

A2931
mamila
Livingston

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

A293151452

FACILITY: DIAMOND CHROME PLATING INC		SRN / ID: A2931
LOCATION: 604 S MICHIGAN, HOWELL		DISTRICT: Lansing
CITY: HOWELL		COUNTY: LIVINGSTON
CONTACT: Scott Wright , Environmental Manager		ACTIVITY DATE: 11/21/2019
STAFF: Daniel McGeen	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Check to verify that the BACT-72A vapor degreaser was in "chill mode." Status of noncompliance reflects Violation Notice sent on 10/30/2019 for Rule 201 and Subpart T, which was not fully resolved, as of 11/21/2019.		
RESOLVED COMPLAINTS:		

On 11/21/2019, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced inspection of the current vapor degreaser at Diamond Chrome Plating, Inc. (DCP). The purpose was to verify that the BACT-72A vapor degreaser was in "chill mode." DCP had received an Imminent Danger Order from the Livingston County Health Department LCHD on 11/18/2019. The Order included, among its requirements, that DCP cease emitting trichloroethylene (TCE), and that it demonstrate that TCE levels in the ambient air have been reduced to a level that no longer present a public health hazard.

As explained to AQD by DCP during a 11/20/2019 meeting with LCHD, EGLE, and Michigan Department of Health and Human Services, "chill mode" means that the solvent heater for the degreaser is turned off, but the cooling or condensing coils for the degreaser are operating, to provide a chilled air blanket. It was explained that this pollutes less than having all power disconnected to the degreaser, because if the condensing coils were not operating, there would be more fugitive emissions of TCE than with them operating. Thus, EGLE considers it is acceptable for the unit to be in "chill mode," following the 11/18/2019 Order from LCHD.

I drove past DCP at 11:04 AM. I then went around the block to check for odors, twice in a row. None were detected. Steam was highly visible from the nickel scrubber exhaust stack. Uncombined water vapor is not a regulated air contaminant, however. Weather conditions were 41 degrees F and raining, with wind out of the southeast at 10-15 miles per hour.

I parked in the plant's north parking lot at 11:08 AM. I went to the plant office, and met with Mr. Jerry Chin, Plant Owner, Mr. Scott Wright, Environmental Manager, and BB&E's Ms. Celeste Holtz, Environmental Scientist/Program Manager. I explained that I would like to confirm that the unit was in "chill mode."

I was taken to the degreaser, and saw that a room-like enclosure was in the process of being made with hanging sheets of thick plastic tarps, as shown in photo Nos. 001 and 002. My understanding was that these are made of PVC, and coated with vinyl, as described in the DCP Sampling Work Plan emailed to AQD and RRD on 11/20/2019, and that the intent is to block vapors from escaping. It was also my understanding that two carbon filtration units have been ordered, and will be located within the enclosure.

Parts were not being cleaned in the degreaser at this time. The parts basket was empty, other than the Teflon pad which is kept at the bottom of the basket, and a sign, which stated, in part, "DO NOT USE." Please see photo Nos. 003 and 004.

The sump heater was not running, as evidenced by the temperature gauge reading so low, as to be off the scale. It was below 40 degrees C, which equates to 104 degrees F. Please see attached photo No. 005, of the temperature gauge.

The chiller line going into the degreaser read 30 degrees F, as shown in the attached photo No. 006. The chiller outlet line for the upper level read 34 degrees F, as shown in the attached photo No. 007. The chiller outlet line for the lower level read 32 degrees F, as shown in the attached photo No. 008.

There were no odors of TCE detectable near the degreaser, including on the catwalk immediately next to

the unit. I observed a new seal, a white strip of material, on the degreaser's idling mode cover, shown in the attached photo No. 009. The 11/21 Sampling Work Plan describes this as consisting of water and weather-resistant foam weather strip material, and a nylon brush seal made of anodized aluminum. I could not detect any odors of TCE, while examining the idling mode cover today, and the bi-parting sliding doors appeared to be closed tightly.

The part basket roof, or the working mode cover, has a seal of flexible, black PVC material, as shown in Photo 010. It is described as corrosion-resistant and said to be 1/8 inch thick in the 11/21 Sampling Work Plan. AQD was informed that it was installed on 11/1/2019. Since the degreaser was in "chill mode" and not cleaning parts, it was not possible to observe the fit of the seal with the degreaser. However, the corrective action plan provided to EGLE on 11/20/2019 contains several photos, showing the seal, which overall appeared to be a good fit.

