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<sup>5</sup>Also Admitted in NY  
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Of Counsel: Emily K. Neuberger<sup>1</sup>

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Eric J. Wejroch  
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August 31, 2018

Joseph Scanlan  
Upper Peninsula District  
Air Quality Division  
Michigan Department of Environmental Quality.

Re: Grede, LLC  
Kingsford, Michigan  
August 6, 2018 Violation Notice ("NOV")

Dear Mr. Scanlan:

I am writing on behalf of Grede, LLC ("Grede") in response to Department of Environmental Quality, Air Quality Division's ("AQD") August 6, 2018 NOV regarding Grede's Kingsford facility.

As a longtime member of the Kingsford community, Grede takes air quality issues very seriously and has committed significant technical, financial, and staff resources to ensuring that the Kingsford facility fully complies with all applicable air quality standards. With the guidance and cooperation of AQD staff, Grede has implemented many improvements to the Kingsford facility's operations and increased staffing levels over the last few years. For example, Grede has installed a new electronic monitoring system for the controlled baghouses, which has improved our staff's ability to ensure that these

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air pollution control devices are working properly at all times. Grede has added five new air quality staff members who perform weekly preventative maintenance, daily housekeeping activities, and monitor and maintain the facility's extensive air quality control equipment on a daily basis. Grede has replaced two of its former "wet" pollution control devices with two more efficient "dry" devices, which has significantly increased the collection efficiency and control of those units. Grede has also worked cooperatively with AQD staff to improve its "housekeeping" procedures to eliminate this potential source of airborne dust. For instance, Grede installed and now operates a spray bar to reduce fugitive emissions at the end of the shakeout line/returns as suggested by AWD during a recent MDEQ inspection. Grede has also arranged to have an "on-call" sweeper available in the event Grede's sweeper is inoperable for any length of time to ensure that dust does not accumulate in the yard. Finally, Grede has retained the services of Paul Blindauer, a well-qualified and experienced air quality consultant with GEI Consultants, to provide further guidance on air quality issues.

These improvements have resulted in the Kingsford facility's reliable and consistent compliance with its Renewable Operating Permit ("ROP"), the 2016 Consent Order, and all other applicable requirements. Consequently, Grede was very surprised to receive the NOV, particularly the alleged violations regarding fugitive emissions, which Grede does not believe are factually supported. Grede's response to each alleged violation is provided below.

1. Failure to provide ADQ notification of a change in RO and for ROP certifications to be signed by RO.

As was explained during the August 7<sup>th</sup> meeting between Grede and AQD staff, Grede's General Manager is the Responsible Official ("RO") for the facility. There was significant turnover in this position during the past year with three different individuals holding the position: Chuck Kalupa until October 2017; Adam Buchcusi until November 2017; Roger Rask from November 2017 through March 9, 2018; and Tyler Hill since March 12, 2018. Although the General Manager/RO at the time of each report appropriately signed each of the certification statements, the M0001 and C0001 forms notifying AQD of the RO changes were inadvertently not included. As AQD instructed during the August 7<sup>th</sup> meeting, Grede is resubmitting each certified report submitted during this time period with the appropriate M001 and C001 notification forms attached. See Attachment 1. Grede will follow this protocol in the future in the event of a change in the General Manager position.

2. Failure to conduct performance testing as required in 2017.

Grede acknowledges that it did not conduct the MACT performance test to demonstrate compliance with its emission limit condition in 2017. Grede staff believed that ADQ had agreed to allow Grede to conduct the required MACT testing in 2018 so that this testing could be performed at the same time as Grede's ROP renewal stack testing. Upon receiving the NOV, Grede contacted Eric Grinstern to confirm that agreement, but Mr. Grinstern does not recall agreeing to postpone the MACT testing. Instead, Mr. Grinstern has indicated that he attempted to

allow Grede to move up the ROP stack testing to coincide with the MACT testing.<sup>1</sup> Grede regrets that it did not confirm in writing its understanding of the agreement with Mr. Grinstern at the time so that this misunderstanding could have been resolved in time to conduct the MACT testing in 2017, if that was what was required.

Grede is in the process of soliciting bids from three qualified testing companies to conduct the required performance testing to satisfy both the MACT and ROP renewal testing requirements. Those bids should be received in the next month and the testing will be completed in 2018. Grede will submit a testing protocol to AQD 60 days prior to testing.

Although the good faith miscommunication that delayed the MACT testing is regrettable, the delay does not support any conclusion that Grede has not complied with all air quality standards. Grede passed its MACT testing in both 2007 and 2012 and fully anticipates that it will pass again this year as the air quality associated with its operations has only improved since 2012. Grede's semi-annual Opacity testing, which is conducted by a third-party consultant, has confirmed compliance with those related standards since entry of the Consent Order in 2016.

3. Failure to notify of change of ownership or operational control of stationary source.

As Grede explained during the August 7<sup>th</sup> meeting with AQD, ownership and control of the Kingsford facility has not changed and, therefore, no notification in this regard is required. Grede, LLC still owns and controls the Kingsford facility. To the extent relevant, Grede's parent company is still Grede Holdings, LLC. The 2016 merger between American Axle & Manufacturing Holdings and the Metaldyne Performance Group did not change the relevant corporate structure or the entity legally responsible for the facility.

