

Chrome plating tank no. 11: A plated part was being removed from tank 11. It is a long, narrow tank in the southeast corner of the east plant. It is a titanium steel tank, which recently replaced a conventional steel tank, to avoid corrosion and potential leaks of chromic acid. The cost has been reported as roughly $100,000.00. There is a containment system at the base of the ductwork,which would route any liquid leaking from the duct to the pit beneath the tank.

Chrome tank no. 12: Tank 12 is no longer being used as a trial tank for surfactants. It is operating without surfactants, as DCP is not intending to use surfactants for the east half of the plant (Departments 1 and 2). It was plating, at this time.

Chrome plating department 3; PTI No. 386-85A:

The west side of the plant is served by scrubber #5. There is a shared containment pit for all four of the tanks in this department, I have been informed. There were no VE from scrubber #5 at 1:56 PM. Scrubber pressure drop was 3.6 inches, w.c., with the range being 2 to 4 inches, w.c. I inquired about some corrosion on what appeared to be ductwork leading to the exhaust stack. I was informed that this was actually the metal surface of a former plating tank which had been repurposed. I was told that this corrosion did not extend through the side of the ductwork.

Tank no. 5 was not plating, at this time. The ductwork appeared to be clean.

Tank 7 was not plating. A couple trickles of chromic acid were visible. Mr. Huckaby demonstrated that they were dried stains, by touching the stains with his hand.

Tank no. 15 was plating. It is a titanium tank. The vertical ductwork, painted brown, appeared to be clean, with no signs of leaks. Overhead, a large, unpainted metal horizontal section of ductwork showed chromic acid stains. These stains looked dry, and I suspected them to be the same stains I observed the previous inspection, in 2014

Tank.no. 17 was plating. No leaks were visible on the brown ductwork.

Sand blasting was taking place in the small sand blast booths near scrubber #5. There were no visible emissions from the control device, which exhausts to the in-plant environment.

Chrome plating tanks 19-21 and scrubber system 6; PTI No. 386-85A:

The PBS/CMP scrubber system 6 is not in use, nor were the chrome plating tanks (numbers 19-21) associated with it.

Batch vapor degreaser; Rule 285(r), and 40 CFR Part 63 Subpart T:

The 3/9/2015 PTE demonstration for the batch vapor degreaser calculated PTE for TCE as 7.9 TPY. This was based upon the various control equipment and control techniques being utilized by DCP. The company has been advised that these controls and techniques must be applied properly, in order to claim emission reduction credit, in the PTE demonstration. DCP has indicated that they have a customer who will only accept TCE as the cleaning solution used for their parts, and that to discontinue the use of TCE here at the plant would result in the loss of this major customer.

Mr. Tom Poplawski, Lab Manager, provided copies of the recordkeeping they do, pursuant to 40 CFR Part 63, Subpart T, the NESHAP for halogenated solvent cleaning. These are attached for reference. They monitor and record the drop speed, wind speed, and dwell time.

Wind speeds recorded in the forms were in the range of 10-20 feet per minute. The wind speed must be under 50 feet per minute, under the NESHAP, we were informed. Records indicated the degreaser's rolling door/cover, which closes both manually and automatically , was working. The records indicated freeboard temperatures, generally at 52-56 degrees F, were less than the required 30% of the solution temperature (190 degrees F). The hoist speed, at 6.8 to 9.8 ft/min was less than the maximum allowable hoist speed of 11 ft/min. There is a pause in the motion of the hoist, when parts are allowed to drip in the degreaser, prior to removal. It is my understanding that this pause is the dwell time. The dwell time, according to the forms, must be at least 85.6 seconds, minimum, and current dwell time was typically 90 seconds, on the examples of records we were given. The 85.6 seconds is the averagemeasurement of 3 "test" runs done on 2/17/998, on how long it took parts to stop dripping in the vapor zone. This is reflected on the attached copy of the *Halogenated Solvent Cleaner NESHAP: Dwell Determination Test Recordkeeping Form.*

Standing on a raised platform, next to the degreaser, I could detect a TCE odor. This process exhausts into the general, in-plant environment, rather than directly outside. Mr. Poplawski operated the degreaser for us, using a basket of parts which had recently been cleaned, to demonstrate how it is used. He advised that we keep our hands and heads clear of the parts basket, as it is automatically lowered, into the degreaser. The dwell or delay time of 90 seconds allowed dripping to cease, prior to the parts basket being removed from the degreaser. The parts basket has a built-in cover or lid, which fits over the entire degreaser, when parts are being cleaned, to prevent emissions.

