

January 31, 2019

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

RE: Response to December 20, 2018 Violation Notice

Dear Mr. McGeen,

Thank you for the opportunity to meet with the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) on January 29, 2019. We found that discussion very helpful as we prepared these responses to the alleged violations received on December 20, 2018.

MDEQ Comments 1 and 2

AQD Rule Violations – Comment 1: 2017 and 2018 recordkeeping show instances where freeboard refrigeration device (FRD) temperature limit in Subpart T was exceeded.

AQD Rule Violations – Comment 2: Semiannual exceedance reports not submitted, prior to, or after, exceedances of the FRD temperature limit.

DCP's Autosonics Model VS 6030E batch vapor degreaser using trichloroethylene (TCE) is subject to the federal National Emissions Standards for Halogenated Solvent Cleaning. These standards are found in 40 CFR Part 63, Subpart T.

Section 63.463(e)(1)(i) 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.

During the July 31, 2018, inspection, DCP provided requested examples of recordkeeping which are required under Subpart T. Temperature readings for the FRD were entered on FRD Recordkeeping Forms, for the time period of August 14, 2017, through July 2, 2018. It is AQD's understanding that DCP is using as a regulatory limit 30 percent of the sump temperature of the batch vapor degreaser, which was documented as being 190°F. This



equates to 57 ° F. *Hawley's Condensed Chemical Dictionary Twelfth Edition*, used by the AQD Lansing District Office, identifies the boiling point of TCE as 86.7 ° C, or 188.06 ° F, 30 percent of which is 56.4 ° F. AQD considers this temperature to be the maximum allowed under Subpart T, for the solvent TCE.

During the review of FRD records, fourteen (14) readings were identified as being over 56.4 °F. Of these, nine (9) were over the 57 ° F being used as the limit by DCP. The readings are listed below in chronological order:

- 1) 10/9/2017:57.6 ° F
- 2) 10/16/2017: 58.4 ° F
- 3) 10/23/2017: 57.5 ° F
- 4) 10/30/2017:58.2 ° F
- 5) 11/7/2017:57.6 ° F
- 6) 11/13/2017: 58.4 ° F
- 7) 11/20/2017: 57.3 ° F
- 8) 11/27/2017: 56.9 ° F
- 9) 12/4/2017: 57.6 ° F
- 10) 1/22/2018: 56.8 ° F
- 11) 2/12/2018: 56.6 ° F
- 12) 3/12/2018: 56.5 ° F
- 13) 3/26/2018: 57.2 ° F
- 14) 6/11/2018: 56.6 ° F

The above exceedances of the FRD temperature limit constitute a violation of Subpart T, Section 63.463(e)(1)(i).

Section 63.468(h) of Subpart T requires a semiannual exceedance report for batch vapor solvent cleaning machines, as follows:

"(h) Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h) (1) through (3) of this section.

"(1) Information on the actions taken to comply with §63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

"(2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.

"(3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report."

DCP has not been submitting semiannual exceedance reports regarding the batch vapor degreaser, which constitutes a violation of 40 CFR Part 63, Subpart T, Section 63.468(h). Pursuant to the exceedances of the FRD temperature, please submit a report identifying the reason for the exceedances, and a description of actions taken. These reports should be submitted quarterly, now that exceedances have occurred. Please note that the exceedance reports are required even in time periods when no exceedances have occurred. The absence of any exceedances should be noted, as appropriate.

Response 1: The vapor degreaser exceeded the FRD temperature limit of 56.4 ° F fourteen (14) times during the period specified above. The 1998 Autosonics batch vapor degreaser had multiple operational issues; the age of the unit, and repairs/replacements throughout the operational timeframe, made it difficult for maintenance to manage and control operating parameters at times. According to facility personnel, the issues associated with the Autosonics batch vapor degreaser included cooling coil removal, water jacket malfunctions, efficiency problems, and the synchronization of all monitoring systems within the degreaser unit. The Autosonics batch vapor degreaser was replaced with a new Vapor Engineering BACT-72A batch vapor degreaser on November 20, 2018 at a cost of approximately \$100,000; the previous degreaser unit was cleaned, and disposed of properly. Since the installation of the new Vapor Engineering BACT-72A batch vapor degreaser, all systems have been functioning properly and no temperature exceedances have occurred. A work order and receipt has been included as **Attachment 1** for reference; additionally, records for the new vapor degreaser are included in **Attachment 1**.