4. Failure to provide consent of purchaser to assume all obligations of Consent Order.

There has not been a change in ownership of the Kingsford facility that would trigger this requirement. See response to 3, above.

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<sup>1</sup> Both Mr. Grinstern and Grede remember agreeing that it made sense to perform the two sets of performance testing at the same time because many of the individual tests are the same and the cost of mobilizing twice could be avoided if the two sets of tests were performed together. It appears, however, that Mr. Grinstern understood the agreement to be that Grede would move up its 2018 ROP renewal testing to 2017 so it could be performed at the same time as the 2017 MACT testing. Grede thought that AQD was allowing Grede to postpone the 2017 MACT testing until 2018 so that it could be performed with the 2018 ROP renewal stack testing.

5. Emission of an air contaminant that has caused injurious effects to property and/or has caused unreasonable interference with the comfortable enjoyment of life and property.
  - a. Failure to adequately collect and dispose of air contaminants.<sup>2</sup>
  - b. Failure to adequately maintain and operate an air cleaning device.

This set of alleged violations apparently arise from a January 2018 complaint made by the owner of property in the general area of the Kingsford facility regarding dust that had collected on various surfaces on the owner's property over the previous three months. AQD apparently analyzed the dust from the complainant's property and dust from the Kingsford facility and found the two samples to be "similar". When AQD inspected the Kingsford facility in May 2018, AQD did not identify any specific sources within the facility that were likely to have been the source of the fugitive dust found on the complainant's property. Nevertheless, Grede and AQD split dust samples from four different locations within the facility. Grede had its samples analyzed for the constituents identified by AQD by WhiteWater & Associates and has shared those results with AQD. AQD, on the other hand, has not shared either the results of the May split-sampling event or the analysis of the dust collected from the complainant's property, despite several requests for these data. Indeed, there were no further communications from AQD between the May inspection and the issuance of the August 6, 2018 NOV, despite several attempts by Grede to discuss these issues further.

Based on the information that AQD has shared with Grede, it does not appear that the alleged emission-related violations are factually supported. In fact, a great deal of evidence affirmatively indicates that the Kingsford facility is not the source of the dust collected from the complainant's property, including the following:

- There are other industrial facilities in the area of the Kingsford facility, including other foundries, that handle and/or manufacture iron. Although the AQD has not shared its analytical results with Grede, the operations of any one or a combination of these facilities could have generated fugitive dust "similar" to the dust collected at the complainant's property.
- As acknowledged by AQD during the August 7<sup>th</sup> meeting, Grede has operated in compliance with its ROP and Consent Order during the relevant time frame. The only deviations recorded were minor operational issues that Grede quickly corrected and that would not have resulted in fugitive dust emissions. Grede's Renewable Operating Permit Deviation Reports for the last year are attached as Attachment 2. These detailed reports demonstrate how closely Grede monitors its operations to ensure consistent compliance with applicable legal requirements.
- The Kingsford facility has routinely passed the semiannual Opacity testing conducted by a third-party testing firm, since entry of the 2016 Consent Order. See Grede's most recent results attached as Attachment 3.

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<sup>2</sup> AQD acknowledges that it has no independent evidence of the violations listed as 5(a) and (b). Rather, these alleged violations are derivative of alleged violation No. 5 and are assumed to have occurred based on the AQD's conclusion that the Kingsford facility was the source of the dust collected from the complainant's property.

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- The deposition of dust on the complainant's property occurred during the winter months when weather conditions would not have permitted fugitive dust from the Kingsford facility's yard to become airborne, even if dust from the facility's operations had accumulated in the yard (of which there is no evidence).

These facts and the many improvements to the Grede's operations discussed above make it very unlikely that its Kingsford facility is the source of the fugitive dust at issue. Based on the available information, Grede does not believe that it violated its ROP or the Consent Order with regard to fugitive dust emissions as suggested by the NOV. If AQD has any additional factual bases for concluding otherwise, please provide that information to Grede to consider.

Grede will continue to work cooperatively with AQD staff to assure Grede's continued compliance with its ROP, Consent Order, and any other applicable requirements. Please contact Tyler Hill if you wish to discuss this response or the related issues further.

Very truly yours,

ZAUSMER, AUGUST & CALDWELL, P.C.