I was advised that DCP would be submitting a Sampling Work Plan for the pending operational testing. I left the site at 11:52 AM, and the Sampling Work Plan was sent to EGLE and LCHD on 11/21/2019.

Later on 11/21/2019, a public meeting was held to inform the public of TCE levels detected in the community, and how these levels above the 2 microgram per meter cubed screening level for TCE used by EGLE and DHHS related to risks for the public. The meeting is not covered in this activity report, as it is being documented elsewhere.

Post-11/21/2019:

Note: DCP removed the TCE from the degreaser on 11/25, and conducted cleaning of the unit on 11/26, as described to AQD. AQD was informed that the company would look for a substitute solvent to use in the degreaser which would be acceptable to their customers. With the removal of TCE, the TCE Sampling Work Plan was no longer necessary.

Conclusion:

No new instances of noncompliance were identified today. The AQD VN of 10/30/2019 had not been resolved, as of 11/21/2019. The degreaser was in "chill mode," and the solvent heater was turned off, thus, the unit was considered to not be in operation.

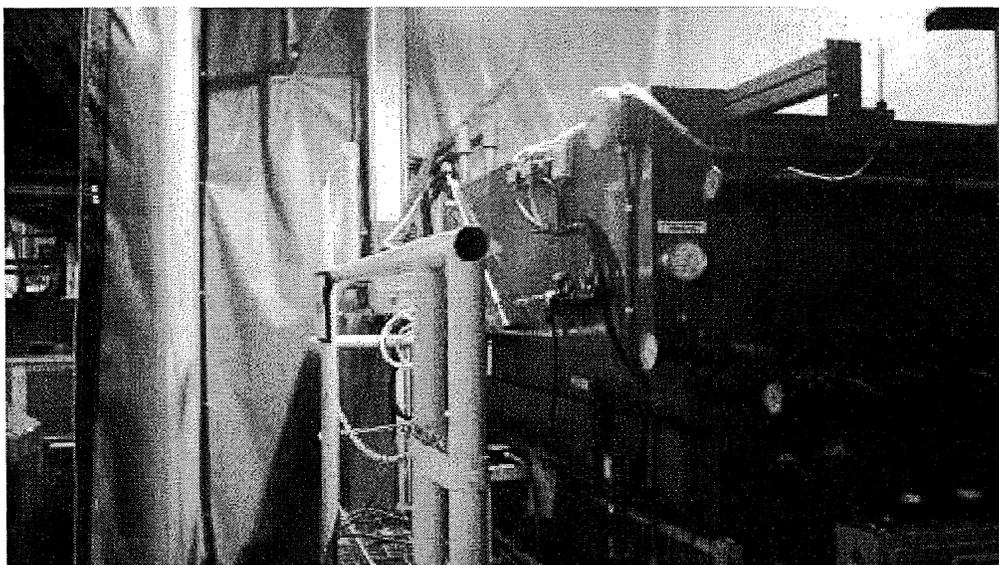


Image 1(001) : Degreaser w/enclosure (partially done).

