



Part 115 Inert and Composting Rules

Department of Environmental Quality

Waste and Hazardous Material Division

3/16/09



**Part 115, Solid Waste Management,
of the Natural Resource and Environmental
Protection Act, 1994 PA 451, as amended**



Welcome and Introductions

- Opening Remarks (George Bruchmann, Chief, WHMD).
- Who was invited (handout).
- Who else should be invited.
- Today's Agenda:
 - Overview of the proposed rule amendments
 - Overview of rules promulgation process
 - Decide on approach
 - Decide on future meetings



Inert/Compost Rules (1997-2005)

- 1997 – Governors regulatory reform instructs various divisions to review their rules.
- 1998/1999 – Rules for inert and composting developed by workgroup.
- 4/2001 – 8/2001 – Workgroup meets five times in attempt to develop compost rules.
- 1/1/2003 – 11/2004 – Workgroup meets six times and develops a consensus package.



Inert/Compost Rules (2005-2009)

- 2006 - DEQ goes to the EAC to discuss guidance on land application of wastes: issues May 2007 (Handout).
- PA 212 of 2007 established yard clippings management options: including composting requirements.
- 2008 – Draft compost and inert rules are shared internally and with Michigan Department of Agriculture and the Michigan Department of Transportation.



Significant Proposed Revisions

- Changing the inert criteria (the Type B criteria from the old Act 307) to be consistent with the Part 201 residential cleanup criteria.
- Amending the low-hazard criteria to reflect the Part 201 criteria.
- Adding wastes to the list of low-hazard waste to make it easier to reuse these materials in an environmentally sound manner.
- Adding new rules to address the self-implementing beneficial reuse of many industrial wastes.
- Adding requirements for the composting of organic wastes.
- Adding a rule related to regulation of dredge material.



Inert Criteria

- Raise the inert criteria from a 1 in a million to in 100,000 risk-based level (less stringent for most parameters under current Type B criteria)
- Consistent with EAC recommendations, the Hazardous Waste program, and the Groundwater program.
- Can use statewide default, site specific, or the generic Residential Criteria under Part 201 (which ever is higher).
- Can deviate from the Part 201 Residential risk-based levels under site specific circumstances; attempt to strike the right balance between controls and risk.



Low-Hazard Wastes

- Criteria for low-hazard wastes increases.
- List of low-hazard waste is increased.
 - Scrap wood
 - Street cleanings
 - Asphalt shingles
 - Some foundry sands
 - Drywall
 - Copper stamp sands



Self-Implementing Beneficial Use

- What wastes are included.
- Levels of contaminants.
- Uses.
- Conditions placed on use.



Industrial By-Product

- Coal ash.
- Biomass ash.
- Wood ash.
- Combinations of coal of the ashes listed above.
- Flue gas desulfurization sludge.
- Cement kiln dust.
- Lime kiln dust.
- Paper mill wastes.
- Foundry sands from ferrous and aluminum foundries .
- Other waste approved by the Director.



Categories

- Category 1 - any non-hazardous industrial by-product.
- Category 2 - industrial by-products that meet the low-hazard criteria.
- Category 3 - industrial by-products that meet the inert criteria.
- Category 4 - industrial by-products that meet background or 25% of the inert standard.



Uses of Industrial By-Products

Category 1

- As a raw material for manufacturing a product.
- As an agent for physical or chemical stabilization, or solidification or other treatment of solid waste.
- Burned as fuel in a boiler, industrial furnace, or power plant.
- Used for leachate system collection protection layer, gas collection layer at licensed landfills.
- Used for daily cover at licensed landfills.



Uses of Industrial By-Products

Category 2

- Any uses listed above.
- Used to produce a product that is bonded by lime, cement, or asphalt.
- Land applied for beneficial use.
- A soil stabilization material or pavement stabilization material.
- Confined fill used for base course, sub-base or sub-grade fill for the construction of portland cement concrete or asphaltic concrete paved lots, driveways, roads, and highways that consists of granular materials.



Uses of Industrial By-Products

Category 3

- Any uses listed above.
- Land application at an agronomic rate provided such rate is less than 30 dry tons per acre per year.
- 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.
- 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.
- Cold-weather road abrasive applied to highways, municipal and rural roads.



Uses of Industrial By-Products

Category 4

- Any uses listed above.
- Unrestricted fill.
- Land application.



Condition on Use

Category 1

- The industrial by-products 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 the public, health, or the environment.
- Must be used at the site of remediation, at a landfill licensed under Part 111 or 115, or at the site of waste generation, prior to disposing the waste into a licensed landfill.
- Must be burned in a plant which is permitted under Part 55 of the act, to burn the waste as fuel.



Condition on Use

Category 2

- The rate is less than 20 dry tons per acre per year, if the industrial by-product is incorporated into the soil.
- Shall not exceed 15% weight (by dry mass) of the stabilized soil or pavement and may extend into the unpaved road shoulder but no more than 5 feet.
- The placement of the by-product may not extend more than 5 feet beyond the paved area unless required for structural integrity at the determination of a registered professional engineer and the use shall not exceed 1,000 cubic yards per acre that is covered by concrete or asphalt.