Michael L. Caldwell

MLC/bas  
Enc.

cc: Ed Lancaster, AQD  
Dean Teeples  
John Bomberg  
Tyler Hill  
Paul Blindauer, GEI

**ATTACHMENT 1**



Michigan Department Of Environmental Quality - Air Quality Division

**RENEWABLE OPERATING PERMIT APPLICATION  
C-001: CERTIFICATION**

*This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.*

**This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.**

Form Type C-001	SRN B1577
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Stationary Source Name Grede, LLC - Iron Mountain	
City Kingsford	County Dickinson

<b>SUBMITTAL CERTIFICATION INFORMATION</b>	
1. Type of Submittal <i>Check only one box.</i>	
<input type="checkbox"/> Initial Application (Rule 210)	<input checked="" type="checkbox"/> Notification / Administrative Amendment / Modification (Rules 215/216)
<input type="checkbox"/> Renewal (Rule 210)	<input type="checkbox"/> Other, describe on AI-001
2. If this ROP has more than one Section, list the Section(s) that this Certification applies to <u>General Conditions</u>	
3. Submittal Media <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Disk <input checked="" type="checkbox"/> Paper	
4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal. AI	

<b>CONTACT INFORMATION</b>	
Contact Name Tyler Hill	Title General Manager
Phone number (906)7790201	E-mail address tyler.hill@aam.com

<b>This form must be signed and dated by a Responsible Official.</b>					
Responsible Official Name Tyler Hill				Title General Manager	
Mailing address 801 S. Carpenter Avenue					
City Kingsford	State MI	ZIP Code 49802	County Dickinson	Country USA	
As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate and complete.					
 Signature of Responsible Official				8/6/18 Date	



**RENEWABLE OPERATING PERMIT  
M-001: RULE 215 CHANGE NOTIFICATION  
RULE 216 AMENDMENT/MODIFICATION APPLICATION**

*This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment.*

1. SRN B1577	2. ROP Number MI-ROP-B1577-2014a	3. County Dickinson
4. Stationary Source Name Grede, LLC - Iron Mountain		
5. Location Address 801 S. Carpenter Avenue	6. City Kingsford	
7. Submittal Type - <i>The submittal must meet the criteria for the box checked below. Check only one box. Attach a mark-up of the affected ROP pages for applications for Rule 216 changes.</i> <input type="checkbox"/> Rule 215(1) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 215(2) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 215(3) Notification of change. <i>Complete Items 8 – 11 and 14</i> <input checked="" type="checkbox"/> Rule 215(5) Notification of change. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 216(1)(a)(i)-(iv) Administrative Amendment. <i>Complete Items 8 – 10 and 14</i> <input type="checkbox"/> Rule 216(1)(a)(v) Administrative Amendment. <i>Complete Items 8 – 14. Results of testing, monitoring &amp; recordkeeping must be submitted. See detailed instructions.</i> <input type="checkbox"/> Rule 216(2) Minor Modification. <i>Complete Items 8 – 12 and 14</i> <input type="checkbox"/> Rule 216(3) Significant Modification. <i>Complete Items 8 – 12 and 14, and provide any additional information needed on ROP application forms. See detailed instructions.</i> <input type="checkbox"/> Rule 216(4) State-Only Modification. <i>Complete Items 8 – 12 and 14</i>		
8. Effective date of the change. (MM/DD/YYYY) <i>See detailed instructions.</i>	10/09/2017	9. Change in emissions? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Description of Change - <i>Describe any changes or additions to the ROP, including any changes in emissions and/or pollutants that will occur. If additional space is needed, complete an Additional Information form (AI-001).</i>  A number of Responsible Official changes have occurred in the past year. Charles Kalupa served as General Manager of the facility until October 9, 2017. Mr. Roger Rask served as General Manager from 11/8/2017 until 3/9/2018. Mr. Tyler Hill is the acting General Manager and has served in that role since 3/12/2018.		
11. New Source Review Permit(s) to Install (PTI) associated with this application? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, enter the PTI Number(s) _____		
12. Compliance Status - <i>A narrative compliance plan, including a schedule for compliance, must be submitted using an AI-001 if any of the following are checked No.</i> a. Is the change identified above in compliance with the associated applicable requirement(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No b. Will the change identified above continue to be in compliance with the associated applicable requirement(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No c. If the change includes a future applicable requirement(s), will timely compliance be achieved? <input type="checkbox"/> Yes <input type="checkbox"/> No		
13. Operator's Additional Information ID - <i>Create an Additional Information (AI) ID for the associated AI-001 form used to provide supplemental information.</i> AI		
14. Contact Name Tyler Hill	Telephone No. (906)779-0201	E-mail Address tyler.hill@aam.com
15. This submittal also updates the ROP renewal application submitted on ____/____/____ <input type="checkbox"/> Yes <input type="checkbox"/> N/A <i>(If yes, a mark-up of the affected pages of the ROP must be attached.)</i>		

**NOTE: A CERTIFICATION FORM (C-001) SIGNED BY A RESPONSIBLE OFFICIAL MUST ACCOMPANY ALL SUBMITTALS**

DEQ Environmental Assistance Center  
Phone: 800-662-9278

www.michigan.gov/deq

EQP 5775 (Rev.01-2017)



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(II), and be made available to the Department of Environmental Quality, Air Quality Division upon request.

Source Name Grade LLC - Iron Mountain County Dickinson  
Source Address 801 South Carpenter Avenue City Kingsford  
AQD Source ID (SRN) B1577 ROP No. MI-ROP\_B1577-2014a ROP Section No. IV

Please check the appropriate box(es):

**Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, this source was in compliance with ALL terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.

2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, EXCEPT for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, ALL monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.

2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, EXCEPT for the deviations identified on the enclosed deviation report(s).