There is a drip pan, installed under the parts basket, in the event of drippage. The rolling door which covers the top of the degreaser appeared to be working properly. I could not see any signs of damage to the door. We were also shown the degreaser's distiller unit, which separates oil from TCE. This containment area has 1.5 times the volume of the distiller unit itself. A curtain was placed behind the degreaser, to block wind from blowing over the degreaser.

I could not find any instances of noncompliance with the batch vapor degreaser. I could not see any signs of leaks on the unit. There are containment areas underneath the device.

Chrome redox tank, PTI No. 672-88:

The chrome redox tank converts hexavalent chromium in wastewater to less toxic trivalent chromium. There is an existing permit for the process, which Mr. Wagner was not immediately aware of. This is a process which he suspected could now be considered exempt, as the vintage PTI (1988) predates many permit exemptions. I will provide a copy of the PTI to Mr. Wagner, and we will review compliance status.

Metal cleaning and electroless nickel plating operation with scrubber, PTI No. 673-88:

The nickel scrubber is physically located outside of the plant, on the south side, and has a conical exhaust outlet. At ground level, to the south of the plant, we could not see any visible emissions.

40 CFR Part 63 Subpart WWWWWW, the NESHAP for Area Source Standards for Plating and Polishing Operations applies to their nickel plating processes, but AQD does not have delegated authority from the Environmental Protection Agency to regulate this Area Source MACT.

Cadmium plating line (two tanks) with wet scrubber, PTI No. 675-88:

The cadmium scrubber is located inside the plant. Some of the ductwork extends outside of the plant, for a short, horizontal run, which was pointed out to me. The scrubber exhaust is horizontal, out the south wall of the plant. The scrubber has a spray head, and a recirculating pump. The unit was running, and there were no visible emissions from the exhaust outlet. There are two mushroom shaped vents atop the roof which once served the cad bench. They are no longer in use, because the cadmium bench has a control unit which now exhausts into the in-plant atmosphere.

Inside the plant, we did not approach the cadmium plating tanks themselves, as additional personal

protective gear (respirators) would be needed.

40 CFR Part 63 Subpart WWWWWW, the NESHAP for Area Source Standards for Plating and Polishing Operations applies to their cadmium plating processes, but AQD does not have delegated authority from the Environmental Protection Agency to regulate this Area Source MACT.

Two alkaline chrome strip tanks; PTI 676-88:

While up on the roof, no visible emissions could be seen from any stack. Their exhaust passes through an in-line mesh pad, before being released to the atmosphere.

Strip tanks which exhaust indoors; Rule 285(r)

I did not observe these tanks today. They exhaust into the general, in-plant environment, rather than to the outside air.

Cooling tower, PTI No. 677-88:

There were no visible emissions from the cooling tower, during the course of the inspection.

6 electric ovens; Rule 282(a):

These are used to heat parts, to remove hydrogen, as that could cause hydrogen embrittlement. .

Emergency generator; Rule 285(g), 40 CFR Part 60, Subpart JJJJ, and possibly 40 CFR Part 63, Subpart ZZZZ:

The natural gas-fired generator is emergency backup for the storm water pumps onsite. The generator was not running, at this moment. We were able to examine it up close, from the roof of plant 5. Mr. Poplawski provided us with copies of operational records, which were being kept pursuant to 40 CFR Part 60, Subpart JJJJ. Please see attached. He explained that the generator is "exercised" or operated, weekly, for purposes of operational readiness.

data from the unit indicated it had run 447.6 hours so far, and the coolant level was 854 stp. A name plate read:

Wolverine Power Systems; GBU 403; 400 AF 3 Pole; UI 690 volt; UIMP 6 kV; 50/60 Hz at 40 degrees C; Ac480V;) 25ka

We left the site at 2:53 PM.