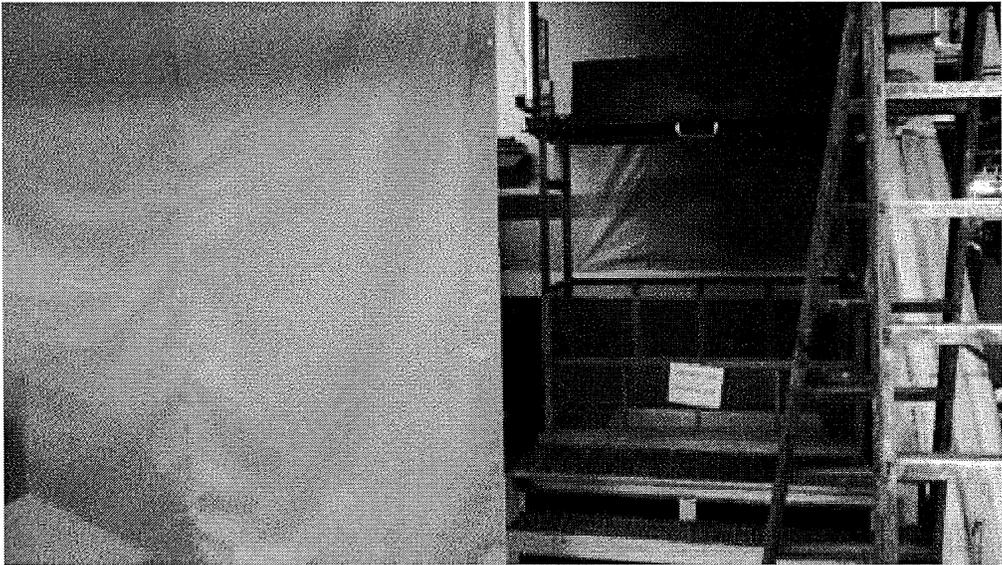


Image 2(002) : Partially completed enclosure.



Image 3(003) : DO NOT USE sign on parts basket.



Image 4(004) : Parts basket, with sign.

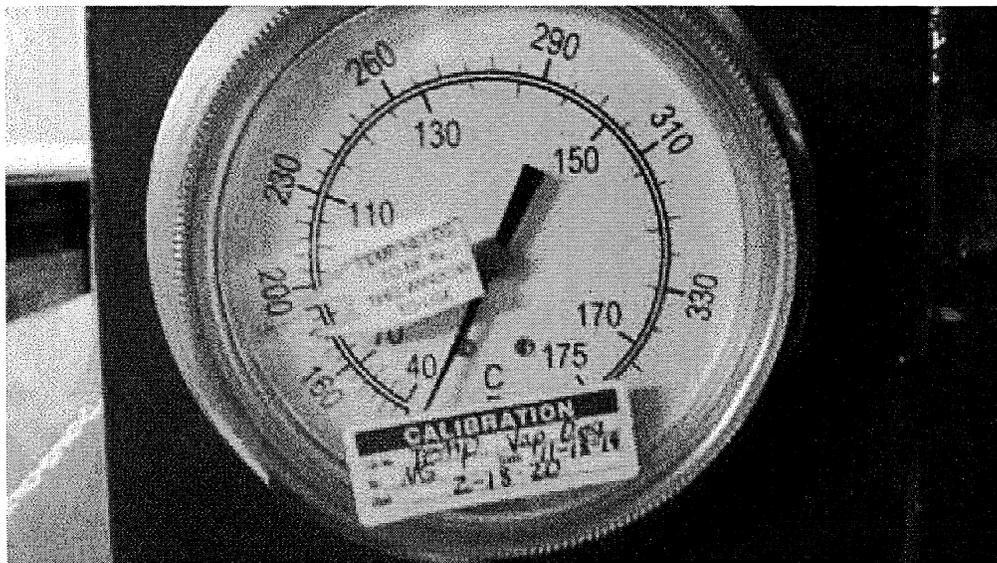


Image 5(005) : Solvent sump temperature gauge.

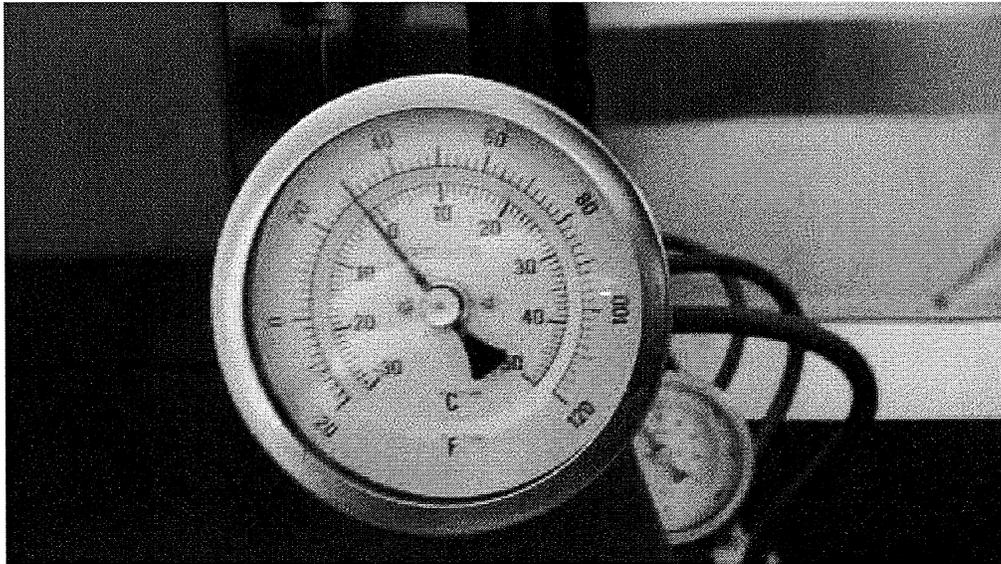


Image 6(006) : Chiller inlet temperature gauge.