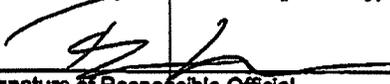
**Other Report Certification**

Reporting period (provide inclusive dates): From 1/1/2017 To 12/31/2017

Additional monitoring reports or other applicable documents required by the ROP are attached as described:  
Annual MAERs Submittal Certification - RY2017

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

Tyler Hill General Manager 906-779-0207  
Name of Responsible Official (print or type) Title Phone Number  
 Signature of Responsible Official 3/12/18 Date

\* Photocopy this form as needed.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division upon request.

Source Name Grede, LLC - Iron Mountain County Dickinson  
Source Address 801 South Carpenter Avenue City Kingsford  
AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV

Please check the appropriate box(es):

**Annual Compliance Certification (Pursuant to Rule 213(4)(c))**  
Reporting period (provide inclusive dates): From 01/01/2017 To 12/31/2017  
 1. During the entire reporting period, this source was in compliance with ALL terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.  
 2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, EXCEPT for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**  
Reporting period (provide inclusive dates): From 07/01/2017 To 12/31/2017  
 1. During the entire reporting period, ALL monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.  
 2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, EXCEPT for the deviations identified on the enclosed deviation report(s).

**Other Report Certification**  
Reporting period (provide inclusive dates): From 01/01/2017 To 12/31/2017  
Additional monitoring reports or other applicable documents required by the ROP are attached as described:  
CAM Report and Certification  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

Roger Rask General Manager 906-779-0201  
Name of Responsible Official (print or type) Title Phone Number

Roger Rask 2/28/2018  
Signature of Responsible Official Date

\* Photocopy this form as needed.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
DEVIATION REPORT**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

This form may be submitted in conjunction with the Renewable Operating Permit Report Certification form (EQP 5738) to report deviations from all general conditions and special conditions in the Renewable Operating Permit (ROP) for which deviations required to be reported by R 336.1213 (Rule 213) subrule (3)(c) have occurred. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division, upon request. Items 1 - 8 must be completed for all deviations being reported.

Source Name Grede, LLC-Iron Mountain County Dickinson  
Source Address 801 South Carpenter Ave City Kingsford  
AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV  
ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266  
Reporting Period (provide inclusive dates): From 07/01/17 to 12/31/17  
Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-P009	2. Condition No. VI, 6	3. Date(s) of Occurrence 08/29/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 15 mins
6. Method Used to Determine Compliance Status (if different from method specified in ROP)		7. Description of Deviation Tried to start up 2 times and couldn't get stack temp up within 15 minutes, stack temp was at 1097F which is below the 1300F degrees limit.		
8. Reason for Deviation and Description of Corrective Action Taken I shut the cupola down, and called Electricians and Maintenance to the Cupola. A fire eye had failed for the upper stack burner. Electricians replaced fire eye. Started up again and stack temp went over 1300 degrees. I continued to monitor through out the day, and that appears to have been the problem.				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)		7. Description of Deviation		
8. Reason for Deviation and Description of Corrective Action Taken				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)		7. Description of Deviation		
8. Reason for Deviation and Description of Corrective Action Taken				



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
DEVIATION REPORT**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

This form may be submitted in conjunction with the Renewable Operating Permit Report Certification form (EQP 5736) to report deviations from all general conditions and special conditions in the Renewable Operating Permit (ROP) for which deviations required to be reported by R 336.1213 (Rule 213) subrule (3)(c) have occurred. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division, upon request. Items 1 - 8 must be completed for all deviations being reported.

Source Name Grede, LLC - Iron Mountain County Dickinson

Source Address 801 S. Carpenter Avenue City Kingsford

AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 01/01/2017 to 06/30/2017

Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-P032, P034, P038	2. Condition No. VI, 1	3. Date(s) of Occurrence 4/18/17 - 4/22/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 5 days
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6. Method Used to Determine Compliance Status (if different from method specified in ROP)	7. Description of Deviation Differential pressure varied from 7.0 w.c. to 10 w.c. after initial start up of collector. Proper range is 1 w.c. to 6 w.c.
-------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------

8. Reason for Deviation and Description of Corrective Action Taken This collector was just installed and run for the first time. Foundasco valve solenoid was installed improperly. Reinstalledasco valve so the collector could pulse properly to clean the filter bags. Back in proper operation.

1. Group or Source Wide ID EU-P009	2. Condition No. VI, 10	3. Date(s) of Occurrence 4/20/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 1 hour
---------------------------------------	----------------------------	-------------------------------------	----------------------------------------------------------------------------------------------------------------	------------------------------------

6. Method Used to Determine Compliance Status (if different from method specified in ROP) Computer monitoring system	7. Description of Deviation Motor amps were out of range at 212. Amp range is 115 - 200.
-------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------

8. Reason for Deviation and Description of Corrective Action Taken Slide gate on quencher was found to be wide open allowing for more airflow. Closed slide gate, amperage was returned to proper range.

