



## Office of Waste Management and Radiological Protection

### Beneficial Use 3 Conditions

- Section 11502(5) - Beneficial use 3” means applied to land as a fertilizer or soil conditioner under part 85 or a liming material under 1955 PA 162, MCL 290.531 to 290.538, if all of the following requirements are met:
  - (a) The material is applied at an agronomic rate consistent with generally accepted agricultural and management practices.
  - (b) The use, placement, or storage at the location of use does not do any of the following:
    - (i) Violate part 55 or create a nuisance.
    - (ii) Cause groundwater to no longer be fit for 1 or more protected uses as defined in R 323.2202 of the Michigan administrative code.
    - (iii) Cause a violation of a part 31 surface water quality standard.
- Section 11551(1) (a) – The material is not a part 111 hazardous waste or mixed with a hazardous waste.
- Section 11551(1) (b) – The 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.
- Section 11551(1) (c) – The material is stored in a manner that maintains its usefulness, controls wind dispersal, and prevents loss of the material beyond the storage area.
- Section 11551(1) (d) – The material is stored in a manner that does not cause groundwater to no longer be fit for 1 or more protected uses, does not cause a violation of a part 31 surface water quality standard, and otherwise does not violate part 31.
- Section 11551(1) (e) – The material is transported in a manner that prevents accidental leakage, spillage, or wind dispersal.
- Section 11551(1) (f) – The use of the material is for a legitimate beneficial purpose other than a means to discard the material and the material is used according to generally accepted engineering, industrial, or commercial standards for that use.
- Section 11551(1) (h) - For beneficial use 3, the material or use of the material, as applicable, meets all of the following requirements:
  - (i) The material is coal bottom ash, wood ash, pulp and paper mill material, pulp and paper mill ash, mixed wood ash, foundry sand from ferrous or aluminum foundries, cement kiln dust, lime kiln dust, lime water softening residuals, flue gas desulfurization gypsum, soil washed or otherwise removed from sugar beets, or dewatered concrete grinding slurry from public transportation agency road projects.

(ii) The amount of any constituent listed below applied to an area of land over any period of time does not exceed the following:

<b>CONSTITUENT</b>	<b>CUMULATIVE LOAD POUNDS PER ACRE</b>
<b>Arsenic</b>	<b>37</b>
<b>Cadmium</b>	<b>35</b>
<b>Copper</b>	<b>1,335</b>
<b>Lead</b>	<b>267</b>
<b>Mercury</b>	<b>15</b>
<b>Nickel</b>	<b>374</b>
<b>Selenium</b>	<b>89</b>
<b>Zinc</b>	<b>2,492</b>

(iii) If the department of agriculture and rural development determines, based on peer-reviewed scientific literature, that any other constituent is subject to a cumulative loading requirement, the amount of that constituent applied to an area of land over any period of time does not exceed that cumulative loading requirement. The cumulative load for that constituent shall be calculated as follows: constituent concentration (mg/kg dry weight) x conversion factor of 0.002 (concentration to pounds per dry ton) x the material application rate in dry tons per acre.

- Section 11551(4) – The storage of a material for beneficial use 3 that complies with regulation no. 641, commercial fertilizer bulk storage, R 285.641.1 to R 285.641.18 of the Michigan administrative code, shall be considered to comply with the storage requirements of this part.
- Section 11551(5) – A person that actively manages and reuses a beneficial use by-product that has already been used in compliance with this part may rely on analytical data from the prior use.
- Section 11551(7) - For beneficial use 3, the material that is offered for sale or use shall be annually registered or licensed under part 85 or 1955 PA 162, MCL 290.531 to 290.538. In addition to the information required under part 85 or 1955 PA 162, MCL 290.531 to 290.538, the following information shall be submitted to the department of agriculture and rural development with the license or registration application:
  - (a) Directions for use to ensure that the material is applied at an agronomic rate that has been reviewed by a certified crop advisor.
  - (b) A laboratory analysis report that contains all of the following:
    - (i) Sampling results that demonstrate that the material does not pose harm to human health or the environment. One method by which this demonstration can be made is by sampling results that comply with both of the following:
      - (A) The levels established pursuant to the association of American plant food control officials' statement of uniform interpretation and policy #25, as follows:
        - (I) A fertilizer with a phosphorus or micronutrient guarantee shall apply the policy in its entirety.
        - (II) A fertilizer with only a nitrogen, potassium, or secondary nutrient guarantee shall use the micronutrients column in the policy and apply a multiplier of 1 to determine the maximum allowable concentration of each metal.

(III) A soil conditioner or liming material shall use the micronutrients column in the policy and apply a multiplier of 1 to determine the maximum allowable concentration of each metal.

(B) The part 201 generic residential soil direct contact cleanup criteria for volatile organic compounds (as determined by U.S. EPA method 8260), semivolatile organic compounds (as determined by U.S. EPA method 8270c), and dioxins (as determined by U.S. EPA method 1613b). Results for dioxins shall be reported on a dry weight basis, and total dioxin equivalence shall be calculated and reported utilizing the U.S. EPA toxic equivalency factors (U.S. EPA/100/R10/005)

(ii) For a fertilizer, all of the following used by a certified crop advisor to determine an agronomic rate consistent with generally accepted agricultural and management practices:

(A) A demonstration that the material contains the minimum percentage of each plant nutrient guaranteed or claimed to be present.

(B) The percentage of dry solids, nitrogen, ammonium nitrogen, nitrate nitrogen, phosphorus, and potassium in the material.

(C) The levels of calcium, magnesium, acidity or basicity measured by pH, sulfur, chromium, copper, silver, chlorine, and boron.

(iii) For a soil conditioner or a liming material, all of the following used by a certified crop advisor to determine an agronomic rate consistent with generally accepted agricultural and management practices:

(A) The percentage of dry solids in the material.

(B) The levels of calcium, magnesium, acidity or basicity measured by pH, sulfur, chromium, copper, silver, chlorine, and boron.

(iv) For a soil conditioner, scientifically acceptable data that give reasonable assurance that the material will improve the physical nature of the soil by altering the soil structure by making soil nutrients more available or otherwise enhancing the soil media resulting in beneficial crop response or other plant growth.

(v) For a liming material, scientifically acceptable data demonstrating that the material will correct soil acidity.

- Section 11551(8) - When a material is licensed or registered as described in subsection (7), the laboratory analysis report and the scientifically acceptable data submitted with a prior application may be resubmitted for a subsequent application unless the raw materials or processes used to generate the material change in a way that could reasonably be expected to materially affect the laboratory analysis report or scientifically acceptable data.
- Section 11551(9) - This part does not authorize open dumping prohibited by the solid waste disposal act, 42 USC 6901 to 6992k.

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