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CERTIFIED MAIL – RETURN RECEIPT REQUESTED
MDEQ Kalamazoo District Office:

October 20, 2020

Mr. Cody Yazzie
Michigan Department of Environment, Great Lakes and Energy
Air Quality Division
7953 Adobe Road
Kalamazoo, MI 49009-5025



Ms. Jenine Camilleri
Michigan Department of Environment, Great Lakes and Energy
Air Quality Division
P.O. Box 30260
Lansing, MI
48909-7760

**Re: Follow Up Letter, Letter of Violation Receipt 10-6-2020
BASF Toda America LLC (BTA). Battle Creek, MI SRN: P0089**

Dear Mr. Yazzie;

Provided for your review is a written response to the Letter of Violation dated October 6, 2020 and alleged violations presented therein.

BTA in June and July of 2019 conducted emissions testing of certain dust collectors pursuant to the testing requirements specified in 40 CFR 63.11496(f)(5) for New Sources of HAP emissions. This testing yielded testing derived emission factors (lb./hour basis) which were subsequently employed to assess compliance with the facility wide nickel emissions limit of 145 lbs./yr on a 12-month rolling specified by specified by Special Condition 1.1 of PTI 70-10B.

Application of these testing derived emission factors demonstrated that starting in March of 2019, the facility emissions were in excess of the 145 lb./yr. emissions limit for nickel. BTA has further determined the exceedance has ceased as of October 31, 2020. BTA notified EGLE of this issue in October of 2019, well before the August 26, 2020 inspection.

BTA, starting in 2019, has implemented four specific capital projects to improve the performance of site emission control devices and vendor analysis of the system. These projects are listed below along with the basis for implementation.

Project One: Automation of the Dust Collector Emptying Process

Automation of dust collector emptying system. BTA during 2019 evaluated the amount of material being collected and removed from the process vent gas from the following dust collectors:

A1-BF-010, A1-BF-020, A1-BF-210, A2-BF-10, A2-BF-015 and A2-BF-020. BTA recognized historical manual emptying procedures employed by the prior owner/operator, were inadequate for the proper removal of accumulated material in each of the dust collectors. Furthermore, during the 2019 turnaround, approximately one metric ton of accumulated particulate was removed from the vent system.

During the 2019 turnaround, BTA installed an automated emptying system that solved two separate identified shortcomings: (1) the failure to remove accumulated material from dust collectors and (2) poor connections of the receiving containers to the dust collectors, which were a source of leaking material in the plant. The automated removal of accumulated particulate in the dust collectors resolved an identified impact on the performance of the collectors.

Project Two: Installation of Temporary HEPA Filtration Systems

Starting in March of 2020, BTA installed temporary HEPA filtration systems to support the following dust collection systems:

A1-BF-010, A1-BF-020, A1-BF-210, A2-BF-010, A2-BF-015, A2-BF-020 (aka West Side System) and A1-BF-030, A2-BF-030, A1-BF-650, A1-BF-720, A2-BF-650, A2-BF-720 (aka East Side System).

Both the East and West Systems were installed in February of 2020 and made operational on March 20, 2020. The systems are being modified during the 2020 turnaround to include an A and B filter bank for each system, extension of the exhaust stack and continuous monitoring of pressure drop across the HEPA filter systems. BTA applied the EPA recommended 99.97% removal efficiency for HEPA systems in emissions estimates starting in April of 2020. It should be noted the removal efficiency for the entire system, primary dust collectors and HEPA filters meets or exceeds 99.99%.

Project Three: Modification of Existing Dust Collectors

During November of 2019, BTA enlisted support of a dust collector vendor to evaluate the condition and performance of the existing dust collection system, which predated BTA's ownership and operation. The vendor identified a design deficiency associated with the method of connection to the tube sheet for the dust collection socks for the following dust collectors; A1-BF-010, A1-BF-020, A1-BF-210, A2-BF-010, A2-BF-015, A2-BF-020. The existing design results in an overly complicated and difficult installation of the socks during replacement.

BTA contacted the original equipment vendor Mikropul regarding the design deficiency, which Mikropul confirmed. BTA subsequently engaged Mikropul in a project to retrofit the identified dust collectors with a new tube sheet assembly. This new assembly facilitates a simpler and more reliable installation of the dust collector socks, thus preventing misalignment during installation or loosening of the sock connection during operation.

Mikropul will be installing the retrofit assembly during the 2020 turnaround being undertaken during the period from September 2020 to mid-November of 2020.

Project Four: Replacement of Water Scrubbers

During the evaluation of control technologies supporting manufacturing operations at the facility, BTA determined the single pass water scrubbers installed by the prior owner/operator were

inappropriate for control of particulate emissions with a particle size distribution of three (3) microns and limited solubility in water. BTA has also experienced occasional pressure fluctuations in the potable water supplied by the City of Battle Creek resulting in minimum flow deviations associated with the scrubber systems.

BTA determined that installation of a dry media controls for control of the emissions from the kilns (Line #1 and Line #2) was a more appropriate methodology of particulate emissions control. A capital project was undertaken in 2019 to begin the design of the dry media systems for particulate control. These systems consist of a cartridge style dust collector supported by an in line HEPA filter. The kilns themselves have a hot side and cold side vent line. For Line #2 there are two kilns each having a hot side and cold side vent system.

Installation of the new dust collector systems supporting the kilns began in September of 2020 and is expected to be completed in November of 2020. It should be noted the removal efficiency for the entire system, primary dust collectors and HEPA filters meets or exceeds 99.99%.

In summary, BTA believes the projects described in the communication will resolve the exceedance of the facility wide nickel emission limit of 145 lb./yr.

Should you have any concerns or questions regarding the information contained in this submittal please contact David Sheaves at 734-324-6836 or by email david.sheaves@basf.com.

Sincerely,



Ivor Bull
COO BASF Toda America LLC & Director BASF Battery Materials North America

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