

Agenda for MMA – DEQ Meeting on Part 115 Rules

1. Proposed exemption from management under Part 115 as solid waste for certain materials.
 - a. Identify sugar beet by-products as agricultural by-products subject to other state regulations under rule 110.
 - b. Create an exclusion by rule for certain high volume, low hazard industrial by-products.
 - c. Provide that certain industrial waste by-products by definition are category III industrial by-products that are subject to specific reporting and record keeping requirements, but otherwise considered inert for specific reuse purposes.
 - d. Create a general reuse provision for coal ashes that focuses on relevant pathways and has a mean of translating a leachate value into a chronic aquatic toxicity level.

2. Role of Part 201 in Part 115 rules, specifically for materials designated inert under Part 115 rules.
 - a. Recognition that locations which receive the materials that are not required to be managed as solid waste do not therefore constitute Part 201 "facilities" and incur obligations under Part 201, even when they exceed Part 201 generic residential criteria.

3. What constitutes storage facility subject to regulation under Part 115 rules?

DRAFT

Rule 110

() Sugar beet processing by-products including soil, weeds, beet parts and mixtures of these materials, which are used as fertilizers and/or soil conditioners authorized under Part 85 of Act 451 of 1994, and related storage and handling of these materials.

() Lime material produced as a by-product of sugar beet processing, which is used as a liming material authorized under Act 162 of 1955, and related storage and handling of this material.

R 299.4129 Storage of solid waste in uncontained waste piles.

(3) Owners and operators of waste piles that are specified in subrule (2) of this rule shall ensure that the unit is not in violation of parts 17, 31, or part 55, **and 303** of the act, does not create a nuisance, **does not allow a new release create a facility as defined in part 201 of the act**, and does not result in environmental contamination after closure. **Waste piles may not be located within 200 feet of surface waters without adequate Storm Water barriers or controls. ~~or Waste piles may not be located within 5 feet of groundwater, unless approved in writing by the director~~ the site has been evaluated and is determined to be compliant with R 323.2204 through R323.2218.**

DRAFT

**EXCLUSION FROM REGULATION AS SOLID WASTE
UNDER PART 115 OF BENEFICIAL REUSE OF CERTAIN QUALIFIED
HIGH-VOLUME, LOW-HAZARD INDUSTRIAL BY-PRODUCTS**

1) The following shall not be regulated as solid waste under the regulations promulgated pursuant to Part 115 of NREPA.

A. Foundry residuals including used foundry sand, and [specify other materials] produced as by-products of metal casting activities at iron, aluminum or steel foundries having the characteristics identified in subparagraph iii and beneficially reused as follows:

- i) Use as fill material at a site having the following characteristics:
 - (a) Depth to groundwater no less than ____ feet below lowest elevation of fill placement
 - (b) (Other site characteristics)

ii) Use in structural fill, tracking control, geotechnical applications and manufactured products including asphalt, concrete, plastics, and horticultural media.

iii) Foundry residuals, to qualify for exclusion from regulation as solid waste under this subsection, shall be analyzed for the following parameters using the methods specified in [specify methods]

RCRA metals
Phenol
Formaldehyde
Cyanide
Fluoride
pH

and the results of analysis shall not exceed the criteria set forth in [specify criteria].

iv) Representative samples of foundry residual material shall be retested at least every three years, and when foundry sand binder materials are changed, to demonstrate qualification under this section.

v) Analysis results shall be maintained on file at the metal casting facility for at least three years and made available to MDEQ upon request.

vi) The owner or operator of the metal casting facility shall notify MDEQ of the beneficial reuse of foundry residuals pursuant to this section in an amount of 5000 tons or greater at least fourteen days prior to initial reuse and annually thereafter for each year during which beneficial reuse of additional materials in an amount of 5000 tons or greater occurs. The owner or operator shall keep a log of all beneficial uses of foundry sand and make the log available to MDEQ upon request.

Rule _____

Notwithstanding anything to the contrary in these rules, paper mill waste as defined in MAC R 299.4104(n) may be beneficially reused in the same manner as a Category 3 material in accordance with the requirements of MAC R 299.4120a - .120d, except that no representative testing is required as long as the manner of generating paper mill waste does not materially change from the methods in use at the time of the effective date of these rules.

728009_1.DOC

Rule _____

(1) A person may beneficially reuse paper mill waste as defined in R 299.4104(n) in compliance with this rule and does not require written authorization from the department provided the reuse complies with the provisions of this rule.

(2) A person beneficially reusing paper mill waste shall comply with all of the following:

(a) The storage, processing, transporting, incinerating of or use of an paper mill waste must be done in a manner that does not violate parts 31, 55, 91, and 303 of the act and does not cause a release that creates a "facility" as defined in part 201 of the act.

(b) Vehicles or containers used to transport paper mill wastes shall be durable and leak-proof. Paper mill waste shall be covered during transportation as necessary so as to prevent littering and spillage.