Conclusion:

We did not observe any instances of noncompliance. AQD will visit the plant during the winter or spring, as time and resources allow, to check on the condition of the PVC ductwork on the roof.

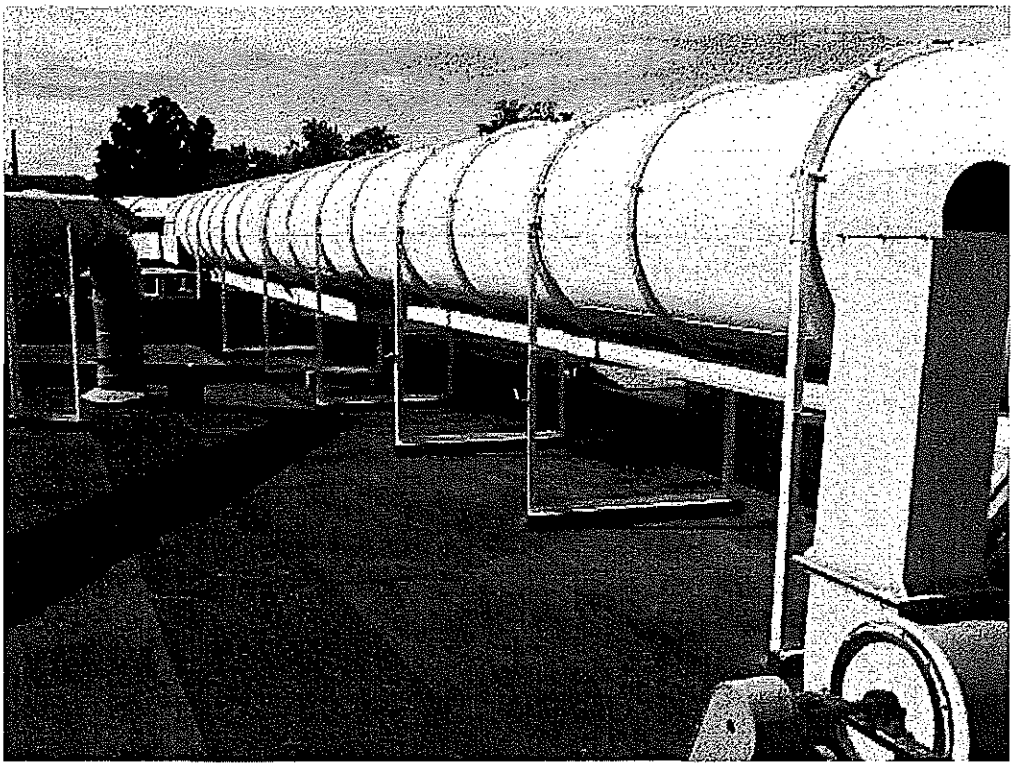

Image 1(Photo 1) : Looking south, at ductwork south of scrubber No. 3.