Response 2: DCP acknowledges that based on the records reviewed by the AQD and the FRD exceedances found, quarterly exceedance reports were to be submitted under 40 CFR Part 63, Subpart T, Section 63.468(h). As discussed with AQD on January 29, 2019, DCP recently lost their environmental health and safety (EH&S) manager, and has been experiencing some

other turn-overs in their EH&S department. DCP has solicited additional help from BB&E for assistance on EH&S compliance; BB&E will continue working with the new EH&S manager to ensure records and reports are completed and submitted to the MDEQ, as necessary.

DCP completed and mailed a hard copy of the exceedance report to the AQD. Please note that due to weather conditions, although the report was completed and ready to be mailed January 30, 2019, the United States Post Office was closed; Given the expected delivery delay, the report has been emailed to AQD. DCP will continue to submit quarterly exceedance reports until DCP has demonstrated a full year of compliance without an exceedance, at which time DCP will petition AQD for a reduced frequency.

MDEQ Comments 3 and 4

AQD Rule Violations – Comment 3: Recordkeeping shows exceedances in August 2018 of Subpart N surface tension limit of 33 dynes/cm.

AQD Rule Violations – Comment 4: Exceedances were not reported per area source reporting requirements of Subpart N.

Additionally, DCP's chrome plating tanks 5, 7, and 15 are subject to the federal National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. These standards are found in 40 CFR Part 63, Subpart N. Section 63.342(c)(1)(iii) requires that for open surface hard chromium electroplating tanks, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from the affected source by:

"(iii) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes/centimeter (dynes/cm) (2.8×10^3 pound-force per foot (lbf/ft)), as measured by a stalagmometer, or 33 dynes/cm (2.3×10^3 lbf/ft), as measured by a tensiometer at any time during tank operation"

Subsequent to the August 29, 2018, inspection by AQD, DCP provided requested copies of surface tension monitoring forms for August 2018, for hard chrome plating tanks 5, 7, and 15. The Chrome NESHAP - Fume Suppressant - Tensiometer Daily Process Operations Record for Tank 5 shows values above the NESHAP limit of 33 dynes/cm on August 1, 3, 6, 8, 10, 13, 15, 17, 20, 24, 27, 29, and 31. The Chrome NESHAP - Fume Suppressant - Tensiometer Daily Process Operations Record for Tank 7 shows values above the NESHAP limit on August 1, 3, 6, 8, 10, 15, 17, 20, 22, 24, 27, and 31. The Chrome NESHAP - Fume

Suppressant - Tensiometer Daily Process Operations Record for Tank 15 shows values above the NESHAP limit on August 1, 3, and 6.

The above exceedances of the 33 dynes/cm limit, as measured by a tensiometer, recorded in August 2018 for chrome plating tanks 5, 7, and 15, constitute a violation of 40 CFR Part 63, Subpart N, Section 63.342(c)(1)(iii).

Section 63.347(h)(2)(i) of Subpart N contains reporting requirements for area sources which have exceedances, as follows:

"(2) Reports of exceedances. (i) If either of the following conditions is met, semiannual reports shall be prepared and submitted to the Administrator:

"(A) The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c)) is 1 percent or greater of the total operating time for the reporting period; or

"(8) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time."

The August 2018 surface tension records for chrome plating tanks 5, 7, and 15 are considered to be associated with excess emissions, as monitoring data for surface tension collected by the owner or operator of the affected source exceeded the regulatory threshold. Unless it can be demonstrated that the duration of excess emissions is less than 1 percent of the total time for the reporting period, such exceedances should be reported to AQD. Non-submittal of an exceedance report for the August 2018 surface tension readings is considered a violation of Section 63.347(h)(2)(i).

Please be aware that Section 63.347(h)(2)(ii) of Subpart N requires:

"(ii) Once an owner or operator of an affected source reports an exceedance as defined in paragraph (h)(2)(i) of this section, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under paragraph (h)(3) of this section is approved."

