

Michael J. ConnollyDirector Environmental Engineering

April 10, 2018

Mr. Mike Kovalchick Senior Environmental Engineer, Air Quality Division Michigan Department of Environmental Quality 301 East Louis Glick Highway Jackson, MI 49201-1556

Re: Violation Notice

SRN: B4306, Jackson County

TMS International, LLC located at Gerdau Jackson, MI

3100 Brooklyn Road, Jackson, MI 49203

Dear Mr. Kovalchick,

In response to the March 20, 2018 Violation Notice we have attached to this letter a Permit to Install application and offer the following comments:

Addressing Rule 201 No permit to install violation comments:

Since TMS began operations in 1989, it was our understanding and belief that our operations were covered by the mill's permit and that our processing plant was exempt from any permit requirement as emissions were below the threshold. TMS confirmed the coverage under Gerdau's permit a number of times with the mill. In addition, at no time was TMS informed by MDEQ that we were operating in violation of MDEQ rules, despite being repeatedly inspected by MDEQ over the years. TMS has always been willing to submit an application to MDEQ if required, but this was never requested before your 3-20-2018 Violation Notice, and based on that initial request an air permit application is now being provided to MDEQ.

As regards your comments about Rule 290 eligibility, we were surprised by your comment since previously MDEQ allowed crushed stone processing emission factor for the air emission calculations for TMS's other operations in Michigan. Nevertheless, per your request, TMS air emissions have now been calculated using Table 12.5-4, Uncontrolled PM Emission Factors for Iron & Steel Mills (uncontrolled), AP-42, 10/86 and also calculated a conveyor drop emission factor using AP-42 13.2.4.3, Equation 1.

Regarding the particulate emissions from haul roads, open storage piles, loading / unloading, we have calculated these emissions and they are now included with the application. However, in addition to some of these emissions already being covered by Gerdau's permit (Flexible Group emissions), referring to Rule 290 (2), emissions are to be included from "emission units" and we interpreted this to only require emissions from stationary sources and therefore we excluded roads, storage piles, and loading / unloading in our Rule 290 exemption determination. Also, please note that the TMS

Rule 290 exemption determination was based on an annual ton per year rate greater than the actual annual rate or monthly actual production rates and it seemed obvious that we never would exceed the total uncontrolled and controlled 1000 lb. and 500 lb. emission limits and therefore we met the Rule 290 exemption requirements.

As to air toxics, TMS and the slag process industry completed an industry wide risk assessment and the air toxics specified in your 3-14-2018 email do not present a significant human health risk from slag processing and as a result we interpreted the purpose of the air toxic section of Rule 290 is to evaluate human health risk from exposure to metals and this risk had been previously evaluated.

The metals you mentioned as toxic air contaminants in steel slag are not available individually. Steel slag consists of several complex minerals but no individual metal in elemental form is being emitted. Appropriate risk assessment calculations and evaluation had been previously completed and therefore a risk screening evaluation was not included in the TMS Rule 290 evaluation. In our new spreadsheet, we have included all the metals you mentioned even though 1) several of the metals were determined to be below detection levels, 2) we found much lower metal concentration related to inhalable fractions, or 3) we found that some of the metals are excluded from USEPA Regional Screening Levels (RSL) for soil (USEPA 2010b).

General comments:

Your NOV alludes to a TMS inspection in January 2018. TMS was not aware of such an inspection. Also, TMS was never informed that MDEQ was of the belief that we installed and operated an unpermitted process. If this was conveyed to Gerdau by MDEQ, this was not relayed to TMS.

Regarding your 3-14-2018 email, you mentioned concerns with air emissions based on your January 2018 site inspection. We believe what was seen was merely steam. During the winter months, TMS continues to add water as needed to cool the molten slag and control air emissions. TMS does pre-water slag prior to processing and there may be steam while processing. We will add water as needed to control air emissions.

Lastly, we were not aware that Gerdau Jackson did not include TMS in their Fugitive Dust Control Plan. TMS thought it was. As a result of your March email, TMS has now included with the air permit application, a Fugitive Dust Control Plan for all emission sources.

We hope that this response and air permit application meets your requirements and please contact me via email or telephone if you have any questions.

Sincerely, Michael J. Cornelly

Michael Connolly

Attached: Renewable Operating Permit Initial Application

Cc: Craig Metzger, Gerdau

Alicia Stone, TMS at Gerdau Jackson