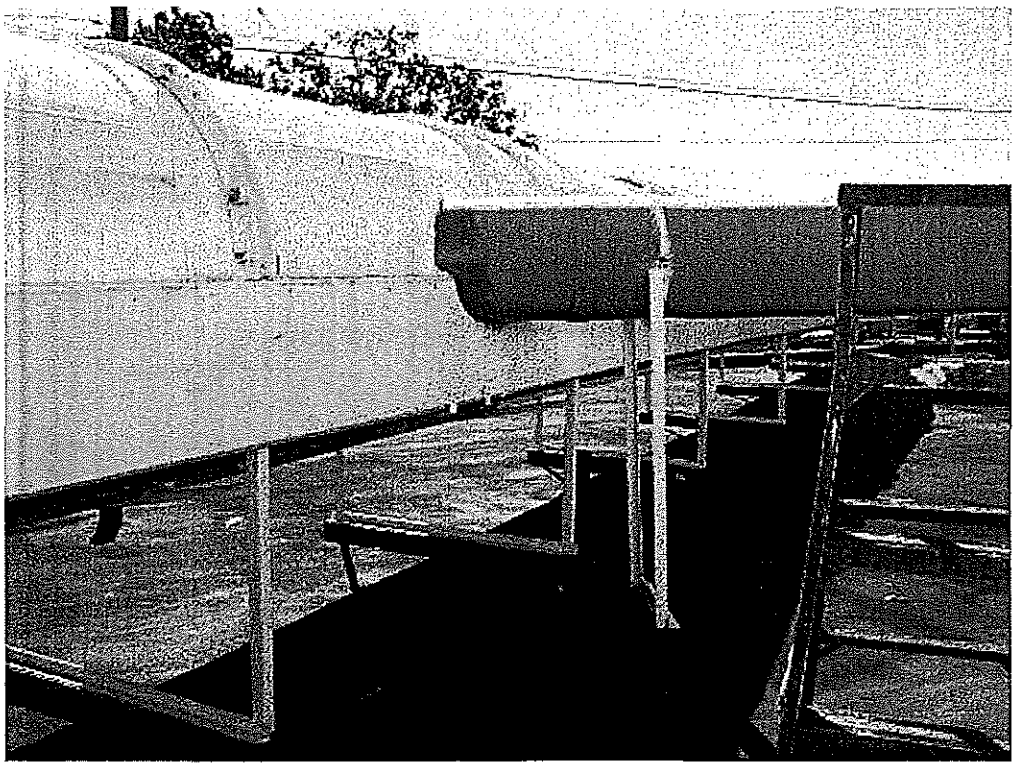

Image 2(Photo 2) : Looking south at ductwork leading away from scrubber No. 4.

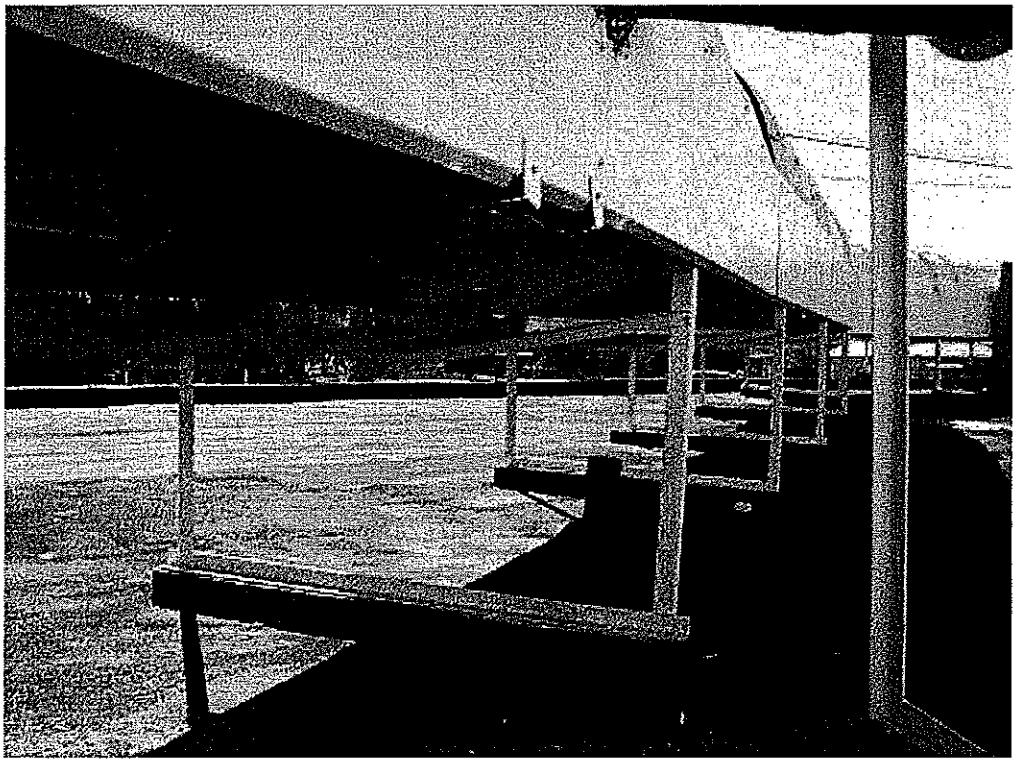

Image 3(Photo 3) : Underside of the ductwork in photo 2.