Response 3: DCP believes a majority of the surface tension exceedances have been caused for several reasons, including one or more of the following, or a combination of all three:

- Tensiometer calibration or malfunction issues;

- Operator error; and/or
- Inconsistent use of fume suppressant/wetting agent.

As discussed with AQD on January 29, 2019, DCP has experienced employee turn-over issues in the last two years, including three DCP personnel who were responsible for conducting the tensiometer tests, and subsequent corrective action. BB&E is working with DCP to revise current Standard Operating Procedures (SOPs) for proper calibration and operation of the tensiometer. Additionally, BB&E is working to ensure that the proper prescribed amount of the fume suppressant, per the manufacture's instruction, gets added to the chrome plating tanks; that the amount added gets properly documented; and that the corrective reading(s) are recorded.

Since receipt of the violation notice on January 8, 2019, DCP has taken action to work with the fume suppressant supplier to include a greater percentage of defoamer in the fume suppressant when added. This will allow the addition of more fume suppressant to each tank, without excessive foaming that could lead to safety hazards to tank operators and quality issues. As noted above, BB&E and DCP are working to ensure SOPs get reviewed and updated, and that personnel are properly trained.

Chrome plating tanks 5, 7, and 15 are located in the west (commercial) operational area of the DCP plant. 40 CFR 60.342(c)(1) allows chromium emissions from open surface hard chromium electroplating tanks to be controlled one of four ways, as detailed in 40 CFR 60.342(c)(1)(i) through 40 CFR 60.342(c)(1)(iv). DCP has historically used chemical fume suppressants and monitored surface tension readings within the tanks (option detailed in 40 CFR 60.342(c)(1)(iii)), as well as used a scrubber unit (Scrubber #5) to further control emissions from these tanks (option detailed in 40 CFR 60.342(c)(1)(i), which is described further below:

“Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.011 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air (4.8×10^{-6} grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are existing affected sources and are located at large hard chromium electroplating facilities.”

Based on DCP's calculations, 0.011 mg/dscm equates to 4.4485 pounds per year. The measured total chromium concentrations during DCP's most recent (June 2016) stack test for Scrubber #5 was 1.74×10^{-4} tons per year (TpY) or 0.348 pounds per year. In summary, the total chromium emission rate was well below the limit of 0.011 mg/dscm.

BB&E reviewed surface tension records for chrome plating tanks 5, 7, and 15; surfactants had been added to tanks 5 and 15 seven days prior to the May 25, 2016 stack test, and added to tank 7 two days prior to the test. In summary, it appears that chemical fume suppressants were in-the tanks at the time of the test.

The AQD VN states that it is assumed that surface tension exceedances equate to emissions exceedances, unless it can be demonstrated that the duration of excess emissions is less than 1 percent of the total time for the reporting period. Although the surface tension readings exceeded the limit of 33 dynes/cm as noted by MDEQ, based on previous stack test results detailed above, it is unlikely that the facility experienced excess atmospheric emissions that lasted for one percent or more of the total operating time for the reporting period. Nonetheless, DCP understands that because surfactants have been in use, tensiometer readings and records must be in order; information regarding corrective action was described above.

It should be noted here, that based on discussions with AQD during the January 29, 2019 meeting, DCP and BB&E are exploring options for moving away from meeting the requirements of 40 CFR Part 63, Subpart N by use of fume suppressants. To improve compliance efforts, and potential future issues associated with the use of fume suppressants, DCP and BB&E will be evaluating requirements for conducting additional stack tests, and associated monitoring and record keeping for demonstrating continuous compliance in accordance with CFR Part 63, Subpart N. DCP and BB&E will consult with the MDEQ AQD during this process,

Response 4: DCP acknowledges that based on the records reviewed by the AQD and the surface tension exceedances found, semiannual exceedance reports need to be submitted under 40 CFR Part 63, Subpart N, Section 63.347(h)(2)(i).

DCP completed and mailed a hard copy of the exceedance report to the AQD. Please note that due to weather conditions, although the report was completed and ready to be mailed January 30, 2019, the United States Post Office was closed; Given the expected delivery delay, the report has been emailed to AQD. DCP will continue to submit semiannual exceedance reports until a reduced frequency is agreed upon by the AQD and DCP. The number of exceedances and duration of exceedances during the six-month period from July 2018 through December 2018 will be reported to AQD in the semiannual exceedance report.

