

November 11, 2019

Mr. Daniel McGeen
 Environmental Quality Analyst
 Lansing District Office
 Air Quality Division
 525 West Allegan Street, 1st Floor South
 Lansing, Michigan 48933

RE: Diamond Chrome Plating, Inc. Response to October 30, 2019 Violation Notice

Dear Mr. McGeen,

On behalf of Diamond Chrome Plating, Inc. (DCP), BB&E, Inc. (BB&E) is providing this letter in response to the items listed in the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) Violation Notice (VN) dated October 30, 2019. The alleged violations were received following EGLE AQD's on-site inspection at the DCP facility. The purpose of the inspection was to determine DCP's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; 40 Code of Federal Regulations (CFR) Part 63, Subpart T, National Emissions Standards for Halogenated Solvent Cleaning, and the First Amended Consent Decree (FACD), Case No. 03-1862 CE.

The following summary table presents EGLE's observations and alleged rule/permit violations; additional information pertaining to EGLE's observations/alleged violations from the VN is provided below, along with DCP's responses.

EGLE Observation No.	Process Description	Alleged Rule/Permit Condition Violated	Comments
1	BACT-72A vapor degreaser	Michigan Air Pollution Control Rule 201	Rule 285(2)(r)(iv) exemption has not been met, because emissions are not remaining within in-plant environment.
2	BACT-72A vapor degreaser	Michigan Air Pollution Control Rule 910	Air cleaning device was not properly installed, maintained, or operated.
3	BACT-72A vapor degreaser	40 CFR Part 63, Subpart T, Section 63.463(e)(iii)(A)	A gap of over one inch was identified between the working mode cover and the degreaser.



EGLE Observation No.	Process Description	Alleged Rule/Permit Condition Violated	Comments
4	BACT-72A vapor degreaser	40 CFR Part 63, Subpart T, Section 63.463(e)(iii)(B)	The gap between the working mode cover and the degreaser constitutes a defect.
5	Chrome plating ductwork atop west plant roof	First Amended Consent Decree, Paragraph 5.3(b)	Date of repair to ductwork was not clearly identified for Roof Area Inspection Forms for leak discovered on 4/29/2019

EGLE Observation 1

Michigan Air Pollution Control Rule 201 requires that an air use permit to install (PTI) be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

The BACT-72A vapor degreaser was installed and operated in late November 2018, under the Rule 285(2)(r)(iv) exemption from the requirements of Rule 201. This exemption reads as follows:

- (r) Equipment used for any of the following metal treatment processes if the process emissions are only released into the general in-plant environment:
- (iv) Cleaning.

Since March of 2019, DCP and DCP's consulting firm, BB&E, have conducted numerous sampling activities to check for the presence of trichloroethylene (TCE) vapors both onsite and offsite. Data from the analysis of air samples has been submitted to EGLE's Remediation and Redevelopment Division (RRD), as well as the AQD, for review. Following review of the most recently received data, which was submitted to EGLE on September 27, 2019, it has been determined by the AQD and the RRD, that TCE emissions are escaping the in-plant environment.

Because TCE emissions from the vapor degreaser are not remaining within the general in-plant environment, the degreaser cannot meet the exemption criteria of Rule 285(2)(r)(iv). Therefore, the degreaser cannot be considered exempt, and this is a violation of Rule 201 of the administrative rules promulgated under Act 451.

A program for compliance may include a completed PTI application for the vapor degreaser. An application form is available by request, or at the following website: www.michigan.gov/air (in the shaded box on the upper right-hand side of the page).

DCP Response 1

DCP historically (and most recently) operated a 1998 Autosonics batch vapor degreaser. The 1998 Autosonics batch vapor degreaser had some operational issues, and given the age of the unit, need for repairs, and difficulties for maintenance to manage and control certain operating parameters at times, DCP decided to replace the degreaser. The 1998 Autosonics batch vapor degreaser was replaced with the new (and current) Vapor Engineering BACT-72A batch vapor degreaser (BACT-72A degreaser) on November 20, 2018 at a cost of approximately \$100,000. Immediately following installation of the new BACT-72A degreaser, all of the systems were functioning properly.

As discussed with EGLE AQD via telephone and email correspondence, and also provided in responses to previous EGLE AQD VN letters (e.g., the *Diamond Chrome Plating, Inc. Response to September 3, 2019 Violation Notice* dated September 25, 2019), DCP has recently had trouble operating the new BACT-72A degreaser while maintaining compliance with the freeboard refrigeration device (FRD) temperature limit under Section 63.463(e)(2)(i) of the federal National Emissions Standards for Halogenated Solvent Cleaning, which states:

- (i) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall ensure that the chilled air blanket temperature (in °F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.