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
----------------------------	------------------	--------------------------	-----------------------------------------------------------------------------------------------------	--------------------------

6. Method Used to Determine Compliance Status (if different from method specified in ROP)	7. Description of Deviation
-------------------------------------------------------------------------------------------	-----------------------------

8. Reason for Deviation and Description of Corrective Action Taken

**ATTACHMENT 2**



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
DEVIATION REPORT**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

This form may be submitted in conjunction with the Renewable Operating Permit Report Certification form (EQP 5736) to report deviations from all general conditions and special conditions in the Renewable Operating Permit (ROP) for which deviations required to be reported by R 336.1213 (Rule 213) subrule (3)(c) have occurred. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division, upon request. Items 1 - 8 must be completed for all deviations being reported.

Source Name Grede LLC County Dickinson

Source Address 801 South Carpenter Ave City Kingsford

AQD Source ID (SRN) b1577 ROP No. MI-ROP-B1577-2009a ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 01/01/18 to 06/30/18

Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-PO32, 34, 36, 38	2. Condition No. VI, 2	3. Date(s) of Occurrence 1/29/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 3 HOURS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 1"w.c. - 6"w.c., Guage was reading 0.	
8. Reason for Deviation and Description of Corrective Action Taken Differential line was plugged. Blew the line out. Back in operation.				

1. Group or Source Wide ID EU-PO12	2. Condition No. VI, 2	3. Date(s) of Occurrence 1/29/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 1 HOUR
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 2"w.c. - 4"w.c., Guage was reading zero	
8. Reason for Deviation and Description of Corrective Action Taken Differential line running to the top of the top of the collector was frozen. Thawed and blew the lines out. Back in operation.				

1. Group or Source Wide ID EU-PO40	2. Condition No. VI, 2	3. Date(s) of Occurrence 2/16/18 2/17/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 2 DAYS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 3.5"w.c.-5.5"w.c. 2/16/18 it was 7.5"w.c., 2/17/18 it was 8.5"w.c.	
8. Reason for Deviation and Description of Corrective Action Taken Had an air leak in a pulse valve, which would not let the system build up enough pressure to pulse and clean the filters. Turned air off the unit and worked on finding a replacement/rebuild kit. Rebuilt valve on 2/17/18. Back in operation.				



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Source Address 801 South Carpenter Ave City Kingsford

AQD Source ID (SRN) b1577 ROP No. MI-ROP-B1577-2009a ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 01/01/18 to 06/30/18

Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-PO14	2. Condition No. VI, 2, 4	3. Date(s) of Occurrence 3/30/18 3/31/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 2 DAYS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 3.5"w.c.-5.5"w.c. Guage read 7 & 6.4. Amps are supposed to be 135-165, and were 119, 131	
8. Reason for Deviation and Description of Corrective Action Taken Air dryer failed, got water in the air lines for the pulse. Water froze and damaged about 12 asco valves. Replaced/rebuild valves, air dryer also replaced. Back in operation. We did also when system couldn't pulse, shut it down each shift and go in with a manual air wand and clean the filters. This helped keep it running.				

1. Group or Source Wide ID EU-PO40	2. Condition No. VI, 2	3. Date(s) of Occurrence 3/30/18 3/31/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 2 DAYS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 3.5"w.c.-5.5"w.c.. 3/30 it was 6.8, 3/31 it was 7.1	
8. Reason for Deviation and Description of Corrective Action Taken Electrical issue inside the pulse board. Would pulse normal for 2-3 hours and have to be reset. Replaced the pulse board, back in operation.				

1. Group or Source Wide ID EU-PO18	2. Condition No. VI, 2, 5	3. Date(s) of Occurrence 4/13/18	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 6 HOURS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 1"w.c.-6"w.c. Guage was reading 10", Amps are supposed to be 175-210, Guage was reading 160.	
8. Reason for Deviation and Description of Corrective Action Taken Pulse arm that rotates over the filters had quit working, replaced motor for arm. Was not properly cleaning the bags resulting in high D.P. and low amps. Once motor was replaced, back in operation.				



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
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Source Name Grede LLC County Dickinson

Source Address 801 South Carpenter Ave City Kingsford

AQD Source ID (SRN) b1577 ROP No. MI-ROP-B1577-2009a ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 01/01/18 to 06/30/18

Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-PO18	2. Condition No. VI, 2	3. Date(s) of Occurrence 4/17/18	4. Previously reported? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 4/13/18	5. Duration of Deviation 4 HOURS
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure is supposed to be 1"w.c. - 6"w.c.. Guage was reading 10"w.c.	
8. Reason for Deviation and Description of Corrective Action Taken PD Blower pump was not working, collector was not getting air to clean bags. Replaced with a rebuilt blower. Was back within range in less than an hour. Back in operation.				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation	
8. Reason for Deviation and Description of Corrective Action Taken				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation	
8. Reason for Deviation and Description of Corrective Action Taken				



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
DEVIATION REPORT**

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Source Name Grede, LLC - Iron Mountain County Dickinson

Source Address 801 S. Carpenter Avenue City Kingsford

AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 01/01/2017 to 06/30/2017

Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-P032, P034, P038	2. Condition No. VI, 1	3. Date(s) of Occurrence 4/18/17 - 4/22/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 5 days
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Differential pressure varied from 7.0 w.c. to 10 w.c. after initial start up of collector. Proper range is 1 w.c. to 6 w.c.	
8. Reason for Deviation and Description of Corrective Action Taken This collector was just installed and run for the first time. Found asco valve solenoid was installed improperly. Reinstalled asco valve so the collector could pulse properly to clean the filter bags. Back in proper operation.				