MDEQ Comment 5

AQD Rule Violations – Comment 5: Repairs to leaks were neither made nor documented in the Second Quarter 2018 Roof Area Inspection Forms (RAIF) for leaks identified on June 5 and 25, 2018.

Lastly, following the August 29, 2018, inspection, AQD staff reviewed the Second Quarter 2018 RAIF, which were submitted to AQD. The forms noted that on June 5 and 25, 2018, leaks on the east roof chrome plating ductwork were identified and cleaned, but they did not identify repairs. For the June 5 leak, on duct V2, an entry for the following day stated that no leaks were found and added "No further action needed." For the June 25 leak, on duct V4, a note indicates that on June 26, no leak was found. No repair was identified as having been made.

Paragraph 5.3(b) of the FACD states, in part:

"(b) 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, any release(s) identified during the inspection, the ductwork segment for each release identified, and the date any release is repaired."

On May 14, 2018, AQD sent DCP a Violation Notice (VN) identifying, in part, instances in the Third Quarter 2017 and First Quarter 2018 RAIF where leaks were identified on the chrome plating ductwork on the east plant roof, but a description of repairs to the leaks was not provided. DCP's June 4, 2018, response to the VN provided an explanation of how chromic acid liquid in a leak may dry, and the dried material may seal the leak, without being repaired. DCP indicated that if a leak is cleaned and there is no further release of liquid, that leak has essentially self-sealed.

As noted in the VN and Enforcement Notice (EN) from the Water Resources Division (WRD) dated September 4, 2018, this practice is not what was agreed upon in the FACD. Paragraph 5.3(b) of the FACD requires leaks to be repaired within 48 hours of discovery. The VN and EN further state that DCP shall repair any current leaks and ensure that the chosen method of repair does not weaken the ducts.

Response 5: DCP believes that it is repairing the duct work in accordance with the FACD. The discussion of “self-sealing” has been mischaracterized. DCP does not use “self-sealing” as a form of repair; however, the self-sealing nature of some of these seeps, does make it difficult for DCP maintenance technicians to identify the area needing repair after the area is cleaned. Please note, this is NOT true of all seeps. If the location of the seep can be determined, it is repaired. DCP technicians inspect the ductwork daily; if a seep is identified, the first step is to clean the seep. DCP technicians observe the area of the seep to make sure that the seep does not return. These seeps are then inspected the following day, and days after, to ensure that it has not returned. The ductwork is under negative pressure; these seeps occur as a result of capillary action, usually where heat (and subsequently oxygen) have been applied, creating small air bubbles in the duct work. Overtime, enough air bubbles connect, and a seep can occur. The seep is cleaned and repaired immediately upon inspection.

In addition to the current repair plans, DCP is planning to use Lexel[®] by Sascho after cleaning each weep. DCP is committed to minimizing the occurrence of seeps as demonstrated by its duct work replacements outlined below:

- October 2015 – One run of ductwork replacement at a cost of \$67,000
- October 2017 – Large run of ductwork replacement at a cost of \$117,878
- September 2018 – Tank #12 Duct Work replacement at a cost of \$3,610

For leaks documented on June 5 and June 25, 2018, DCP believes proper leak repair documentation was completed. As shown in **Attachment 2**, on June 5, 2018 the V2 elbow weep was cleaned at approximately 1530. On June 6, 2018 the V2 elbow was inspected and no weeps or leaks were found to be present, indicating a repair other than cleaning was not necessary. **Attachment 2** also shows on June 25, 2018 the V4 weep was cleaned at approximately 1530. The following day, June 26, 2018, the V4 duct was inspected and no weeps or leaks were found to be present, indicating a repair other than cleaning was not necessary. Nonetheless, DCP will begin applying Lexel[®] in the area of the weep on the same day as the cleaning.

DCP also is currently working on developing a revised Ductwork Designation Plan and associated tracking sheet to better characterize the current configuration of the ductwork. This will allow more accurate record keeping so proper replacement of a coupling or duct section can occur once ten (10) leaks have been identified. As discussed with the MDEQ AQD on January 29, 2019, DCP spent approximately \$190,000 on replacing the old ductwork, with new ductwork, that is much less susceptible to leaks. Photos were shared with the AQD on January 29, 2019, showing that the new ductwork no longer has horizontal joints, as the old ductwork did. Since replacement, DCP has observed that seeps/weeps are generally not

occurring within the length of the ductwork, but instead at the couplings where two 20-foot sections are connected.