(c) Before beneficial reuse of paper mill waste each generator of the paper mill waste shall submit an initial certification to the department that contains the following information:

(i) Name, phone number, and address of the generator.

(ii) A description for each paper mill waste intended for beneficial use, a description of the process that generated the paper mill waste or a material safety data sheet, and an estimate of the volume that could be used on an annual basis.

(iii) Certification by the owner of the site of reuse that the information on the form is true and accurate, and that the conditions of R 299.4120a(2) to R 299.4120d will be met.

(iv) Certification by each generator that the information on the form is true and accurate, and that the conditions of R 299.4120a(2) to R 299.4120c will be met.

(v) For items registered as fertilizers, soil conditioners, specialty fertilizers, or soil blends under part 85 of the act, a suggested list of uses for application and suggested application rates.

(d) By March 31 of each year, each generator shall submit a report to the department that contains the following information for the previous year:

(i) Name, address, phone number, and contact person of the generator.

(ii) Paper mill wastes generated.

(iii) Volumes of paper mill wastes sent off-site.

(e) Department staff may conduct inspections at both the site of generation and the site of reuse and may collect samples in order to verify compliance with these rules.

(3) Paper mill waste may be utilized for the following beneficial uses:

(a) As a raw material for manufacturing a product that is not applied to or placed on the ground. Paper mill wastes shall be used to produce products in which the measurable leaching, emissions, or decomposition characteristics of the manufactured product do not present a threat of harm to public health, safety, welfare, or the environment, provided the following conditions are met;

(i) The broker and/or producer certify to the department that they will comply with the conditions contained in this part.

(ii) The broker and/or the producer report to the department on a yearly basis the volume of material used, on a form provided by the department.

(b) As an agent for physical or chemical stabilization, or solidification or other treatment of solid waste at the site of remediation, at a landfill licensed under part 111 or

part 115 of the act, or at the site of waste generation, before disposing the waste into a licensed landfill, provided all of the following conditions are met:

- (i) The solidified waste shall pass the paint filter test before disposal.
- (ii) The solidification shall be done in 1 of the following:
 - (iii) In a tank.
 - (iv) In a container.
 - (v) In a building.
 - (vi) In compliance with R 299.4130.
 - (vii) Burned as fuel in a boiler, industrial furnace, or power plant that is

permitted under part 55 of the act, to burn the waste as fuel.

(d) Used for leachate system collection protection layer and/or gas collection layer at licensed landfills. Other uses shall be in compliance with applicable rules. A landfill shall produce yearly reports indicating volumes used, generators, average working face, and number of days of operation.

(e) Used for daily cover at licensed landfills provided that it can be demonstrated that the material is able to control disease vectors, be an effective fire blanket, and control blowing. The material shall not be placed more than 6 inches thick. A landfill shall produce yearly reports indicating volumes used, generators, average working face, and number of days of operation.

(f) Used to produce a product that is bonded by lime, cement, or asphalt.

(g) Land applied for beneficial use if applied agronomically.

(h) Paper mill wastes approved by the department meeting the requirements of ASTM C618 or other appropriate standards used as a soil stabilization material or pavement stabilization material for improving the structural bearing capacity of soils under building pads, paved surfaces, parking lots, and roads. Paper mill waste shall be used in compliance with the following:

(i) The placement of the supplementary cementitious material may extend into the unpaved road shoulder but not more than 5 feet beyond the pavement unless required for structural integrity at the determination of a registered professional engineer.

(ii) The use of supplementary cementitious material shall not exceed 15% by dry mass of the stabilized soil or pavement.

(iii) Any area where paper mill wastes are not directly beneath the pavement structure shall be sloped to prevent ponding of water, covered with topsoil and seeded as soon after placement as is practical or covered with a minimum of 6 inches of gravel or stone.

(iv) The paper mill waste shall not be placed within 5 feet of the seasonal high groundwater table.

(i) Confined fill used for base course, subbase or subgrade fill for the construction of portland cement concrete or asphaltic concrete paved lots, driveways, roads, and highways that consists of granular materials. Paper mill waste shall be used in compliance with the following:

(i) The placement of the paper mill waste may not extend more than 5 feet beyond the paved area unless required for structural integrity at the determination of a registered professional engineer.

(ii) Any area where paper mill wastes are not directly beneath the pavement structure shall be sloped to prevent ponding of water, covered with topsoil, and seeded as soon after placement as is practical, or covered with a minimum of 6 inches of gravel or stone.

(iii) The use shall not exceed 1,000 cubic yards per acre that is covered by concrete or asphalt, unless the director has approved an alternate volume, on a case-

by-case basis, that considers the conditions of the site and would be protective of public health, safety, welfare, and the environment.

(iv) Paper mill waste shall not be placed within 5 feet of the seasonal high groundwater table.