DCP uses as a regulatory limit, 30 percent (%) of the boiling point of TCE. With a boiling point of 188.06 degrees Fahrenheit (°F), the regulatory limit of 30% equates to 56.4 °F.

DCP has taken several corrective action steps to address the temperature exceedances and operational issues DCP has recently experienced with the new BACT-72A degreaser to prevent potential emissions of TCE; as noted above, these corrective action steps have been detailed in responses to previous AQD VN letters, and have continued to be communicated to Mr. Dan McGeen of EGLE AQD via telephone and email correspondence. DCP will continue working on corrective actions with the manufacturer of the BACT-72A degreaser and EGLE AQD, and in the meantime, has begun completing a permit to install (PTI) application for the degreaser.

In addition, DCP has since completed the following corrective action steps:

- DCP attempted to run the BACT-72A degreaser without an idling mode heater. This was completed in an attempt to limit the total heat; however, without the idling mode heater, the vapor dropped below the required level for proper operation of the unit. Therefore, the idling mode heater was turned back on.

- DCP attempted to add a small cooling/fan system in an effort to increase the air volume effected by the cooling coil; however, the action was ultimately unsuccessful.
- DCP added five gallons of glycol to increase heat transfer from the liquid; DCP is still evaluating this action to see if it allows for the system to be set at lower temperatures, without the system icing up.
- DCP also is evaluating implementation of a shut-down/limited run time schedule for the BACT-72A degreaser (i.e., limited shifts of operation), in an effort to control or limit the number of hours the unit is on, thereby potentially reducing overall emissions and the FRD temperature.

EGLE Observation 2

During the inspection conducted by the AQD on October 17, 2019, staff observed operation of the BACT-72A vapor degreaser, while examples of parts were being cleaned. The built-in roof of the parts basket, which had been lowered into the degreaser, was functioning as the working mode cover of the degreaser. However, there was a gap of more than an inch between the working mode cover and the degreaser itself. It is my understanding that DCP intends to cover or seal this opening with a TCE-resistant material.

The cover is intended to function as one of the air pollution controls for the degreaser, but the gap between cover and degreaser appeared to be a source of fugitive TCE emissions. This constitutes a violation of Rule 910 of the administrative rules promulgated under Act 451, which requires that an air-cleaning device shall be installed, maintained, and operated in a satisfactory manner, and in accordance with the administrative rules and existing law.

DCP Response 2

As discussed with EGLE AQD during the on-site inspection on October 17, 2019, DCP has addressed the gap between the working mode cover and the degreaser itself by installing a new seal; the new seal was installed on November 1, 2019. Photographs prior to, and following implementation of the corrective action, are included in **Attachment 1**.

EGLE Observation 3

Additionally, 40 CFR Part 63, Subpart T, Section 63.463(e)(iii)(A) requires the following:

- (iii) If a working-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(A) and (e)(2)(iii)(B) of this section.
 - (A) Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.

The gap between the working mode cover and the vapor degreaser indicates that it does not completely cover all cleaning machine openings when closed. This is a violation of Section 63.463(e) (iii) (A).

DCP Response 3

Please refer to DCP Response 2, above.

EGLE Observation 4

Furthermore, 40 CFR Part 63, Subpart T, Section 63.463 (e)(iii)(B) requires the following:

(iii) If a working-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(A) and (e)(2)(iii)(B) of this section.

(B) Ensure that the working-mode cover is maintained free of cracks, holes, and other defects

The gap between the working mode cover and the vapor degreaser is considered by the AQD to be a defect with the cover. This is a violation of Section 63.463(e)(iii)(B).

DCP Response 4

Please refer to DCP Response 2, above.

EGLE Observation 5

Lastly, the AQD has reviewed the Second Quarter 2019 Roof Area Inspection Forms (RAIF) for the west plant roof. The entry for April 29, 2019 states, "roof duct was cracked and rain water got in and caused chrome leak. It was repaired." The form field for the completed action was left blank and did not specify the date of repair. This is a violation of the FACD, Paragraph 5.3(b), which states, in part:

"On and after the Effective Date, Defendant shall inspect all ductwork and control equipment at the Property each day the Facility is in production to identify any release of an air contaminant to the environment that fails to be appropriately conveyed to the control equipment for control and removal. All releases must be repaired within forty-eight (48) hours of being identified. Defendant shall conduct and maintain at the Property a written record that identifies the person(s) conducting the required inspection, and release(s) identified during the inspection, the ductwork segment for each release identified, and the date any release is repaired."

