

received Nov - 3 2016

Air Quality Division Detroit Office

November 1, 2016

Mr. Jonathan Lamb Senior Environmental Quality Analyst Department of Environmental Quality/Air Quality Division Cadillac Place 3058 W. Grand Blvd., Suite 2-300 Detroit, Michigan 48202-6058

Dear Mr. Lamb:

Fritz Enterprises, Inc. (FEI) has received and reviewed the Violation Notice (VN), which was issued by the Department of Environmental Quality/Air Quality Division (MDEQ/AQD) ON October 12, 2016. The VN alleged the following two violations:

- 1. The visible emissions from FEI's River Rouge Plant exceeded 5% over a 6-minute average a total of five times from 12:53 PM to 1:20 PM. The highest 6-minute average was 56%; thereby, in violation of Special Condition (SC) No.I.4 of FGAluminumMelt Table of PTI No. 15-01A, and R. 336.1301(1)(c).
- 2. The emissions from FEI's River Rouge Plant were not properly controlled by the FG's baghouse and lime injection system; thereby, in violation of SC No. IV.1 and 2 of FGAluminumMelt Table of PTI No. 15-01A, and R. 336.1910.

The VN requested that FEI initiate actions necessary to correct the above alleged cited two violations and submit a written response to the MDEQ/AQD by November 2, 2016.

On September 20, 2016, FEI submitted the following explanation of the malfunction incident in an email message:

The refractory lined duct pipeline from the furnace to the preheat drum failed on Sunday, 9/18/2016. Apparently, the refractory lining failed inside the duct due to wear and tear conditions, and the hot gasses flowing through the pipeline burned a hole in the metal exterior of the 90 degree elbow. Please see the attached photo of the failed pipeline (Exhibit 1). Consequently, the plant shift foreman reacted immediately and stopped the aluminum scrap feed to the furnace, started investigating the situation, and cleaned out the furnace's reaction well. Upon discovering the hole in the duct pipeline, the plant maintenance crew patched the duct line hole with a fiber blanket (aka, Kwool). Obviously, this was an immediate and preliminary fix. Please see the attached photos of the patched pipeline (Exhibit 2). Ultimately, a new refractory lined pipeline was ordered and installed. The installation was completed on September 30, 2016.

It was estimated that the duration of the breakdown of the pipeline had lasted 3 hours (12:00 Noon – 3:00 PM). Please see the attached Equipment Malfunction or Breakdown Report (Exhibit 3), which was documented pursuant to FEI's Standard Plant Operations Procedures. The baghouse collection system was in its normal operational mode during this incident.

> 1650 W. Jefferson Trenton, MI 48183 (734) 362-3200 Fax (734) 362-3250



In order to prevent a reoccurrence of a similar pipeline failure, FEI has initiated and continues to implement the following activities:

- 1) Increase the frequency of the inspection of the said pipeline to twice per week in order to insure the preservation of its integrity.
- 2) Document the inspection activities on a regular basis. Copy of the frequent inspection record sheets are attached (Exhibit 4.1 & 4.2).
- Purchased and is using a hand-held laser thermometer (made by Amprobe) to measure the pipeline outer temperature at different locations of the pipeline. Abnormal temperatures exceeding 600° F should result in a stoppage of the scrap aluminum charge to the furnace. Pictures of the thermometer are attached (Exhibit 5).
- 4) All shift foremen were instructed that in case of an Equipment Malfunction or Breakdown to immediately suspend the charge operations of scrap aluminum to the furnace, initiate a thorough investigation action, and resolve the malfunction immediately.

FEI asserts the following facts and observations regarding the above pipeline failure incident of September 18, 2016:

- FEI has regained, and is maintaining, compliance with all of the conditions of PTI No. 15-01A in an expeditious fashion.
- The excess visible emissions were a result of a sudden and unavoidable breakdown of the preheater pipeline, and beyond the control of FEI. This was consistent with the provisions of R 915(3)(a).
- The plant's baghouse collection system was maintained and operated in a manner consistent with good practice of minimizing emissions and pursuant to FEI's Standard Plant Operations Procedures. This was consistent with the provisions of R 915(3)(b) and (i).
- Repairs to the failed preheater pipeline were made in an expeditious fashion as soon as the failure was discovered. This was consistent with the provisions of R 915(3)(d).
- The amount and duration of excess emissions were minimized to the maximum extent practicable during periods of the emissions. This was consistent with the provisions of R 915(3)(e).
- FEI's shift foreman immediately stopped the scrap aluminum charge to the furnace, initiated an investigation action of the incident, and cleaned out the inside of the furnace. The maintenance department staff responded immediately to make the necessary repairs to the failed pipeline and were able to stop the visible emissions within 2 hours of the knowledge of the incident. This was consistent with the provisions of R 915(3)(f).
- This kind of pipeline failure was not part of a recurring pattern indicative of inadequate design, operation, or maintenance. The pipeline failure was a sudden and unavoidable breakdown and a result of wear-and-tear conditions. This was consistent with the provisions of R 915(3)(g) and (h).