As discussed with the AQD, the revised Ductwork Designation Plan, tracking sheet, and labeling on the actual ductwork, will differentiate the main section from the associated couplings. Observed seeps/weeps will be repaired as detailed above, and tracked; once ten (10) seeps/weeps have been documented on either the coupling or the actual ductwork length the appropriate piece (i.e., either the coupling or the ductwork length), will be replaced.

This updated tracking sheet, along with the revised Duct Designation Plan, will be provided to the MDEQ WRD and MDEQ AQD by April 1, 2019.

Supporting information to address these alleged violations is attached as indicated in the numerical responses above. DCP and BB&E appreciate the AQD's willingness to meet with us on January 29, 2019, and work with us on addressing these issues. 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

Cc

Mr. Todd Fracassi, Pepper Hamilton
Mr. James Colmer, BB&E
Mr. Scott Wright, Diamond Chrome Plating, Inc.
Ms. Jenine Camilleri, DEQ (electronic)
Mr. Brian Negele, DEQ (electronic)
Ms. Mary Ann Dolehanty, DEQ (electronic)
Mr. Christopher Ethridge, DEQ (electronic)
Mr. Brad Myott, DEQ (electronic)
Ms. Carla Davidson, DEQ, WRD (electronic)
Ms. Rebecca Taylor, DEQ, RRD (electronic)
Mr. Brian Grochowski, DEQ, WMRPD (electronic)

ATTACHMENT 1
Degreaser Reference Information



VAPOR ENGINEERING INC.

VAPOR DEGREASERS • ULTRASONICS
PENSACOLA FLORIDA 32514

INVOICE

CUSTOMER

Diamond Chrome Plating
604 s. Michigan Avenue
Howell, Mi. 48843

NO. 9741**DATE** 3/27/2018**TERMS** 45% Bal Per fin page**F.O.B.** Pensacola, FL**ORDER NO.** Advise**PREPAID** Frt. **COLLECT** XXXX**SHIPPED TO** Above Attn: Jack Beatty**FROM** VE Pns **VIA** Advise

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1 only	Model BACT-72A Vapor Degreaser 440V, 60Hz, 3Ph. 110V Cont Circuit Includes 10 ton chiller for closed circuit control 100% freeboard		Total...\$ 78,410.00 see financial page

PHONE 850-434-3191 FAX 850-478-0369 E-MAIL VAPORENGR@GMAIL.COM

SPECIAL NOTES

No exhaust fan

customer to supply solenoid valves
to control air power covers

Please Report any shipping damages
directly to product carrier

water chiller will be drop shipped
from Bastrop Tx. Freight collect



VAPOR ENGINEERING, INC.
147 MIRABELLE CIR. PENSACOLA, FL 32514
PHONE (850) 434-3191

NEW ADDRESS / SAME LOCATION

DIAMOND CHROME PLATING, INC.

PO Box 557
 Howell, MI 48844
 517-546-0150
 517-546-3666 (fax)



PURCHASE ORDER

Number 18-M6109
 Date 03/27/18

VENDOR VAPOR ENGINEERING

SHIP TO Diamond Chrome Plating
 604 S Michigan Avenue
 Howell, MI 48843

DO NOT DUPLICATE

SHIPPING METHOD	SHIPPING TERMS	DELIVERY DATE
TAXABLE?	INDUSTRIAL PROCESSING?	PAYMENT TERMS
NO	YES	Net 30
REQUESTER	PURPOSE OF ITEM(S)	
JACK BEATTY	VAPOR DEGREASER	

QTY	ITEM #	ACCT #	DESCRIPTION	UOM	UNIT PRICE	LINE TOTAL
1.00	BACT-72A	15300	VAPOR DEGREASER	EACH	\$ 73,415.00	\$ 73,415.00
1.00			CLOSED CIRCUIT COOLING (CK100 10 TON)	EACH	included	included
1.00		15300	POWERED COVERS	EACH	4,995.00	4,995.00
			440 VOLT MACHINES ADD - OPT L.N.C.			
			PER QUOTATION 1/25/2018 FROM EDWARD KALIS			