DCP Response 5

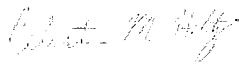
The leak was repaired immediately upon discovery. The completed action was incidentally included in the “found issues” column of the inspection report, which stated the following: “Roof duct was cracked and rain water got in and caused chrome leak. It was repaired.” The corrective action language was moved to the appropriate column in the inspection form, with the date/time of the inspection and corrective action noted in the appropriate column. The corrected west roof inspection form is included as **Attachment 2**.

EGLE requested a meeting between DCP, BB&E, EGLE Remediation and Redevelopment Division (RRD), Water Resources Division (WRD) and AQD to discuss the observations/alleged violations included in the October 30, 2019 VN. BB&E, on behalf of DCP, contacted EGLE AQD on November 1, 2019 to propose a new meeting date/time; a meeting at Constitution Hall in Lansing, Michigan has been scheduled for November 20, 2019 at 1:00 PM.

DCP and BB&E appreciate the Department’s willingness to work with us on addressing and correcting this matter. If you have any questions regarding this information or wish to discuss any of our responses further, please do not hesitate to contact me.

Sincerely,

BB&E, Inc.



Celeste M. Holtz
Project Manager

Attachments

Attachment 1 – Photographic Log

Attachment 2 – Corrected Q2 West Roof Area Inspection Form

cc (electronic copy):

Mr. Todd Fracassi, Pepper Hamilton

Mr. James Colmer, BB&E, Inc.

Mr. Scott Wright, Diamond Chrome Plating, Inc.

Mr. Matt Bolang, Livingston County Health Department

Ms. Lisa Quiggle, MDHHS

Mr. Aaron Cooch, MDHHS

Ms. Jenine Camilleri, EGLE

Mr. Brian Negele, DAG

Ms. Mary Ann Dolehanty, EGLE

Dr. Eduardo Olaguer, EGLE

Mr. Christopher Ethridge, EGLE

Mr. Brad Myott, EGLE AQD
Mr. Dennis Eagle, EGLE RRD
Mr. David LaBrecque, EGLE RRD
Ms. Vicki Katko, EGLE RRD
Ms. Rebecca Taylor, EGLE, RRD
Ms. Carla Davidson, EGLE, WRD
Mr. Bryan Grochowski, EGLE MMD

Attachment 1
Photographic Log – Diamond Chrome Vapor Degreaser
November 1, 2019



Photo 1: View of approximate 1-inch gap between the working mode cover and degreaser.



Photo 2: View of approximate 1-inch gap between the working mode cover and degreaser.

Attachment 1
Photographic Log – Diamond Chrome Vapor Degreaser
November 1, 2019



Photo 3: View of approximate 1-inch gap between the working mode cover and degreaser.



Photo 4: View of rubber shield installed on November 1, 2019 to cover gap between working mode cover and degreaser.

Attachment 1
Photographic Log – Diamond Chrome Vapor Degreaser
November 1, 2019



Photo 5: View of rubber shield installed on November 1, 2019 to cover gap between working mode cover and degreaser.



Photo 6: View of rubber shield installed on November 1, 2019 to cover gap between working mode cover and degreaser.

Attachment 1
Photographic Log – Diamond Chrome Vapor Degreaser
November 1, 2019



Photo 7: View of rubber shield installed on November 1, 2019 to cover gap between working mode cover and degreaser.

