UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 0 6 2016

REPLY TO THE ATTENTION OF

Ms. Kristin Hart
Chief
Permits and Stationary Source Modeling Section
Bureau of Air Management
Wisconsin Department of Natural Resources
PO Box 7921
Madison, Wisconsin 53707-7921

Dear Ms. Hart:

The U.S. Environmental Protection Agency has the following comments on the Wisconsin Department of Natural Resources' (WDNR) combined draft initial Title V permit and new source review permit for Superior Silica Sand – Arland Plant, permit number #603108330-P01 (SSS). In order to ensure that the project meets federal Clean Air Act (CAA) requirements, that the permit will provide necessary information so that the basis for the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA recommends that the following points be addressed:

1) 40 CFR 70.5(c)(3) requires the source to provide emission-related information as part of the permit application, including all emissions of pollutants for which the source is major and emissions of all regulated air pollutants. Pursuant to 40 CFR 70.2, "regulated air pollutant" includes "Any pollutant for which a national ambient air quality standard (NAAQS) has been promulgated" and thus includes particulate matter of less than 2.5 micrometers ($PM_{2.5}$). Further, 40 CFR 70.3(d) requires that fugitive emissions from a Part 70 source must "be included in the permit application and Part 70 permit in the same way as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source." WDNR's February 2016 report entitled "Air Quality Review of Industrial $PM_{2.5}$ from Stationary Sources in Wisconsin" (henceforth referred to as the TSD), states that mechanical units are not likely to "cause or contribute to a violation of the NAAQS". A determination that an emission unit does not cause or contribute to a violation of the NAAQS does not necessarily equate to no emissions from the unit. As frequently seen in ambient air impact analyses, an emission unit can emit significant quantities of a pollutant and still not cause, by itself, a violation of the NAAQS. WDNR's statement that mechanical units are unlikely to "cause or contribute to a violation of the NAAQS" does not address the explicit Part 70 requirements to quantify emissions rates. WDNR's failure to consider $PM_{2.5}$ emissions from mechanical sources, including fugitive emissions, is not allowable under Title V of the CAA and the permit record is currently deficient. Compliance with Title V requires WDNR to quantify the $PM_{2.5}$ emissions from the mechanical sources at the facility.

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EPA urges WDNR to include $PM_{2.5}$ emissions calculations for the mechanical units at SSS using the best available information[1].

2) WDNR has proposed to remove the $PM_{2.5}$ emissions limits for the rotary sand dryer, dust collection system and product storage silos which were adopted in permit #14-MHR-069. These limits were adopted because when emissions were limited to those emission rates modeling showed that the NAAQS were not violated. This seems to imply that modeling using the maximum theoretical emission rate for each emissions unit would result in modeled a violation of the NAAQS. WDNR justifies the decision to remove the $PM_{2.5}$ limits by stating that the TSD leads it to the conclusion that mechanical sources such as the rotary sand dryer, dust collection system, and product storage silos do not have the potential to cause or contribute to a violation of the NAAQS. In the case of SSS, site specific data lead WDNR to conclude that if limits were not imposed on these emission units then the facility could cause or contribute to a violation of the NAAQS. While states generally have discretion in the implementation of minor permitting programs, a state's new source review program is required to prevent the construction of sources that would interfere with attainment or maintenance of a NAAQS or violate the control strategy in nonattainment areas[2] and this requirement is codified in Wisconsin Statute 285.63(1)(b). Since site-specific information such as stack heights, topography, meteorological data and emission rates can impact local air quality, EPA believes that it is not appropriate to invalidate the conclusions reached by the initial site-specific ambient air quality analysis by relying on WDNR's TSD alone. EPA believes that prior to removing the emission limits, WDNR must provide additional, site-specific justification explaining why the removal of the $PM_{2.5}$ limits would not cause or contribute to a violation of the NAAQS.

3) Permit Condition I.A.1.b.(1) requires that the rotary dryer only fire propane or natural gas, however there is no associated recordkeeping requirements. It is unclear from the permit record if the dryer is physically capable of burning an additional fuel type. The permit should require the facility to maintain records of the fuel burned in the dryer or confirm that the dryer is only physically capable of burning propane or natural gas.

4) Permit Condition I.A.b.(3) requires that the baghouse be in line and operated at all times that the rotary driver is in operation. Similarly, Condition I.B.1.(b)(2) and I.C.1.b.(2), require that the dust collector and bin filters be in line and operated at all times Process P02 and P03-P07 are in operation. However, it does not appear that there are any associated recordkeeping requirements. Please add the requirement to record any periods that the emission is operating but the associated control device is not operational or explain why it is not necessary to do so.