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Thank you for granting FEI the opportunity to review and respond to the Violation Notice of October 12, 2016. We hope to have adequately responded to the concerns of the MDEQ/AQD and consummated a resolution of the said Notice. If you have any concern or require further information, please contact me at your earliest convenience.

Sincerely,

Many

U. Sam Amer Environmental Manager

1650 W. Jefferson Trenton, MI 48183 (734) 362-3200 Fax (734) 362-3250









FRITZ ENTERPRISES INC. RIVER ROUGE ALUMINUM FACILITY

EQUIPMENT MALFUNCTION OR BREAKDOWN REPORT

[Note: For use only by Fritz Environmental Management to report to MDEQ]

1)	Name (Person Reporting Breakdown).	Kenneth Filipkawski							
2)	Tille: Foreman	Phone:							
3)	Company Name:	Fritz Enterprises							
4)	Mailing Address:	1650 W. Jefferson, Trenton, MI 48183							
5)	Plant Location:	River Rouge, MI							
6)	Source:	Aluminum Facility							
7)	Type of Equipment:	Reverbatory Furnace							
8)	Date of Breakdown: 9-18-16	Time of Breakdown: 12:00 pm							
9)	Estimated Duration of Breakdown:	3 Hours							
10)	Nature of Breakdown or Malfunction: Hole in duct work refractory Fellon Tof								
	Ensite of duct Burned hole thru metal								
11)	Potential Air Pollution Problems Created: (Typ	pe,and Amount)							
	Smake anning out hole in due	twork Notice Smoke At 12:00pm							
12)	Corrective Action(s) Taken (Initiated within 1 w	vorking day):							
	12:00 pm stopped Feed system 1:00	an clean out Reaction well. 1:10 pm & 125 clean							
	out inside Fundre Maintaince ca.	Me in 2:30pn Putched Hole in duct work							
13)	Date of Initiation of Repair/Replacement/Corre								
14)	Date of Completion of Repair/Replacement/Co	prrective Action 9-18-16							
15)	Corrective Actions consistent with Startup, She	utdown, Corrective Action Plan? YES // NO							
	,								
16)	Additional Comments/Explanation: New Refractor/ line duct will be								
	ordered 9-19-16 to Replace	older existing duct.							
		a Rella							
	Signature Demeth Lynaunth								
17)	David Splan, Vice President, Environmental M	gmt Signature: Van V/L Date: 9-19-16							
	F081								

Exhibit 3

DATE / TIME	INSPECTOR	COMMENTS	l.
9-22-:145pm	Sam	EIBOW 324 - 1ST 254 800 346 370	1
1-22 300 pm	SAM	EIBAN 134 554 220 311 324 346	
1-23 740 Am	SAM	131 468. 298 349 348 374	
1-26 730 Am	sam	133 453 298 365 360 345	1
7-27 740 Am	SAM	86 484 252 312 321 323	00 5
-28 745 An	s'Am	116 465 305 338 351 363	1
10-6- 2:00pm	Kenn	264 290 302 399 407 431	
10-7 3:45pm	Kew	254 266 2011 378 383 375	-
0-10-16 2.20 m	Ken	249 272 289 413 413 402	Ost True
0-11-16 3:10pm	Ken	246 276 304 424 425 445	100
0-12-16 2-15pm	Ken	109 102 112 115 109 137	710
0.1316 2:54 pm	Kent	(de lle. 78 84 72 93.	57°
D-141-16 3:300M	Ken	295 306 334 458 440 455	610
5-17-16 3:35pm	Ken	263 255 354 374 371 378	820 at
0-18-16 3:40pm	Ken	266 286 302 409 411 4/5	76
6-19-16 33 3 8 pm	KEN	263 292 302 430 428 432	720
0.20-14	quis	245 284 306 400 410 414	60
10-24-16.	Ken -		5%
0-25-16	Ken	230 247 272 413 391 397	53
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Exhibit 4.1

Modified											
1	PREHEAT DRUM DUCT WORK INSPECTON										
DATE / TIME	INSPECTOR	ELBOW TEMP F	1ST PIPE TEMP F		3RD PIPE TEMP F	4TH PIPE TEMP F	V.E. Y/N IF YES OPACITY READING LOGED ON OPACITY SHEET IN LAB				
Differ inte	intor cereix										
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Exhibit 4.2