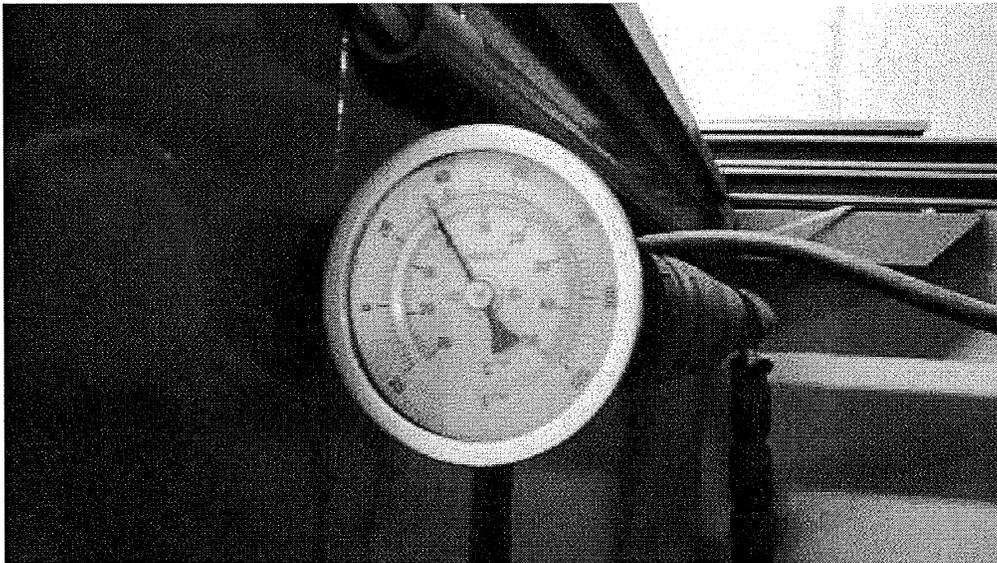


Image 7(007) : Chiller outlet, upper level gauge.

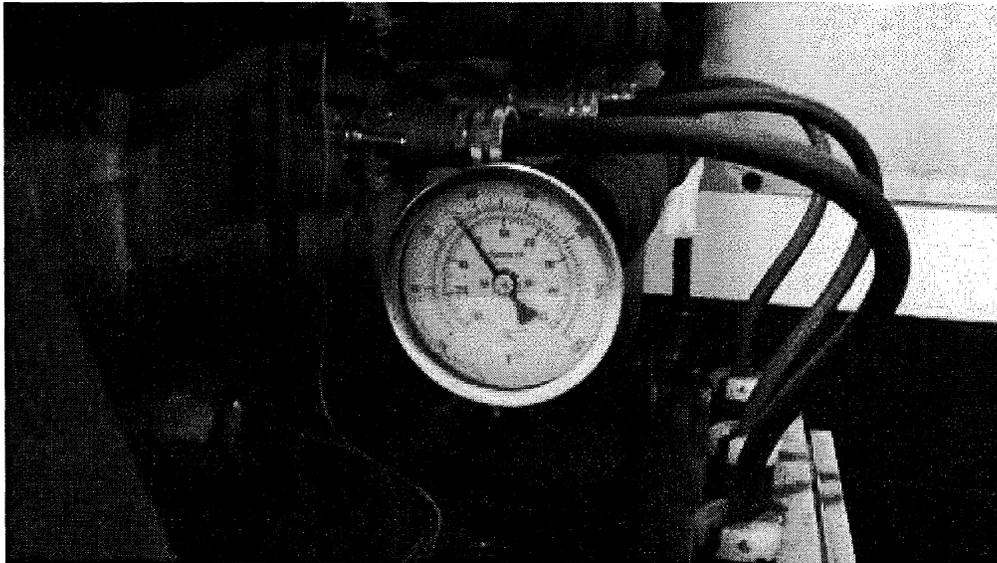


Image 8(008) : Chiller outlet, lower level gauge.