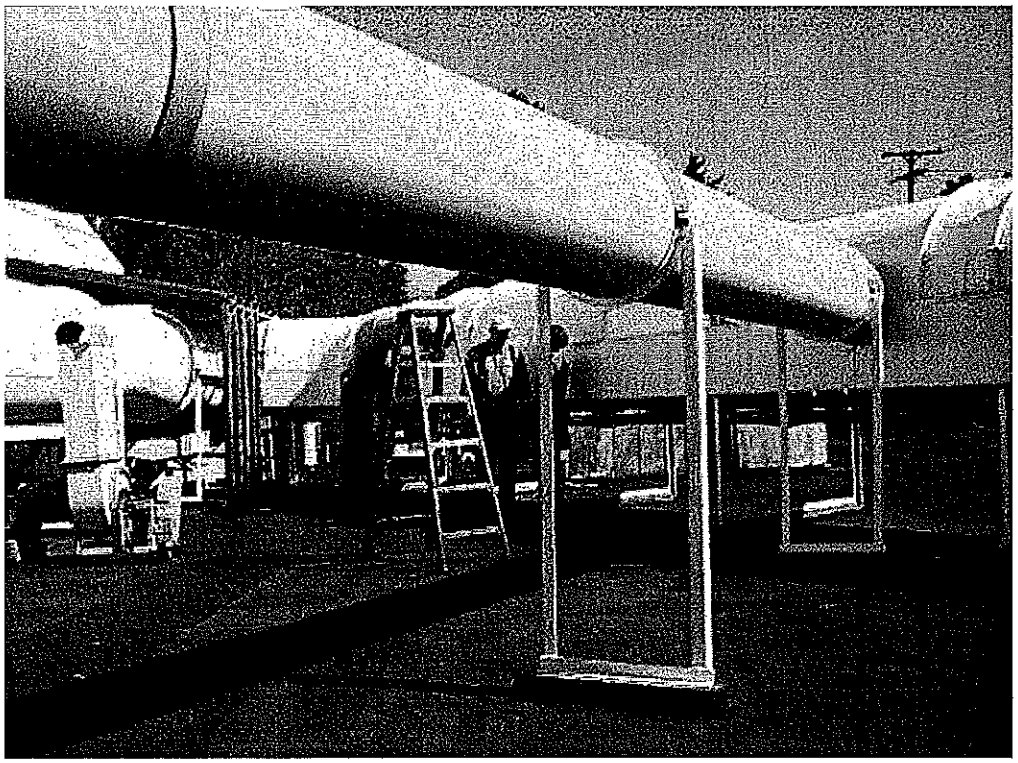

Image 4(Photo 4) : Looking N, at 54 inch diam. ductwork (background), to be replaced with twin 24 inch ducts.