Condition on Use

Category 3

- The rate is less than 30 dry tons per acre per year, if the industrial by-product is incorporated into the soil.
- The Industrial by-product shall not be placed within 4 feet of the groundwater table, the maximum amount used for any project is less than 5,000 cubic yards and the project shall be completed within 2 years or less.
- 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.
- The rate not to exceed 0.5 dry tons per lane mile.



Condition on Use

Category 4

- The maximum amount of an industrial by-product used for any project is 10,000 cubic yards and is completed within 5 years.
- Land application at an agronomic rate or at a rate proven to be beneficial to crop production or to improve soil quality.



Composting of Organic Materials

Summary of current requirements:

Yard clippings must be managed according to section 21 of Part 115 Solid Waste Regulations:

- registration, location requirements, monitoring, reporting.

“Source separated material” as defined in Part 115 (324.11506(6)) and other material exempt from the definition of solid waste do not have any substantial requirements for composting:

- No permit, No license, No notification, No location restrictions.

Other compostable material that is not exempt from the definition of solid waste must obtain a solid waste processing license or petition to exempt the material from the definition of solid waste. (Rule 118)



Composting of Organic Materials

Some of the reasons why stakeholders have proposed amending the current rules?

- Bring requirements for composting items like food waste up to a similar level of regulation as yard clippings so that potential environmental impacts from composting facilities will be minimized.
- Provide a starting point for local units of government to regulate composting activities in their communities.
- Provide guidance from state regulations regarding acceptable practices for composting organic material.
- Provide an understandable framework for obtaining approval to compost materials currently defined as solid waste.



Composting of Organic Materials

Summary of proposed changes:

- Composting is divided into three categories:
 - Yard clippings
 - “Class 1”
 - “Class 2”
- Compost use is divided into two categories:
 - General use
 - Restricted use



Composting of Organic Materials

Issues that will be address in the rules:

- | | |
|--|---|
| <ul style="list-style-type: none">• Notification• Registration/application• Registration fee• Location restrictions• Compost use restrictions• Violations of NREPA• Volume limitation• Nuisance• Local zoning• Speculative accumulation• Foreign matter in incoming material | <ul style="list-style-type: none">• Foreign matter in finished compost• Bags• Water management• Waste removed from compost• C:N ratio• Control of vectors• Records• Testing• Compost plan requirements• Anaerobic• Farm compost and use• Classification• Labeling |
|--|---|



Composting of Organic Materials

On-Farm composting:

- Part 115 currently requires yard clippings compost facilities to register with the DEQ if the farm accepts a tipping fee for accepting more than 5000 cubic yards or if the farm is not managing an on-farm waste stream.
- Currently, there are no Part 115 restrictions on farms accepting food waste, paper, wood, aquatic plants, or other compostable material not defined as solid waste. The proposed rules would transfer the same requirements for composting class 1 compostable material at a farm. **Rule 121a(5)**



Composting of Organic Materials

Composting location restrictions:

- Part 115 currently requires all yard clippings compost facilities to compost at least 50 feet from a property line, 200 feet from a residence, and 100 feet from surface water.
- Currently, there are no Part 115 location restrictions for composting facilities accepting food waste, paper, wood, aquatic plants, or other compostable material not defined as solid waste. The proposed rules would add location restrictions for class 1 compostable material.
- Class 2 composting facility locations are proposed to be approved on a case-by-case basis.



Composting of Organic Materials

Proposed language addressing:

Water management issues

- Run-off from the class 1 or class 2 composting facility that does not contact compost or compostable materials shall be managed as required by the storm water requirements of part 31.
- Storm water that contacts compost or compostable materials or compost leachate shall be managed as process water and may only be discharged from the composting facility according to a NPDES permit.
- Either a groundwater discharge permit shall be obtained from the department or the composting shall occur on an impermeable liner in accordance with R 299.4130. **Rule 121c(3)d,e,&f**



Dredge Materials

- Putting into rule our current process.
- Does not encompass dredge material from federal navigation projects that are disposed in confined disposal facilities or used for beach nourishment.
- Small projects not located in areas of concern are exempt from testing requirements.



Rules Promulgation Process

- 8/08 – Request for rule making approved by the State Office of Administrative Hearings and Rules.
- 3/09 to 5/09 – work group develops rules.
- 5/09 – draft of rules due to SOAHR.
- 8/09 – Regulatory impact statement due.
- 10/09 – Public hearing.
- 1/10 – Rules to Joint Committee on Administrative Rules (JCAR).
- 3/10 – Rules adopted.



Outcome of Rules Process

- Consensus on issues when possible.
- Capture pros and cons.
- Identify impact and consequences.
- Recognize DEQ management has ultimate decision.
- Stakeholder support – letters of support?



Approach?

- Go through rules in numeric order.
- Organize around themes or issues:
 - Inert criteria/ liability/ low-hazard/ by-products.
 - Self Implementing Beneficial use.
 - Compost.
 - Other.



Future Meetings

- April 1, 2009 – 9:30 to 3
- April 17, 2009 – 9:30 to 3
- May 6, 2009 – 9:30 to 3
- May 22, 2009 – 9:30 to 3
- Others



Contact Information

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