

**Sheplak, Scott**

-file-

---

**From:** Lee, Diana [Lee@epchc.org]  
**Sent:** Thursday, October 30, 2008 11:02 AM  
**To:** Sheplak, Scott  
**Subject:** FW: Comments on Mosaic BART Exemption  
**Attachments:** Comments on BART (RAI2) 10-29-08.doc

Scott,  
I tried sending this to you last night, but something went wrong since I received a delivery error message. I did however, copied Syed on our comments, so hopefully he was able to forward it to you. If you have any questions, please let me know.

Thanks,  
Diana

---

**From:** Lee, Diana  
**Sent:** Wednesday, October 29, 2008 9:10 PM  
**To:** Scott.Sheplack@dep.state.fl.us  
**Cc:** Syed.Arif@dep.state.fl.us; Woodard, Sterlin; Waters, Jason  
**Subject:** Comments on Mosaic BART Exemption

Scott,  
Attached are our comments on Mosaic's BART Exemption project (Project No. 0570008-061-AC). If you have any questions, please let me know.

Thank you,

Diana M. Lee, P.E.  
Chief, Air Permitting

## MEMORANDUM

**DATE:** October 29, 2008

**TO:** Scott Sheplak, P.E.

**FROM:** Diana M. Lee, P.E.

**SUBJECT:** Mosaic Fertilizer: BART Exemption Request  
Project No. 0570008-061-AC

On October 2, 2008, FDEP-Tallahassee received Mosaic's response to the RAI dated September 9, 2008. After review of the response to the RAI, we have the following comments:

- 1) In response to Comment #2, Item d., Mosaic stated that the catalyst supplier will not be restricted to Haldor Topsoe; MECS has products that are essentially interchangeable with the Haldor Topsoe catalyst, and Mosaic may elect to use MECS or an equivalent product. In the attachment provided for Haldor Topsoe's VK series sulphuric acid catalysts, it shows two types of VK series catalysts, VK38 and VK48 for a vanadium catalyst. The VK48 is a high-vanadium version of the standard all-around VK38 catalyst. The Catalyst Supplier Study in Appendix C, submitted with the application dated September 9, 2008 and conducted at the Riverview facility, only references the catalyst as VK, 12 mm Daisy, but it does not specify if it is a VK38 or VK48 catalyst. The Title V permit does not reflect or restricts the type of catalysts that are used in Mosaic's Riverview SAPs. Pursuant to Rule 62-070(3), F.A.C., Mosaic should provide specific information on the type of catalyst formulation that is currently in each converter bed of each SAP, and the type of catalyst formulation that will be used in each converter bed, after each SAP is modified as part of this project, since Mosaic stated that it may include various types of catalyst and/or different catalyst loadings to achieve the desired SO<sub>2</sub> emissions.
  
- 2) In the application, Mosaic states that SAP No. 9 currently has a standard vanadium catalyst. Please be advised that based on information provided by Mosaic to EPC staff during an inspection on October, 27, 2008, it appears that cesium catalyst is being used on converter bed no. 4 for SAP #9. This information appears to be in conflict with the permit application. In addition, this change may not have gone thru a permit review process. Pursuant to Rule 62.070(3), F.A.C., Mosaic should provide information

relating to the cesium that is being used on SAP #9, which should include date of installation, the specific type of cesium catalyst formulation, SO<sub>2</sub> conversion efficiency, and other operating parameters pertinent to the operating efficiency of this catalyst and SAP #9. Also, if cesium is being used on converter bed no. 4 at SAP #9, why can Mosaic achieve a lower SO<sub>2</sub> emission rate than the proposed 2.8 to 3.0 lb/ton, when according to Mosaic, the fourth pass (or converter bed no. 4) is the most critical for emissions control? Furthermore, if SAP #9 has a cesium catalyst, why is it not feasible to use cesium catalyst on converter bed no. 4 for the other two SAPs, being that the existing converters will be either replaced or modified? Please be advised, that Chapter 1-1.07, Paragraph 2, Rules of the EPC states that if the latest available technology as may be applied to air, water, and noise pollution sources results in or is expected to result in lower or improved emissions, then the latest available technology as determined by the Commission (EPC) and consistent with the State Department of Pollution Control shall apply.