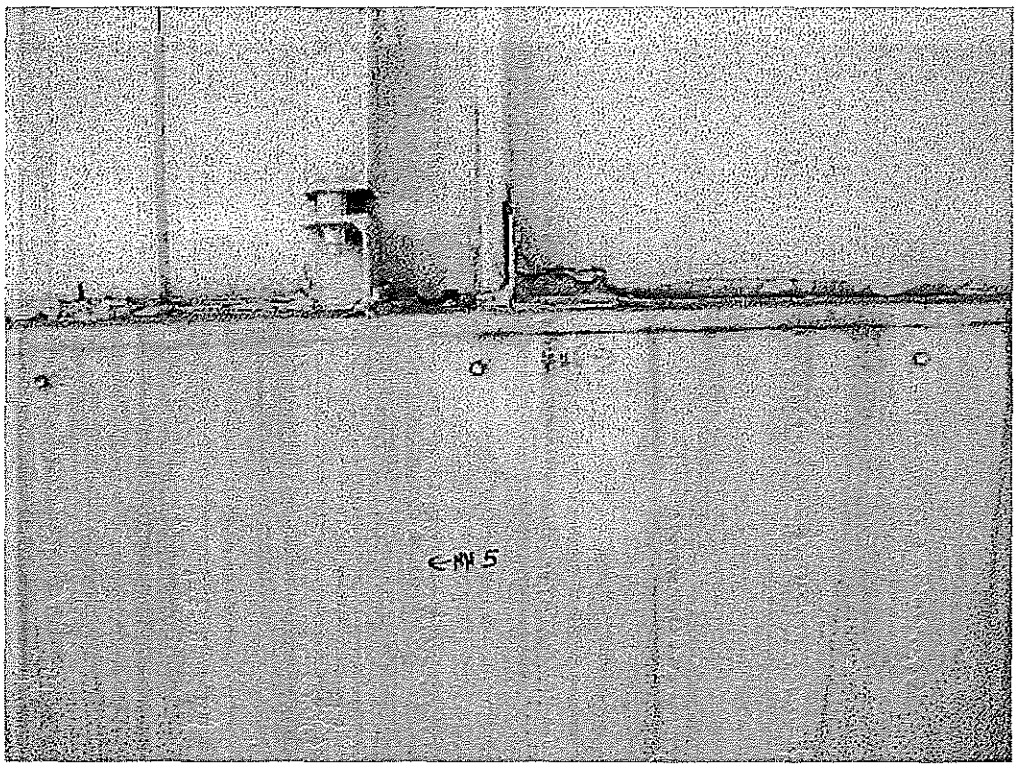

Image 5(Photo 5) : Initial, hand written labeling of ductwork, to be done in formal manner, in future.

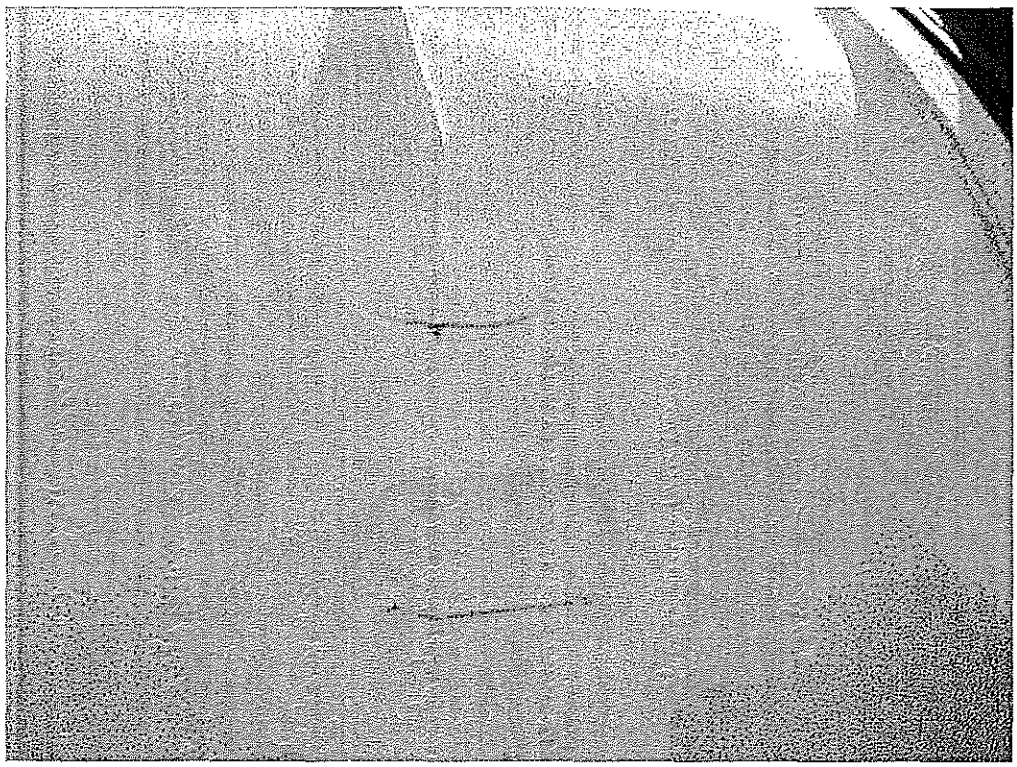

Image 6(Photo 6) : PVC patches, applied by plastic welding.