Attachment 2

Roof Area Inspection Form						
West Roof						
Month /Year:	Time:	Inspector Name:	Found Issues:	Duct Designation (from Figure):	Follow Up Required:	Completed Action (note day & time):
April 19						
1	9:30	Tony Payne	None			
2	11:30	Tony Payne / Nate Goodemote	None			
3	12:30	Tony Payne	None			
4	10:30	Tony Payne	None			
5	11:30	Tony Payne	None			
6	10:30	Tony Payne	None			
7	Sunday	No Production				
8	10:00	Tony Payne	None			
9	10:30	Tony Payne/ Nate Goodemote	None			
10	10:00	Tony Payne	None			
11	10:30	Tony Payne	None			
12	10:30	Tony Payne	None			
13	10:00	Tony Payne	None			
14	Sunday	No Production				
15	11:00	Tony Payne	None			
16	10:30	Tony Payne	None			
17	10:00	Tony Payne	None			
18	10:30	Tony Payne	None			
19	Holiday	No Production				
20	Holiday	No Production				
21	Holiday	No Production				
22	10:00	Tony Payne	None			
23	10:00	Dan Chinn	None			
24	10:00	Tony Payne	None			
25	10:00	Tony Payne	None			
26	11:00	Tony Payne	None			
27	10:30	Dan Chinn and Guy O'Berry	None			
28	Sunday	No Production				
29	10:00	Dan Chinn	Roof duct was cracked and rain water got in and caused chrome leak.	Circular to rectangle transition.	Filled crack to prevent leak.	Observed roof duct crack was repaired immediately upon discovery (April 29, 2019, 10:00), and chrome was cleaned up.
30	10:00	Dan chinn	None			
<p>Notes: All weeps must be cleaned the same day as discovery, note date and time when cleaning is complete. The weep must be maintained until repair is completed. All repairs must be completed within 48 hours of discovery. Note date and time when repair is complete. Note any condition issues with catch pans and collection collars.</p>						

Attachment 2

Roof Area Inspection Form						
West Roof						
Month /Year:	Time:	Inspector Name:	Found Issues:	Duct Designation (from Figure):	Follow Up Required:	Completed Action (note day & time):
May-19						
1	11:30	Tony Payne	None			
2	10:30	Tony Payne	None			
3	9:30	Tony Payne	None			
4	10:30	Tony Payne	None			
5	Sunday	No Production				
6	11:00	Tony Payne	None			
7	11:00	Tony Payne	None			
8	11:00	Tony Payne	None			
9	10:00	Dan Chinn	None			
10	10:00	Dan Chinn	None			
11	10:30	Tony Payne	None			
12	Sunday	No Production				
13	11:30	Tony Payne	None			
14	11:30	Tony Payne	None			
15	10:00	Tony Payne	None			
16	2:00	Tony Payne	None			
17	10:30	Tony Payne	None			
18	11:00	Tony Payne	None			
19	Sunday	No Production				
20	1:00	Tony Payne	None			
21	10:30	Tony Payne	None			
22	11:00	Tony Payne	None			
23	12:00	Tony Payne	None			
24	10:30	Tony Payne	None			
25	Holiday	No Production				
26	Holiday	No Production				
27	Holiday	No Production				
28	10:30	Tony Payne	None			
29	9:45	Tony Payne/ Dan chinn	None			
30	10:30	Tony Payne	None			
31	11:00	Tony Payne	None			
<p>Notes: All weeps must be cleaned the same day as discovery, note date and time when cleaning is complete. The weep must be maintained until repair is completed. All repairs must be completed within 48 hours of discovery. Note date and time when repair is complete. Note any condition issues with catch pans and collection collars.</p>						

Attachment 2

Roof Area Inspection Form						
West Roof						
Month /Year:	Time:	Inspector Name:	Found Issues:	Duct Designation (from Figure):	Follow Up Required:	Completed Action (note day & time):
June-19						
1	10:00	Tony Payne	None			
2	Sunday	No production				
3	10:30	Tony Payne	None			
4	8:30	Tony Payne	None			
5	8:30	Tony Payne	None			
6	10:00	Tony Payne	None			
7	10:00	Tony Payne	None			
8	2:30	Tony Payne	None			
9	Sunday	No production				
10	10:30	Tony Payne	None			
11	10:30	Tony Payne	None			
12	10:30	Tony Payne	None			
13	8:30	Tony Payne	None			
14	10:30	Tony Payne	None			
15	10:30	Tony Payne	None			
16	Sunday	No production				
17	10:00	Tony Payne	None			
18	10:00	Tony Payne	None			
19	12:30	Tony Payne	None			
20	1:00	Tony Payne	None			
21	10:30	Tony Payne	None			
22	1:00	Tony Payne	None			
23	Sunday	No production				
24	11:00	Tony Payne	None			
25	10:30	Tony Payne	None			
26	10:30	Tony Payne	None			
27	8:00	Tony Payne	None			
28	10:00	Tony Payne	None			
29	10:00	Tony Payne	None			
30	Sunday	No production				
<p>Notes: All weeps must be cleaned the same day as discovery, note date and time when cleaning is complete. The weep must be maintained until repair is completed. All repairs must be completed within 48 hours of discovery. Note date and time when repair is complete. Note any condition issues with catch pans and collection collars.</p>						