NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT)
Act 451 of 1994

324.11551 Beneficial use by-product; qualification; requirements; analysis of representative sample by initial generator; determination; storage and use; beneficial uses 1 and 2 at and along roadways; registration or licensure under MCL 290.531 to 290.538; submission of information; open dumping; notice to prospective transferee.

Sec. 11551.

(1) Except for a material that the department approves as a beneficial use by-product under section 11553(3) or (4), to qualify as a beneficial use by-product, a material or the use of the material, as applicable, shall meet all of the following requirements:

(a) The material is not a part 111 hazardous waste or mixed with a hazardous waste.

(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.

(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.

(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.

(e) The material is transported in a manner that prevents accidental leakage, spillage, or wind dispersal.

(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.

(g) For beneficial use 2, the material, if specified below, meets the following environmental standards using, at the option of the generator of the by-product, EPA method 1311, 1312, or ASTM test method 3987:

Constituent-maximum leachate mg/l	Coal ash or wood ash	Pulp and paper mill ash, mixed wood ash	Foundry sand	Cement kiln dust, lime kiln dust	Water softening limes, dewatered grinding sludge	Stamp sand from sand blasting	Spent media
Arsenic â€“ 0.2	X	X	X	X	X		
Boron â€“ 10	X						
Cadmium â€“ 0.1	X	X		X	X		
Chromium â€“ 2.0	X						X
Lead â€“ 0.08	X	X	X	X	X		
Mercury â€“ 0.04	X	X		X	X		
Copper â€“ 20		X			X	X	
Nickel â€“ 2.0		X	X		X		X
Selenium â€“ 1.0	X				X		
Thallium â€“ 0.04	X			X			
Zinc â€“ 48	X	X			X		

(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:

CONSTITUENT	CUMULATIVE LOAD POUNDS PER ACRE
Arsenic	37

Cadmium	35
Copper	1,335
Lead	267
Mercury	15
Nickel	374
Selenium	89
Zinc	2,492

(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.

(i) For beneficial use 5, the material is foundry sand from ferrous or aluminum foundries and representative sampling of the foundry sand using either a totals analysis, a leachate analysis (using EPA method 1311, EPA method 1312, ASTM method 3987, or other leaching protocol approved by the department), or any combination of the 2 types of analyses demonstrates that none of the following maximum concentrations are exceeded:

CONSTITUENT	TOTALS ANALYSIS MG/KG	LEACHATE ANALYSIS MG/L
Antimony	4.3	0.006
Cobalt	0.8	0.04
Copper	5,800	1
Iron	23,185	2.0
Lead	700	0.004
Manganese	1,299	0.86
Molybdenum	5	0.073
Nickel	100	0.1
Thallium	2.3	0.002
Vanadium	72	0.0045
Zinc	2,400	2.4
Benzene	0.1	0.005
Formaldehyde	26	1.3
Phenol	88	4.4
Trichloroethylene	0.1	0.005

(2) The determination whether a material meets the requirements of subsection (1)(a) or (g) shall be based on the analysis of a representative sample of the material by the initial generator. The initial generator shall maintain records of the test results for not less than 10 years after the date the material was sent off site and make the records available to the department upon request. The generator shall resample and analyze the material when raw materials or processes change in a way that could reasonably be expected to materially affect analysis results.

(3) Except as otherwise provided in this act, storage and use of beneficial use by-products shall comply with all other applicable provisions of this act.

(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.

(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.

(6) All of the following apply to beneficial uses 1 and 2 at and along roadways:

(a) Routine repair and replacement of roadways constructed using beneficial use materials does not constitute generation of beneficial use by-products triggering the requirements of this section if the beneficial use by-products remain or are reused at the same roadway and are used in a manner that meets the definition of beneficial use 1 or beneficial use 2, as appropriate. If the beneficial use by-products will be reused at some place other than the same roadway, then the requirements applicable to generators of beneficial use by-products must be met, except as follows:

(i) As set forth in subsection (5).

(ii) The requirements of section 11552 apply only if the category of beneficial use will change.

(b) For beneficial use 2, the requirement that beneficial use materials be covered by concrete, asphalt, or 6 inches of gravel applies at the time of placement and use. The development of potholes, shoulder erosion, or similar

deterioration does not result in a violation of this part.

(c) If road materials containing beneficial use by-products are ground, reheated, or melted for reuse, the requirements of part 55 must be met.

(d) This part does not prohibit the state transportation department from seeking additional data or information for road building materials or from requiring that road building materials meet state transportation department specifications and standards.

(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.

(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.

(9) This part does not authorize open dumping prohibited by the solid waste disposal act, 42 USC 6901 to 6992k.

(10) If an owner of property has knowledge that a material has been used on the property for beneficial use 2, before transferring the property, the owner shall provide notice to a prospective transferee that the material was used for beneficial use 2, including the date and location of the use, if known. If a contractor, consultant, or agent of an owner of property uses a material on the property for beneficial use 2, the contractor, consultant, or agent shall provide notice to the owner that the material was used for beneficial use 2, including the date and location of the use.

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