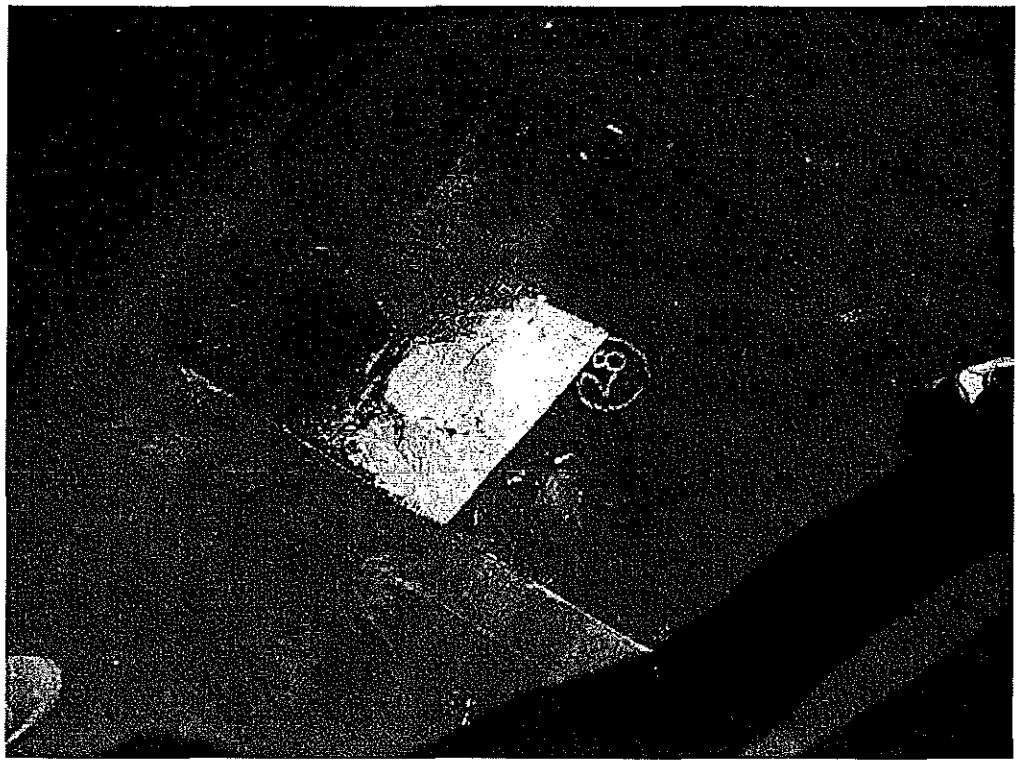

Image 7(Photo 7) : Sealed exhaust point, and initial numbering.

