

MCE Recommended Legislative Reforms to Address Concerns around Denali Water Solutions

In order to address companies that are mixing waste and applying the mixture onto farmland, threatening the water, air, and soil health of those next door and downstream, the Missouri Legislature must enact the following reforms.

1. Close the “agricultural facility” loophole for minimum design standards

Denali told DNR they would operate for less than 29 days and therefore, was able to get out of minimum design standards because Denali didn’t qualify as an “agricultural facility.”

Recommendation: Remove the “more than 30 consecutive days per year” provision, include language to ensure facilities that store (and not just mix) waste fall under this definition, and make explicit that businesses storing bulk fertilizer must follow 10 CSR 20-8.500(4) when constructing new agricultural facilities:

“Agricultural facility, any site, with the exception of chemical production facilities, where bulk pesticides or fertilizers, excluding anhydrous ammonia fertilizer,

(a) are stored and combined in non-mobile containers, dedicated containers, or storage basins or

(b) are stored and being mixed, applied, repackaged, or transferred between containers or storage basins ~~for more than thirty (30) consecutive days per year.~~

Entities currently storing combined bulk fertilizers in storage basins are not exempt from the requirements in 10 CSR 20-8.500(4) when constructing new agricultural facilities.”

2. Define a business type that covers operations like and similar to Denali. The wastes such business accepts.

Recommendations:

Create a new term and definition: “**Multi-industry waste processor-** A business which accepts biosolids, sludges, and process waste for transport from industrial or commercial food production and agriculture sources. The wastes accepted by multi-industry waste processors originate from operations including but not limited to the processing of food products, livestock feed products, poultry hatcheries, meat processing, pet food processing, the slaughter of animals, and fat, oils, or grease processing; and whose business operations may include storage or land application of such process waste.”

Codify DNR’s definition of “process wastes”: “**Process wastes.** The waste, waste-water, sludges, biosolids and residuals originating from sanitary conveniences, or generated during manufacturing or processing, or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product and includes discharges from land application fields that occur as a result of the land application process;”¹

¹ Already found in 10 CSR 20-6.015(1)(B)(10)

3. Require Construction Permits from DNR

We need to ensure companies like Denali must receive a construction permit for any earthen basins/lagoons. This requires an explicit provision in statute stating this as well as codifying several definitions already in regulation to avoid confusion.

Recommendations:

Require a construction permit: “The Department of Natural Resources shall promulgate rules regulating the establishment, permitting, design, construction, operation and management of multi-industry waste processors. The department shall have the authority and jurisdiction to regulate the establishment, permitting, design, construction, operation, location, and management of any multi-industry waste processor. Such rules and regulations shall be designed to afford a prudent degree of environmental protection to ensure safe and clean soils, water, and air for the surrounding community. It shall be unlawful to operate any multi-industry waste processor in this state storing biosolids, sludges, and process wastes unless such entity holds a construction permit from the Clean Water Commission following approval of an application that conforms to minimum design standards established by the department, and an operating permit from the commission. Such operations are prohibited from handling domestic wastewater, domestic biosolids, septage, or human waste.”

Define terms used in new construction permit provision:

- **“Domestic wastewater** - wastewater (i.e., human sewage) originating primarily from the sanitary conveniences of residences, commercial buildings, factories, and institutions, including any water which may have infiltrated the sewers. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.”²
- **Septage** - domestic wastewater sewage sludge that is removed from septic tanks or similar treatment works, including domestic wastewater treatment works serving up to one hundred fifty (150) persons;”³
- **Process wastes** - Waste, waste-water, sludges, biosolids and residuals originating from sanitary conveniences, or generated during manufacturing or processing, or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product and includes discharges from land application fields that occur as a result of the land application process;”⁴
- **Domestic Biosolids** - Primarily organic solid materials separated from the liquid components of domestic wastewater during domestic wastewater treatment and subsequently treated physically and chemically to produce a semisolid product.”⁵

4. Remove Operating Permit Exemption and Explicitly Require Such Permits

We need to ensure that certain operations that obtain licenses from the Fertilizer Control Board are not exempt from operating permits, as the Fertilizer Control Board’s authority does not extend to water quality, air quality, or public health considerations.

² Already found in 10 CSR 20-2.010(26).

³ Already found in 10 CSR 20-6.015(1)(B)(11).

⁴ Already found in 10 CSR 20-6.015(1)(B)(10).

⁵ Definition informed by *Basic Information about Biosolids*, EPA, https://19january2021snapshot.epa.gov/biosolids/basic-information-about-biosolids_.html (a webpage no longer updated after January 21, 2021) by *A Plain English Guide to 503 Biosolids Rule*, EPA, [plain-english-guide-part503-biosolids-rule.pdf](https://www.epa.gov/plain-english-guide-part503-biosolids-rule.pdf) (epa.gov).

MCE Recommended Legislative Reforms to Address Concerns around Denali Water Solutions

Recommendation: *Override 10 CSR 20-6.015(3)(B)(8).* “Notwithstanding any provision of this section to the contrary, the commission shall not exempt any entity from the requirement to obtain a permit under this section based on licensure under the Missouri Fertilizer Law, sections 266.291 to 266.351. No person shall operate a multi-industry waste processor without first obtaining an operating permit from the Clean Water Commission.”

5. Require pollutant monitoring/laboratory testing for waste handled by Denali-like businesses

Recommendation: *Testing of the individual waste streams prior to mixture and contents of lagoon when all wastes are mixed.* “Each multi-industry waste processors shall, as a requirement for obtaining and renewing an operating permit, test and record the nutrient and pollutant contents of substances from each individual waste stream from which they collect as the substances are obtained as well as test and record the combined waste the facility maintains, transports, and land applies as part of its business operations on a monthly basis. Nutrients and pollutants for which to be tested include but are not limited to E. coli, fecal coliform, nitrogen, phosphorus, potassium, ammonia, chloride, heavy metals, PFAS, and pharmaceutical chemicals.”

6. Increase setbacks for waste storage lagoons/land application sites

We must ensure adequate protections of homes, schools, public areas, and various water sources from waste contamination. This requires greater setback distances between these areas and the location of both waste lagoons/storage facilities and lands where waste is applied.

Recommendation: *Make setbacks apply to both lagoons/storage facilities and land application* Codify 10 CSR 20-8.200(6)(B)(2)(B-E); our recommended setbacks for any inhabitable building or public use area (A) are below.

Override 10 CSR 20-8.200(6)(B)(2)(F) for DNR discretion on reducing these setbacks in some circumstances- as one of the goals is odor control, it should be made clear that these setbacks cannot be decreased.

Additional setbacks, mostly based on Alabama regulations where companies like Denali have operated previously⁶:

- A minimum of one hundred (100) feet from public roads and right of ways
- A minimum of five hundred (500) feet from public and private drinking water wells, lakes, or intake structure⁷
- A minimum of five hundred (500) feet from any inhabitable building other than that of the operator of the facility.
- A minimum of five hundred (500) feet from any public use area
- A minimum of one hundred (100) feet from surface waters of the State
- A minimum of one hundred (100) feet from the property boundary.
- A minimum of ten feet (10') to public water supply pipelines;
- A minimum of one hundred (100') from lakes not used for drinking water supply

⁶ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT LAND DIVISION - SOLID WASTE PROGRAM DIVISION 13, 335-13-16-.05 Operating Criteria for Storage, Staging and Land Application of By-Product Materials. Available at <https://adem.alabama.gov/alEnviroReglaws/files/Division13.pdf>.

⁷ These three terms are taken from existing legislation governing other land application of waste, specifically liquid manure. §640.760.