1. Group or Source Wide ID EU-P009	2. Condition No. VI, 10	3. Date(s) of Occurrence 4/20/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 1 hour
6. Method Used to Determine Compliance Status (if different from method specified in ROP) Computer monitoring system			7. Description of Deviation Motor amps were out of range at 212. Amp range is 115 - 200.	
8. Reason for Deviation and Description of Corrective Action Taken Slide gate on quencher was found to be wide open allowing for more airflow. Closed slide gate, amperage was returned to proper range.				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation	
8. Reason for Deviation and Description of Corrective Action Taken				



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Source Name Grede, LLC-Iron Mountain County Dickinson

Source Address 801 South Carpenter Ave City Kingsford

AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV

ROP Section Contact Eric Grinstern Contact Phone No. 616-356-0266

Reporting Period (provide inclusive dates): From 07/01/17 to 12/31/17

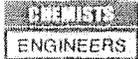
Report Type:  Annual  Semi Annual  Other (Describe) \_\_\_\_\_

1. Group or Source Wide ID EU-P009	2. Condition No. VI, 6	3. Date(s) of Occurrence 08/29/17	4. Previously reported? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 15 mins
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation Tried to start up 2 times and couldn't get stack temp up within 15 minutes, stack temp was at 1097F which is below the 1300F degrees limit.	
8. Reason for Deviation and Description of Corrective Action Taken I shut the cupola down, and called Electricians and Maintenance to the Cupola. A fire eye had failed for the upper stack burner. Electricians replaced fire eye. Started up again and stack temp went over 1300 degrees. I continued to monitor through out the day, and that appears to have been the problem.				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation	
8. Reason for Deviation and Description of Corrective Action Taken				

1. Group or Source Wide ID	2. Condition No.	3. Date(s) of Occurrence	4. Previously reported? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in ROP)			7. Description of Deviation	
8. Reason for Deviation and Description of Corrective Action Taken				

**ATTACHMENT 3**



**BADGER LABORATORIES & ENGINEERING INC.**  
501 WEST BELL STREET • NEENAH, WISCONSIN 54956-4868 • EST. 1966  
(920) 729-1100 • FAX (920) 729-4845 • 1-800-776-7196

April 16, 2018

Project #18-0006A

Mr. Tom White  
**AAM Castings**  
801 South Carpenter Avenue  
Kingsford, MI. 49802-5594

Dear Mr. White:

Attached is a copy of the report detailing the Visible Emission tests run April 11, 2018 at the AAM Castings facility located in Kingsford, MI. All the points read were in compliance with their respective Opacity limitation.

If you have any questions regarding the report, please call. Thank you for allowing us to provide this service to you.

BADGER LABORATORIES & ENGINEERING  
WDNR Certified Lab #445023150

Bruce F. Lamers  
Project Manager

Attachment

## AAM Castings - Visible Emission Test

### I. Introduction and Summary

Badger Laboratories & Engineering Co., Inc. (BL&E) was retained by AAM Castings to determine the fugitive Visible Emissions from foundry operations located at the facility. The facility is located at 801 South Carpenter Avenue, Kingsford, MI.

The emission tests were conducted April 11, 2018 by Mr. Jeff Jennerjohn of BL&E (phone No. 920-729-1100). The testing was performed to demonstrate compliance with the MACT standard for the iron and steel foundry industry. Testing was performed at four points. Each point consisted of a scan of the length of the wall. A one-hour long testing was also performed on the cupola baghouse discharge

No representative from any control agency was present to witness the tests. Testing was performed following U.S. EPA Method 9 by a certified visible emission observer. Mr. Tom White is the AAM Castings contact.

A summary of the emission results is shown below. The Smoke Forms containing the raw field data are also contained in the Appendix.

### Method 9 Observations

Point No.	Time Period	Point Description	Opacity Limit*	Opacity Results Highest 6' ave.
				1 Hour*
1	9:00-10:00	North Side of Building	20%	0.0%
2	9:00-10:00	West Side of Building	20%	0.0%
3	11:05-12:05	South Side of Building	20%	0.0%
4	11:05-12:05	East Side of Building	20%	0.0%
5	10:02-11:02	Cupola Baghouse	20%	1.6%

The limit is 20% except for one 6-minute period per hour which may be 27% Opacity.

## **II. Process Description**

The Visible emission testing was performed to demonstrate that the building fugitive emissions were in compliance with the MACT standard limitation for the iron and steel foundry industry. The length of each wall (point) of the facility was scanned to determine the fugitive visible emissions from indoor operations.

Visible emission testing was also performed on the discharge of the baghouse controlling emissions from the cupola. Observations were performed at the exit ports of the positive pressure baghouse.

Badger Labs personnel was advised by AAM Castings personnel that foundry operations were at normal levels and it was OK to take visible emission readings. Badger Labs personnel was not supplied with any process or operating data. Any and all process data will be supplied by AAM Castings personnel.