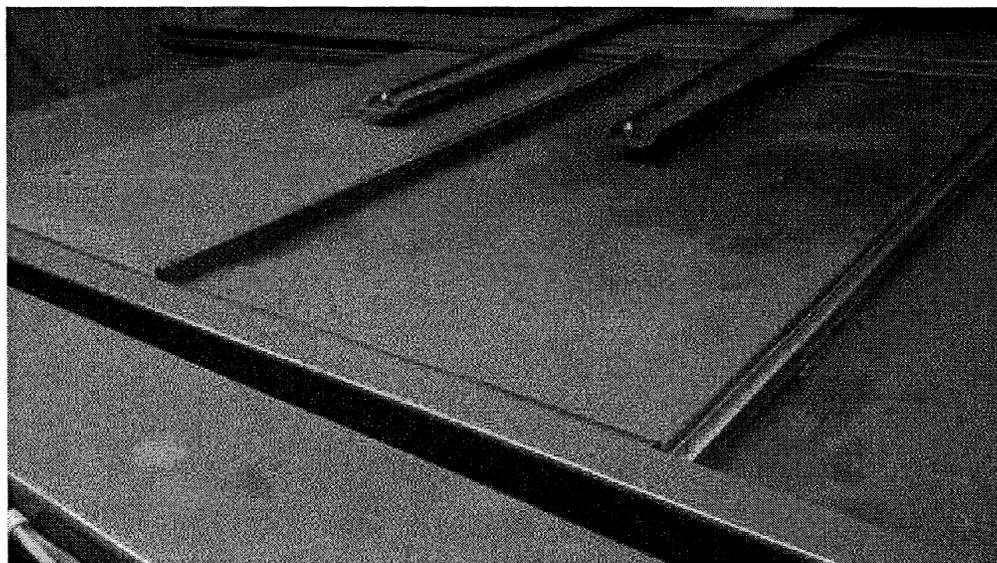


Image 9(009) : Degreaser idling mode cover, seal (white).

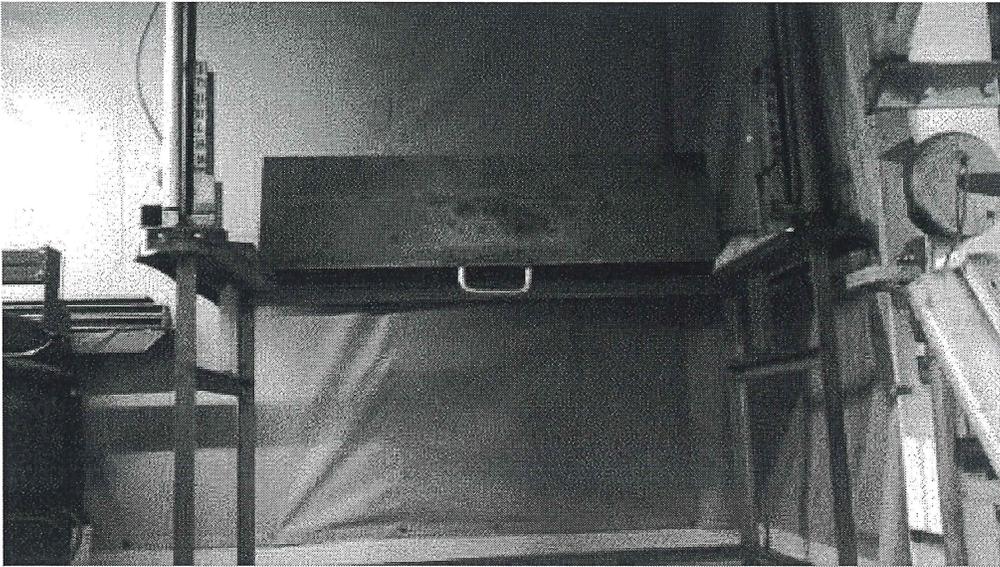


Image 10(010) : Working mode cover, with seal (black trim).

NAME *[Signature]*

DATE *1/3/2020*

SUPERVISOR *[Signature]*