5) Conditions I.A.1.b.(6) and I.B.1.b.(5) require that the Permittee develop a pressure drop range for the baghouse and dust collector during the initial operation. However it is unclear if this range has been developed. Given that the requirement for a pressure drop range was imposed via a December 2014 construction permit, the appropriate pressure

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[2] See 40 CFR 51.160(b)(2)

drop range should exist. Furthermore, since the permit relies upon the control devices achieving a certain control efficiencies to demonstrate compliance with the particulate matter limits, EPA believes that the pressure drop range of the devices should be explicitly identified in the permit.[3] To improve clarity, practical enforceability and transparency for the public, the pressure drop range should be incorporated into the draft permit.

6) Condition I.B.3.c.(2)(b) requires that the Permittee maintain records of each Method 22 test performed, however there is no requirement specifying the frequency at which Method 22 tests must be performed. EPA suggests revising the draft permit to require Method 22 tests on a quarterly basis to demonstrate compliance with the New Source Performance Standard (NSPS) Subpart OOO requirement.

7) Condition I.C.1.(b)(3) requires that the facility maintain a copy of the vendor's guarantee that the cartridge-style dust collectors can achieve the NSPS particulate matter limit. However, the manufacturer will only guarantee that the device will achieve the exhaust concentration if the device is operated in accordance to the manufacturer's specifications. EPA does not believe that the initial stack test alone is sufficient to determine continuous compliance. EPA has stated in guidance that, "when permits require add-on controls operated at a specified efficiency level, permit writers should include, so that the operating efficiency condition is enforceable as a practical matter, those operating parameters and assumptions which the permitting agency depended upon to determine that the control equipment would have a given efficiency".[4] If the manufacturer's guarantee is to be relied upon to demonstrate continuous compliance, the requirement to operate per the manufacturer's design manual and per the design parameters included in the application which were relied upon in determining the manufacturer's guarantee should be included as a federally enforceable condition. Please revise the permit accordingly or incorporate an alternative monitoring to ensure continuous compliance with the particulate matter limits.

8) Conditions I.D.1.b.(1)(e), I.E.1.b.(1)(e), I.F.1.b.(1)(e), I.H-M. 1.b.(1)(e), and I.Z and AA.1.b.(1)(e) require that "equipment and enclosures shall be inspected on a regular basis (daily, weekly, monthly, or per manufacturer's recommendation) for physical integrity)". To improve clarity and practically enforceability of the conditions EPA suggests requiring these inspections on a weekly basis at minimum. Additionally, EPA suggests adding a requirement that the facility record when inspections are conducted, the results of the inspection, and any corrective action taken.

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[3] *See* JP Pulliam Title V petition response Order, No. V-2009-01, June 21, 2010, at 10 https://www.epa.gov/sites/production/files/2015-08/documents/jp_pulliam_decision2009.pdf

[4] *See* Memorandum from Terrell E. Hunt, EPA, "Guidance on Limiting Potential to Emit in New Source Review Permitting" (June 13, 1989), at 7 https://www.epa.gov/sites/production/files/2015-08/documents/lmitpotl.pdf, and Cash Creek Generation, LLC, Title V petition response Order, No. IV-2010-4, June 22, 2012, at 17 https://www.epa.gov/sites/production/files/2015-08/documents/cashcreek_response2010.pdf

9) Table 3 of 40 CFR 60 Subpart OOO requires repeat performance tests within five years from the previous test for fugitive emission sources that are not controlled by water sprays and have not adopted the water spray monitoring requirements of 40 CFR 60.674(b) and 60.676(b). Fugitive emissions sources F01, F02, F03, F13, F15, F20, F21, F33, F34, F12, F24, F35, F14, and F25 appear to be subject to 40 CFR 60 Subpart OOO, but the requirement for repeat testing has not been incorporated. Please revise the draft permit to incorporate the repeat performance testing requirements or incorporate the water spray monitoring requirements.

10) Permit conditions I.N-V.1.b.(2) and I.ZZZ.2.b(1) require the facility to make a "visible emission observation" at least once per day. Similarly, Conditions I.W-Y.1.b.(1)(b), I.Z and AA.1.(b)(1)(c) and I.H-M.1.b.(1)(c) require "daily observations" for fugitive dust. To improve clarity and enforceability of the permit condition please consider specifying what methodology should be used to make this observation, for example, Method 22.

11) Permit condition I.ZZZ.2.c.(3) cites to I.ZZZ.2.b.(4), however it does not appear that I.ZZZ.2.b.(4) exists. Please correct the citation as appropriate.

We look forward to working with you to address all of our comments. If you have any further questions, please feel free to contact Andrea Morgan, of my staff, at (312) 353-6058.

Sincerely,

Genevieve Damico

Genevieve Damico
Chief
Air Permits Section