## **III. Comments**

The testing on April 11, 2018 proceeded normally with no problems that we were aware. To the best of our knowledge the test results are accurate and indicate the process emissions during the test period.

## **IV. Stack Testing and Analytical Procedures**

The EPA reference method used in the testing program is summarized below.

### **Method 9: Visible Emissions**

Opacity observations were performed according to EPA Method 9 by a certified visible emission observer. The observer was certified on April 10, 2018 at a qualified Smoke School.

The points read were the sides (walls) of the building. There were multiple openings in each wall. A scan of the length of the wall was performed which included all the openings. The highest opacity observed was recorded. Two separate points (walls) were read concurrently. Readings were taken at fifteen seconds intervals. No emissions were observed at any of the points (4). The smoke forms used are contained in the Appendix.

The cupola baghouse point read was the discharge ports of the positive pressure baghouse. There were multiple ports along one face of the baghouse. A scan of the length of the face was performed which included all the openings. The highest opacity observed was recorded. Readings were taken at fifteen seconds intervals. The smoke form used is contained in the Appendix.

## Appendix









Name of Company: AAM Date: 4-11-18

Location: \_\_\_\_\_ FID Number: \_\_\_\_\_

City, State, Zip Code: Kingsford, MT Observer Certification Date: 4-10-18

Discharge Location: Capola Bag House Control Device: \_\_\_\_\_

Height of Discharge Above Ground: 60 ft. Steam Plume? Yes  No  Attached  Detached

Time of Observation: Initial 10:02:00 Final 11:01:45

Observer Location: Distance to Discharge: 200 ft. Same \_\_\_\_\_

Direction from Discharge: N Same \_\_\_\_\_

Height of Observation Point in Relation to Discharge: 60 ft. Same \_\_\_\_\_

Plume Description (Color, Length, etc.): 3-6 ft. white/grey clouds Same \_\_\_\_\_

Plume Background Description: white/grey clouds Same \_\_\_\_\_

Weather Conditions: Wind Direction: W Same \_\_\_\_\_

Wind Speed: 0-5 Same \_\_\_\_\_

Ambient Temperature: 41.00F Same \_\_\_\_\_

Sky Conditions (clear, overcast, % clouds, etc.): overcast Same \_\_\_\_\_

SEC MIN	0	15	30	45	SEC MIN	0	15	30	45
0	0	0	5	0	30	0	0	0	5
1	5	5	0	0	31	5	0	0	5
2	5	5	5	5	32	5	10	10	0
3	0	0	0	0	33	0	0	0	0
4	0	5	0	0	34	0	0	0	0
5	0	0	0	5	35	5	5	0	5
6	0	0	0	0	36	0	0	0	5
7	0	0	0	0	37	5	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	5	5	5
10	0	0	5	0	40	5	5	0	0
11	5	5	5	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	5	5	5	0	43	0	0	0	0
14	0	0	0	0	44	5	10	5	5
15	0	0	0	0	45	0	5	5	5
16	5	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	5	5
18	0	0	0	5	48	0	0	0	0
19	0	0	0	0	49	5	5	0	0
20	0	0	0	0	50	0	5	5	5
21	0	0	0	0	51	0	5	5	5
22	0	0	0	0	52	5	0	0	5
23	5	5	0	0	53	0	0	5	0
24	0	0	0	0	54	5	5	5	10
25	0	5	5	0	55	5	5	5	5
26	0	0	0	0	56	5	5	10	5
27	0	0	0	0	57	0	0	5	5
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0

Describe Point in Plume at Which Opacity was Determined: scan length of exit ports

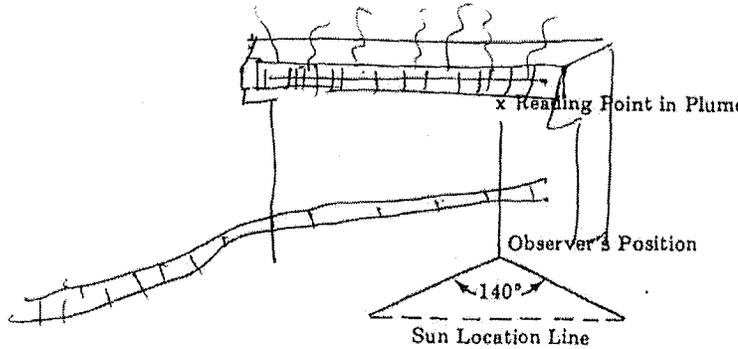
Remarks: \_\_\_\_\_

Summary of Average Opacity (From Computer Program)

Set Number	Time	Opacity	
	Start - End	Sum	Average
1	51-56	100	4.2
2	44-49	60	2.5
3	30-55	55	2.3

Signature of Observer: [Signature] Name of Observer (Please print): Jeff Jernigan

