

**DIRECTOR KAYLA LYON** 

Fax: 515-725-8202

November 19, 2022

SHERMAN LUNDY BMC AGGREGATES LC 101 BMC DRIVE ELK RUN HEIGHTS IA 50707

Re: BMC Aggregates, L.C. - Waterloo South Quarry Reclamation DNR ID #07-BUD-20-02 John Deere Foundry Waterloo - Source Addition

Dear Mr. Lundy:

This letter serves to amend the current beneficial use determination (Doc #96595) to include the acceptance of "Bag Splitter Sand" from the John Deere Foundry in Waterloo, IA as a component of "802 Sand System Baghouse Dust Pelletizer;" which is currently authorized as beneficial fill material. Based upon the DNR's review of John Deere's process modification request, dated November 18, 2020 (Doc #98962), BMC Aggregates, L.C. is authorized to accept as beneficial fill material, 802 Sand System Baghouse Dust Pelletizer containing Bag Splitter Sand. This authorization amends the by-product description for John Deere Foundry Waterloo, as expressed within Special Condition 4(a) of the current determination, as well as updates Appendix C with the "Table 1. John Deere Foundry's Authorized By-products" (enclosed), as provided within the process modification request.

802 Sand System Baghouse Dust Pelletizer shall continue to be analyzed quarterly in accordance with Special Condition #5 of the current determination. Moreover, pursuant to Special Condition #6 of the current determination, at no time shall 802 Sand System Baghouse Dust Pelletizer exceed the Toxicity Characteristics Leaching Procedure (TCLP-EPA Method 1311) and Synthetic Precipitation Leaching Procedure (SPLP-EPA Method 1312) regulatory levels in Chapter 108; nor shall the 802 Sand System Baghouse Dust Pelletizer have any Total Metal contaminant levels resulting in an unacceptable risk level as determined by the Iowa Cumulative Risk Calculator using the "Site Worker" exposure scenario. Any regulatory exceedance shall be reported by the By-Product Generator to the DNR, and the End-User, in writing within ten (10) business days of receiving the results from the laboratory. All reuse activities shall cease until retesting confirms the solid by-product is within applicable regulatory limits.

If you have questions, please contact me at (515) 201-8272 or Chad.Stobbe@dnr.iowa.gov.

Sincerely,

Chad A. Stobbe

**Environmental Specialist Senior** 

Land Quality Bureau

Phone: 515-725-8200

## Enclosure

cc: Iowa DNR Field Office #1, Manchester

David Jackson, Environmental Engineer John Deere Foundry Waterloo 2000 Westfield Avenue Waterloo, IA 50701

Table 1. John Deere Foundry's Authorized By-products				
	Sand By- Product Source	Description	Primary Location (End-User Site)	Secondary Location (Disposal Site)
1	Refractory Brick	Bunkered collection point for ladle and holding furnace lining when it is periodically chipped out and replaced. [Bunkered material is loaded onto a truck with end loader.]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-28-04
2	West Dock Sand	Main collection point for sand leaving the Foundry. Belts carry sand from Mold Line 802, Mold Line 804, Cleaning Room (Dept. 850 & 853), Core Room Didion, and Department 789. [West dock sand is stored in an overhead silo and discharged directly onto a truck.]	Leheigh Cement  Waterloo South  Quarry	Black Hawk County Landfill 07-SWA-105-18
3	802 Sand System Baghouse Dust Pelletizer	Collection point of main baghouse system for department 802. Major processes controlled include belts, shakeout, lump breaker, attrition mill, sand cooler, mullers, and new sand from core/mold making. The process also includes a collection point to process material from small dust collectors. All material is processed through a pelletizer which adds moisture to the material for dust control prior to disposal. [Roll-off]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18
4	East Dust Pelletizer	Collection point of multiple baghouse systems for departments 802 Tumblast, 808 Sand Belts, and 871 Shakeout. [Roll-off]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18
5	Cleaning Room Dust	Collection point for the baghouse controlling departments 850 and 853 shot blast units. [Trailer]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18
6	871 Baghouse Dust	Collection point for Cleaning Room baghouse supporting castings produced on the 804 mold line. [Roll-off]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18
7	804 Sand System Baghouse Dust	The main dust collection system for processes on 804 mold line. Also captures dust from sand cooler. This may alternatively be transported to the East Sand Pelletizer. [Trailer]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18
8	808 Inside ETA	Baghouse system to collect dust from the 808 Sand Shed enclosure. Captures dust from sand reclaim (West Dock Sand) and new sand delivery system. ETA references the manufacturer. [Roll-off]	Waterloo South Quarry	Black Hawk County Landfill 07-SWA-105-18