

# **Beneficial Use 3 By Products**

# Used as Fertilizer, Soil Conditioner, or Liming Material (Public Acts 178 & 180 of 2014) Application Checklist

www.michigan.gov/mda-fertilizer

*Effective September 16, 2014*, the Michigan Fertilizer and Liming Materials laws were amended to include additional testing and labeling requirements for beneficial use 3 materials.

The land application of certain materials (see the list below) was overseen by the Michigan Department of Environmental Quality (MDEQ) and is now overseen by Michigan Department of Agriculture and Rural Development (MDARD) as fertilizers, soil conditioners or liming materials. These uses are defined as "beneficial use 3." For additional information about beneficial use materials in Michigan, go to MDEQ Beneficial Use Website

- The <u>new</u> license/registration of any beneficial use 3 products on the list below must meet additional testing and labeling requirements.
- <u>Existing</u> beneficial use 3 licenses/registrations (renewals) are **not** impacted, unless a raw material or generation process has changed. If a raw material or generation process has changed since the original license/registration was issued, then the applicant will need to follow the new beneficial use application process for license/registration renewal.

## **Beneficial Use 3 Materials**

- 1. Coal Bottom Ash
- 2. Wood Ash
- 3. Pulp and Paper Mill Ash
- 4. Mixed Wood Ash
- Cement Kiln Dust used as a Flue Gas Scrubbing Reagent
- 6. Lime Kiln Dust used as a Flue Gas Scrubbing Reagent
- 7. Foundry Sand from Ferrous or Aluminum Foundries
- 8. Pulp and Paper Mill Material

- Dewatered Concrete Grinding Slurry from Public Transportation Agency Road Projects
- Lime Softening Residuals from the Treatment and Conditioning of Water for Domestic Use or from a Community Water Supply
- 11. Soil Washed or Otherwise Removed from Sugar Beets
- 12. Segregated Flue Gas Desulfurization Material

New applicants must submit ALL of the following items in a packet to MDARD, Central Licensing Unit (see application for address) for consideration for licensing and registration. Beneficial Use 3 Materials are referred to as THIS MATERIAL in this document.

1. MDARD Application – complete and attach 1 of the following applications:

<u>Fertilizer/Soil Conditioner Licensing or Registration Application</u> (Act 451 of 1994, Part 85, Fertilizer, Sections 8504 & 8505) or

Liming Materials Product Licensing Application (Act 162 of 1955)

- THIS MATERIAL will be used as a: Fertilizer, Soil Conditioner or Liming Material (circle one)
- THIS MATERIAL will be used for: agricultural or non-agricultural use (circle one)

#### 2. Label or Invoice (Sec 8502, Sec 11551(7)(a) & Act 162 of 1955)

The applicant shall provide a copy of the label/invoice that will accompany THIS MATERIAL and be furnished to the purchaser. The label shall include directions for use to ensure that THIS MATERIAL is applied at an agronomic rate. The applicant shall verify that the agronomic rate has been reviewed by a certified crop advisor.

# 3. Cumulative Loading Rate (Sec. 11551(1)(h)(ii)):

THIS MATERIAL may be applied for a maximum of \_\_\_\_\_ pounds per acre per year. The cumulative amount of any of the following constituents cannot exceed the following chart in a lifetime. A lifetime will be assumed to be 100 years.

Constituent	Cumulative Load (lbs/ac)
Arsenic	37
Cadmium	35
Copper	1,335
Lead	267
Mercury	15
Nickel	374
Selenium	89
Zinc	2,492

## 4. Nutrient, Inorganic, Metals Testing and Efficacy Data (Sec. 11551(7)(b)(i)(A))

THIS MATERIAL will be tested for the following nutrient, inorganic and metals testing. The metals will be evaluated using the Association of American Plant Food Control Officials' (AAPFCO) statement of uniform interpretation and policy #25: <a href="www.aapfco.org/rules.html">www.aapfco.org/rules.html</a>

	Fertilizer	Soil Amendment	Liming Material	Notes
Agronomic Rate by Certified Crop Advisor (consistent with GAAMPs)	x	X	x	
Efficacy Data		х	х	

Plant Nutrient				Includes any nutrient guarantees on the
Guarantees listed in the Guaranteed Analysis	Х			label that are not already identified on the checklist.
Arsenic	X	x	Х	and one of the original control of the original contro
Cadmium	Х	X	X	
Cobalt	X	X	X	
Lead	X	X	X	
Mercury	X	X	X	
Molybdenum	X	X	X	
Nickel	X	X	X	
Selenium	X	X	X	
Dry Solids (%)	X	X	X	
Total Nitrogen	X	X	^	
Ammonium Nitrogen	Х			
Nitrate Nitrogen	Х			
Phosphorus	Х			
Potassium	Х			
pН	Х	х	х	
Calcium	Х	х	Х	
Magnesium	Х	x	х	
Sulfur	Х	х	х	
Chromium	Х	х	Х	
Copper	Х	x	х	
Silver	Х	x	Х	
Boron	Х	х	Х	
Chlorine	Х	х	х	

- 5. Part 201 Generic Residential Soil Direct Contact Cleanup Criteria (DCC) for volatiles, semivolatiles, and dioxin (Sec. 11551(7)(b)(i)(B)). For a complete list of analytes call the Toxicologist at 517-284-5731:
  - Volatile Organic Compounds (US EPA Method 8260B)
  - Semivolatile Organic Compounds (US EPA Method 8270C)
  - Dioxins (US EPA Method 1613b)
- 6. Narrative and Flow Chart description of raw materials and processes used to generate the material (Sec. 11551(2) and (8)). <u>Flow Chart template</u>. Additionally if any of the raw materials, processes, or product is exposed to the outdoors a map will need to be submitted.

#### 7. The applicant certifies that it will comply with ALL of the following:

- The use of THIS MATERIAL must be applied at an agronomic rate consistent with generally accepted agricultural and management practices (GAAMPs) (Sec. 11502(5)(a).
- The use, placement or storage of THIS MATERIAL at the location of use does not cause a Part 55 (air). Part 22 (groundwater) or Part 31 (surface water) violation, or create a nuisance (Sec. 11502(5)(b)).
- The use of THIS MATERIAL complies with Part 115, which includes the following provisions:
  - THIS MATERIAL is specified for beneficial use 3 and conforms to its definition in Part 115.
  - o THIS MATERIAL is not a part 111 hazardous waste or mixed with a hazardous waste.
  - Open dumping of THIS MATERIAL, which is prohibited by the solid waste disposal act, 42
     USC 6901 to 6992k, will not and has not occurred.
  - o THIS MATERIAL is annually registered or licensed under part 85 or 1955 PA 162, MCL 290.531 to 290.538.
  - THIS MATERIAL is not stored at the site of generation or use for more than 3 years, or the amount that is transferred off site for use during a 3-year period equals at least 75% by weight or volume of the amount of that material stored on site for beneficial use at the beginning of the 3-year period.
  - o THIS MATERIAL is stored in a manner that maintains its usefulness, controls wind dispersal, and prevents loss of the material beyond the storage area.
  - THIS MATERIAL is transported in a manner that prevents accidental leakage, spillage, or wind dispersal.

Select one of the following:						
The storage of THIS MATERIAL complies with Part 115 OR						
The storage of THIS MATERIAL comp Fertilizer Bulk Storage. (Sec. 11551(3-4))	lies with MDARD Regulation 641, Commercial					
I certify the above statements are true.						
Signature:	Date					
Responsible Party (Name):	Title:					
Applicant (Firm Name):						