Sketch of Observer Discharge, and Sun Location: \_\_\_\_\_



Allowable Source Opacity: hardly over 1.6%

# Opacity Readings

Cupola Baghouse

4/11/2018

Sorted

	0	15	30	45	Total	Start	End	Sum	Ave	Start	End	Sum			
0	0	0	5	0	5	0	5	45	1.9	51	56	100			
1	5	5	0	0	10	1	6	40	1.7	52	57	95			
2	5	5	5	5	20	2	7	30	1.3	50	55	90			
3	0	0	0	0	0	3	8	10	0.4	53	58	85			
4	0	5	0	0	5	4	9	10	0.4	49	54	80			
5	0	0	0	5	5	5	10	10	0.4	54	59	80			
6	0	0	0	0	0	6	11	20	0.8	44	49	60			
7	0	0	0	0	0	7	12	20	0.8	47	52	60			
8	0	0	0	0	0	8	13	35	1.5	30	35	55			
9	0	0	0	0	0	9	14	35	1.5	31	36	55			
10	0	0	5	0	5	10	15	35	1.5	48	53	55			
11	5	5	5	0	15	11	16	35	1.5	32	37	50			
12	0	0	0	0	0	12	17	20	0.8	35	40	50			
13	5	5	5	0	15	13	18	25	1.0	39	44	50			
14	0	0	0	0	0	14	19	10	0.4	40	45	50			
15	0	0	0	0	0	15	20	10	0.4	42	47	50			
16	5	0	0	0	5	16	21	10	0.4	43	48	50			
17	0	0	0	0	0	17	22	5	0.2	45	50	50			
18	0	0	0	5	5	18	23	15	0.6	46	51	50			
19	0	0	0	0	0	19	24	10	0.4	0	5	45			
20	0	0	0	0	0	20	25	20	0.8	1	6	40			
21	0	0	0	0	0	21	26	20	0.8	27	32	40			
22	0	0	0	0	0	22	27	20	0.8	28	33	40			
23	5	5	0	0	10	23	28	20	0.8	29	34	40			
24	0	0	0	0	0	24	29	10	0.4	34	39	40			
25	0	5	5	0	10	25	30	15	0.6	41	46	40			
26	0	0	0	0	0	26	31	15	0.6	8	13	35			
27	0	0	0	0	0	27	32	40	1.7	9	14	35			
28	0	0	0	0	0	28	33	40	1.7	10	15	35			
29	0	0	0	0	0	29	34	40	1.7	11	16	35			
30	0	0	0	5	5	30	35	55	2.3	36	41	35			
31	5	0	0	5	10	31	36	55	2.3	2	7	30			
32	5	10	10	0	25	32	37	50	2.1	37	42	30			
33	0	0	0	0	0	33	38	25	1.0	13	18	25			
34	0	0	0	0	0	34	39	40	1.7	33	38	25			
35	5	5	0	5	15	35	40	50	2.1	38	43	25			
36	0	0	0	5	5	36	41	35	1.5	6	11	20			
37	5	0	0	0	5	37	42	30	1.3	7	12	20			
38	0	0	0	0	0	38	43	25	1.0	12	17	20			
39	0	5	5	5	15	39	44	50	2.1	20	25	20			
40	5	5	0	0	10	40	45	50	2.1	21	26	20			
41	0	0	0	0	0	41	46	40	1.7	22	27	20			
42	0	0	0	0	0	42	47	50	2.1	23	28	20			
43	0	0	0	0	0	43	48	50	2.1	18	23	15			
44	5	10	5	5	25	44	49	60	2.5	25	30	15			
45	0	5	5	5	15	45	50	50	2.1	26	31	15			
46	0	0	0	0	0	46	51	50	2.1	3	8	10			
47	0	0	5	5	10	47	52	60	2.5	4	9	10			
48	0	0	0	0	0	48	53	55	2.3	5	10	10			
49	5	5	0	0	10	49	54	80	3.3	14	19	10			
50	0	5	5	5	15	50	55	90	3.8	15	20	10			
51	0	5	5	5	15	51	56	100	4.2	16	21	10			
52	5	0	0	5	10	52	57	95	4.0	19	24	10			
53	0	0	5	0	5	53	58	85	3.5	24	29	10			
54	5	5	5	10	25	54	59	80	3.3	17	22	5			
55	5	5	5	5	20										
56	5	5	10	5	25										
57	0	0	5	5	10	Set No.				1	51	56	100	Ave	4.2
58	0	0	0	0	0					2	44	49	60	2.5	
59	0	0	0	0	0					3	30	35	55	2.3	

**Total**                      **385**  
**Hourly Ave**                    **1.6 %**



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
REPORT CERTIFICATION**

*Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.*

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division upon request.

Source Name Grede, LLC - Iron Mountain County Dickinson

Source Address 801 South Carpenter Avenue City Kingsford

AQD Source ID (SRN) B1577 ROP No. MI-ROP-B1577-2014 ROP Section No. IV

Please check the appropriate box(es):

**Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From 01/01/2017 To 12/31/2017

1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.

2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From 07/01/2017 To 12/31/2017

1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.

2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

**Other Report Certification**

Reporting period (provide inclusive dates): From 01/01/2017 To 12/31/2017

Additional monitoring reports or other applicable documents required by the ROP are attached as described:

CAM Report and Certification

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

Roger Rask	General Manager	906-779-0201
Name of Responsible Official (print or type)	Title	Phone Number
		<u>3/8/2018</u>
Signature of Responsible Official		Date

\* Photocopy this form as needed.