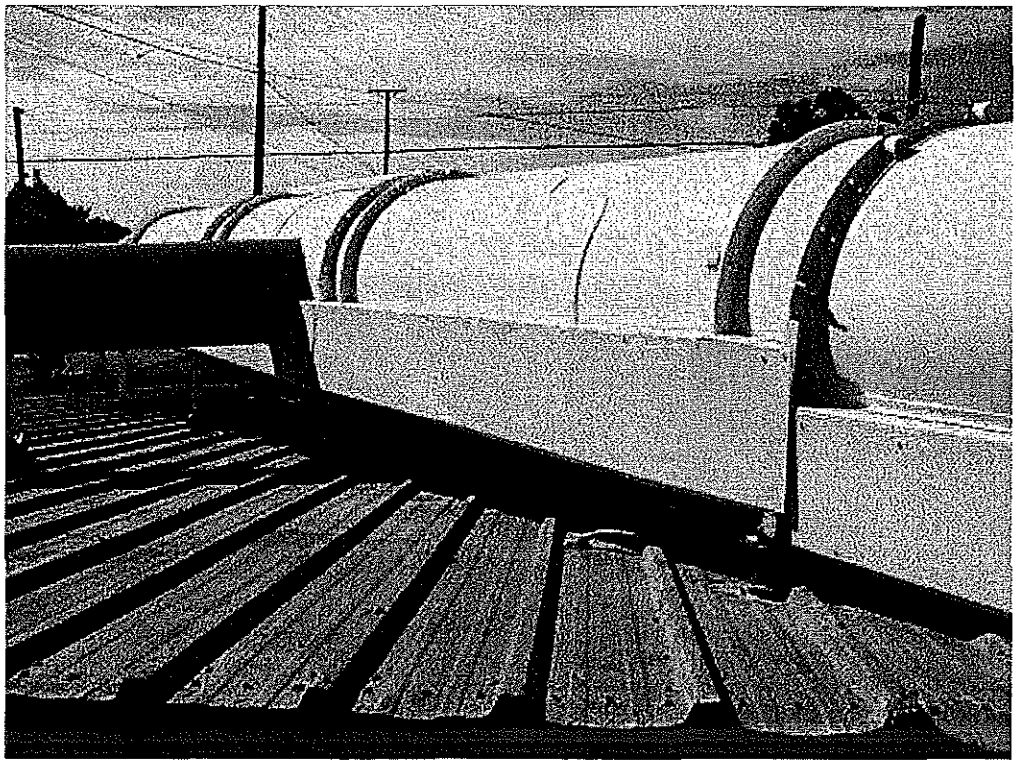

Image 8(Photo 8) : Looking south, towards the south end of the east roof.

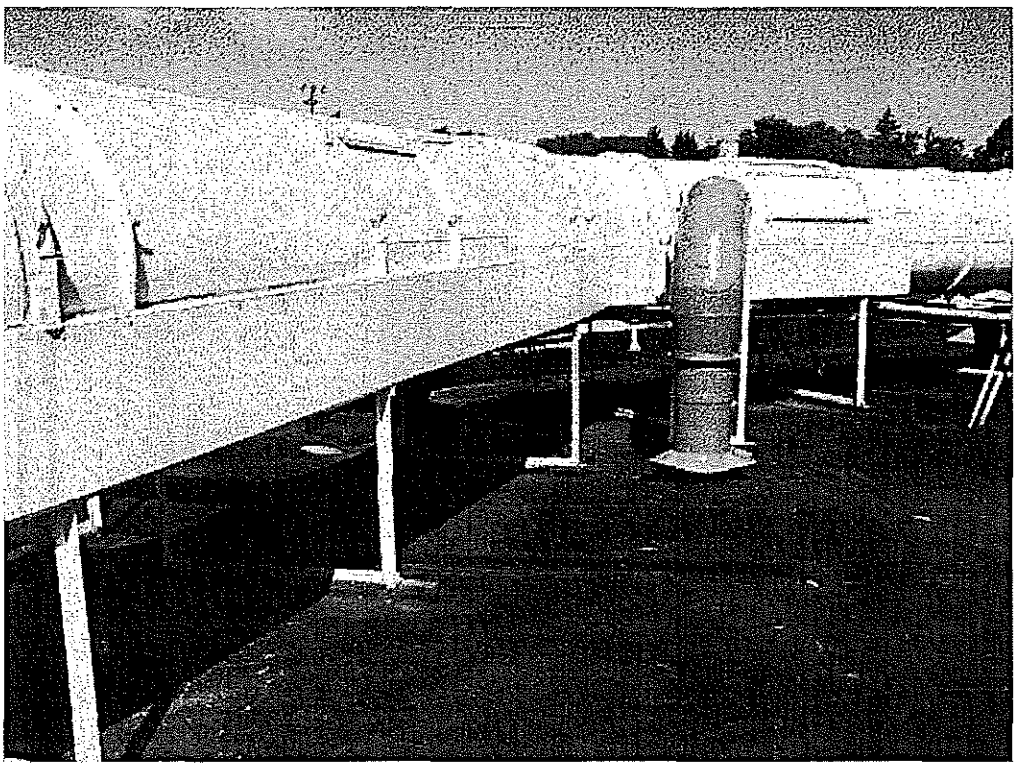

Image 9(Photo 9) : Looking north, at ductwork leading to scrubber No. 3.

NAME _____ DATE 9/30/2015 SUPERVISOR B. M.