August 11, 2020

Nichols Aluminum LLC Davenport dba Aleris - Casting
Attn: Brian McCabe, HSE Manager
1725 Rockingham Road
Davenport, IA 52802

RE: Complaint Investigation - Baghouses in Melt Department
Complaint No. 28502
Facility No. 82-01-089
Title V Permit No. 03-TV-017R2

Dear Mr. McCabe:

On July 29, 2020, I was at your facility along with Kurt Levetzow, Supervisor at Field Office #6, to investigate a complaint regarding the lime feed system for the baghouses in the melt department at the Nichols Aluminum LLC Casting facility located at 2101 J.M. Morris Road in Davenport, Iowa. We investigated this compliant concurrently with the Title V air quality compliance evaluation for the facility. During the course of the complaint investigation, I toured the facility with you, Matt McIntosh and Mark Donovan and also met with Bart Burds.

Based on information obtained from the facility personnel during and after the site visit, the facility is aware of the plugging issues with their automated lime feed system and has taken some action to attempt to address them and plans on more improvements to the lime feed system for the baghouses to further cut down on issues with the automated feed system not working properly and leading to the need to manually feed lime. The facility provided a Gantt chart (attached) showing the steps that they have taken and steps that they still plan to take to address issues with the automatic lime feed system.

During the course of the complaint investigation it was also discovered that the manual feed systems for the Fuller Baghouse and the Mikropul Baghouse were different and that the manual feed for the Fuller Baghouse had a bag lift that would simply lift a 50 pound bag up to the manual feed intake. The manual feed system for the Micropul Baghouse involved personnel having to scoop the powdered lime from the 50 pound bags to a tray below the intake for the manual feed. (See next page for photo)



View of the manual feed intake for the Mikropul baghouse (EP 23). The manual feed requires that somebody scoop the powdered lime from 50 pound bags to a small tray just below the manual feed intake.

Therefore, in summary there is evidence that there are steps the facility should be taking to reduce the incidences of manual feeding of lime to the baghouses that have automated lime feed systems. While not all instances of plugging of the lines can be eliminated, the facility should be adequately documenting all instances and what was done, including the determination of the manual feed rate for the baghouse. The facility should also ensure that they have ample replacement parts for the lime feed system (e.g. airlocks, fluidizers and vibrators) should those parts fail. Furthermore, the manual lime feed system for the Mikropul baghouse should be modified to a bag lift like the one for the Fuller baghouse in order to better allow for less labor intensive manual feeding for those times when it is unavoidable.

While the complaint investigation did not identify that the facility was not adequately maintaining the lime feed system, it did reveal the need to better document the alarms associated with the automatic lime feed system to the baghouses as well as the need to ensure that all associated records (e.g. work orders and manual feed reports) are available and complete. It also identified areas that the facility could improve upon the lime feed system including updates to the manual feed system for the Mikropul baghouse in order to better facilitate manual lime feeding for those times it is

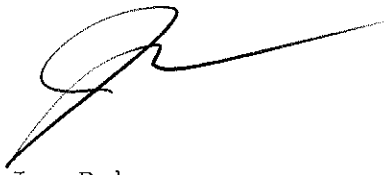
unavoidable. Furthermore, it identified the need for the facility to have an adequate stock of replacement equipment (e.g. vibrators, fluidizers, etc.) in order to minimize the amount of times that the facility needs to resort to manual feeding of lime to the baghouses.

This office would like to do a follow up visit in approximately 2 months to evaluate improvements made to the lime feed system and to the documentation of issues involving the lime feed system.

If you have any questions or would like further explanation of any part of this letter or report, please contact me at 319-653-2135 or Jon.Ryk@dnr.iowa.gov.

Sincerely,

FIELD SERVICES & COMPLIANCE BUREAU



Jon Ryk
Environmental Specialist

JPR: N:\Environmental Services\Field Services\ESD06-Wash-Fo6\JRYK\AQ\2020\Aleris Castings 82-01-089\8-20 Complaint Ltr - Aleris Nichols Casting Lime Feed Complaint.doc

Attachment: Lime Silo Gantt Chart

xc: AQB - DNR, Des Moines
FO6 AQ File - Nichols Aluminum LLC Davenport dba Aleris - Casting