Certifications of Conformance/Analysis Required with this Order?	Yes	No	
			SUBTOTAL \$ 78,410.00
			SALES TAX
			TOTAL \$ 78,410.00

DFI (2014) (15 CLAUSES) (Revised 2/21/17)

1. Diamond Chrome Plating's (DCP) PO number and order number must appear on all correspondence, invoices and shipping documents.
2. Notify DCP of changes in product location, process, definition and, where required, obtain approval.
3. Grant right of access to DCP, their customers and/or regulatory authorities, to all facilities involved in this order and to all applicable records at any level of the supply chain.
4. Ensure that requirements stated herein be passed down to sub-tier suppliers.
5. Notify DCP of nonconforming product.
6. Make arrangements for identification approval of supplier nonconformance material.
7. Notify DCP of a change in manufacturing location.
8. Supplier to maintain all records supporting items shipped against the PO for at least 10 years from shipment date.
9. Supplier to furnish certificate of compliance.

[Signature] 3/27/18
 Authorized by Date



EWI-008-E

NESHAP - National Emission Standards for Hazardous Air Pollutants
Halogenated Solvent Cleaner NESHAP
FRD Recordkeeping Form
FRD = Freeboard Refrigeration Device

Cleaning Machine Identification Number: 1
Machine Type: Batch Vapor
Solvent: TCE (Trichlorethylene)
FRD Temperature Requirement: 30% of sump temperature maximum

Date	Initials	Temperature (°F)	Comments
7/23/2018	MR	55.4	
7/30/2018	MR	54.1	
8/6/2018	MR	53.7	
8/13/2018	MR	54.6	
8/20/2018	MR	54.3	
8/27/2018	MR	54.4	
9/3/2018	MR	55.1	
9/10/2018	MR	54.8	
9/17/2018	MR	53.9	
9/24/2018	MR	54.2	
10/1/2018	MR	53.6	
10/8/2018	MR	53.3	
10/15/2018	MR	52.9	
10/22/2018	MR	53.1	
10/29/2018	MR	52.6	
11/5/2018	MR	53.2	
11/12/2018	MR	54.2	
11/19/2018	MR	51.8	
11/26/2018	MR	50.2	New vapor degreaser installed
12/3/2018	MR	51.3	
12/10/2018	MR	50.8	
12/17/2018	MR	51.7	
12/24/2018	MR	N/A	Holiday
12/31/2018	MR	N/A	Holiday

*Note: EWI-008 logs switched from paper to electronic on July 23, 2018.

ATTACHMENT 2
Ductwork Inspection Information

Roof Area Inspection Form

Date & Time:	Inspector Name:	Issue Found:	Duct Designation (from map):	Follow Up Required:	Completed Action (note day and time):
6/5/18 3 PM	Scott Wright	Small Weep on	1/2 IN 90° Elbow Weld	yes	Cleared Weep 6/5/18 3:30 PM
6/6/18 3:30 PM	Scott Wright	None			Checked 1/2 NO Leaks Found - no further action needed 6/6/18 3:30 PM SWW
6/7/18 1:00 PM	Scott Wright	None			
6/8/18 3:00 PM	Scott Wright	None			
6/11/18 4:30 PM	Scott Wright	None			
6/12/18 1:30 PM	Scott Wright	None			
6/13/18 1:30 PM	Scott Wright	None			

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.

Roof Area Inspection Form

Date & Time:	Inspector Name:	Issue Found:	Duct Designation (from map):	Follow Up Required:	Completed Action (note day and time):
6/25/18 3:00 ^{pm}	Scott Wright	Small Weap	V4	yes	Cleaned on 6/25/18 3:30 ^{pm} 6/26/18 1:30 ^{pm} NO WEAP Found SWW
6/26/18 1:30 ^{pm}	Scott Wright	none			
6/27/18 12:30 ^{pm}	Scott Wright	none			
6/28/18 1:15 ^{pm}	Scott Wright	none			
6/29/18 2:30 ^{pm}	Scott Wright	none			
7/2/18 2:15 ^{pm}	Scott Wright	none			
7/2/18 1:15 ^{pm}	Scott Wright	none			

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.