(j) Confined fill, commercial or industrial building subbase, paved lot base or subbase, paved roadway base or subbase, tank, vault, or tunnel or mine abandonment, transportation facility embankment, or other similar uses approved by the director. Paper mill waste used according to this subrule shall comply with the following:

(i) Paper mill waste shall not be placed within 5 feet of the seasonally high groundwater table.

(ii) The maximum amount of a paper mill waste used for any project is less than 5,000 cubic yards, unless the director has approved an alternate volume, on a case-by-case basis, that considers the conditions of the site and would be protective of public health, safety, welfare, and the environment..

(iii) The project for which the paper mill waste is used shall be completed within 2 years or less, unless an alternate timeframe has been approved by the director, in writing, on a case-by-case basis, that considers the conditions of the site and would be protective of public health, safety, welfare, and the environment..

(k) Granular materials when used for unconfined fill used for a surface material that does not exceed a 6-inch thickness and applied more than 250 dry tons per acre, or used for utility trench pipe bedding and backfill applied less than 0.5 dry tons per linear foot of trench.

(l) Cold-weather road abrasive applied to highways, municipal and rural roads at a rate not to exceed 0.5 dry tons per lane mile.

(4) A person storing paper mill waste at the site of generation or at the site of reuse shall not store it at a site of generation or reuse in a manner constituting speculative accumulation. The generator shall maintain written records to demonstrate compliance with this requirement at the site of generation.

(5) Land application of paper mill waste shall comply with the following:

(a) Paper mill waste that contains free liquids shall not be applied to the ground if it is frozen or covered with snow unless otherwise approved by the director.

(b) Paper mill waste that contains free liquids shall not be surface applied to a slope that exceeds 6% or injected into a slope that exceeds a 12% grade unless otherwise approved by the director.

(c) Except where specifically applied to increase the water retention capacity of porous soils or to serve as a soil stabilization agent, a paper mill waste shall not be applied to the land in a manner that adversely restricts soil permeability or causes ponding, pooling, or runoff in the area.

(d) Paper mill waste shall not be applied to a site known to be previously used for the land application of a biosolid, septage, waste, or wastewater from any business unless approved by the director.

(e) The following isolation distances shall be maintained for land application of paper mill wastes:

	Application methodology	
	Distance in feet	
	Surface	Subsurface
Municipal water supply	1,000	1,000
Domestic wells	50	50
Homes and commercial buildings	50	25
Public roads and property lines	25	0
Surface water	150	50

(f) Paper mill waste shall not be land applied unless the seasonally high groundwater table is at least 30 inches below the surface of the soil at the time of application unless otherwise approved by the director.

(g) Paper mill waste shall be applied to soils in a uniform manner to ensure accurate and even distribution.

(h) The generator of a paper mill waste shall provide to each person using the paper mill waste an information sheet that details all applicable requirements related to land application of the paper mill waste.

727937_1.DOC

R 299.4115 Criteria for designating inert materials appropriate for general reuse.

Rule 115. (1) A person may petition the director to designate a solid waste as an inert material that is appropriate for general reuse.

(2) The director shall approve a petition that is submitted under this if the petition demonstrates both of the following:

(a) The material will not be used in a manner that causes nuisance conditions.

(b) The concentration of each hazardous substance in the material is below any criteria in Part 201 for a relevant pathway.

(i) ~~The inhalation and ingestion pathway~~ is not a relevant pathway, if the petition demonstrates, to the Director's satisfaction that the waste is not of a respirable or ingestible particle size.

(ii) In order to evaluate the chronic aquatic toxicity pathway for any non bioaccumulative chemical, the permittee shall use a default mixing value of 5 in translating any leachate result into open water concentration.

(iii) The most recent aquatic toxicity values developed under rule 57 and Part 4 of NREPA shall be used in indentifying the Part 201 aquatic toxicity values.

(iv) Petitions for inert designations of coal ashes shall not have to evaluate iron, manganese or aluminum because these minerals have been demonstrated to readily absorb onto soils surrounding coal ash sites. The Director may waive evaluations of these minerals for other wastes if the applicant can make similar demonstration through case studies or peer reviewed literature.

(v) The total concentration referred to above shall only be the recoverable amount determined by utilizing SWES-846 methods employing aquaregia for dissolution of mineral matrixes. Other dissolution techniques shall be used for other matrixes, such as hydrocarbon matrixes, as specified by the SWES methods. Recoverable substances do not include substances bound within glassy matrixes, alumina- silicate matrices or otherwise requiring, hydrofluoric acids, peroxides, heat or pressure to effectuate a complete dissolution. The purpose for determining the recoverable amount is to estimate the quantity of substances that may be able to dissolve in the environment, including extreme natural environments, but not substances that will only dissolve in extreme laboratory environments.

*Part 31
Rules*