Introduction

The Solid Waste and Sustainability Advisory Panel (SWSAP) evaluated Michigan's solid waste laws to determine whether any changes would help to promote the state's solid waste and sustainability goals. Before making any recommendations to the Department of Environmental Quality (DEQ), the SWSAP is seeking public input on the draft proposals developed during its review process.

Proposals

The following proposals should guide the development and analysis of legislation to amend Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Materials Management Planning (formerly Solid Waste Management Planning)

Every county or region needs a plan to manage the wastes or materials it generates. County and regional planning must evolve as Michigan relies less on disposal and moves toward a broader materials management scheme to support the state's Solid Waste Policy and the Governor's goal of doubling Michigan's recycling rate. We need to focus on materials management rather than solid waste management. The materials management planning provisions under Part 115 should be amended to promote recycling and waste utilization, and to clarify and improve requirements as follows:

- The Materials Management Plan (MMP) should contain goals for utilization of managed materials and develop a framework to demonstrate progress towards the achievement of these goals consistent with or exceeding the state's Solid Waste Policy.
- MMPs should not incorporate import/export authorizations; however, origins of waste should be tracked and reported in tons to the planning agency to ensure that the planning agency can effectively plan for its managed materials.
- The MMP should not drive disposal capacity. (e.g., 66 months disposal capacity triggers the siting process).
- A MMP should contain a siting process with a minimum set of criteria and a process whereby facilities can be developed. Further, the facility must demonstrate that it has met all of the required Part 115 rules and regulations; and has an approval from the Host Community (i.e. Resolution, HCA, etc.).

- To the extent practicable, every County/Region should identify all managed materials and provide all current available management options (landfill disposal, recycling, composting, incineration, waste to energy, anaerobic digesters, other waste transfer and processing facilities, etc.).
- Waste utilization facilities should report to a system that is available to the State of Michigan/County/Region (Planning Agency) the origin of managed materials in tons so the planning agencies can effectively plan for the management of these items. The DEQ should provide a reporting mechanism to collect and reflect the data provided on an annual basis by discard and by-product categories, consistent with Part 175.
- Counties or regional planning agencies should review their Plans every 5 years, similar to the master plan process, and amend the plan as needed.
 - When the Michigan Solid Waste Policy is significantly changed, the DEQ Director will initiate a plan update.
 - Each county should contact its neighboring counties regarding the feasibility of doing a regional plan and provide documentation indicating the outcome of that contact.
- Intermediate deadlines and default mechanisms are needed in the process (see flow chart in <u>Appendix A</u>).
- Promote regional Plans and incentivize counties to work together.

For additional detail, please see the materials management planning concepts in Appendix A.

Authorizations

The management of solid waste must be authorized under Part 115. Current provisions include construction permits and operating licenses for the transfer, processing, and disposal of solid waste, registrations, and exemptions, with or without written approval and conditions. The authorization provisions under Part 115 should be amended to promote recycling and waste utilization, clarify and improve requirements, and eliminate unnecessary regulations, as follows:

- A general permit concept should be established for certain waste utilization activities: yard clippings composting; materials recovery facilities; and exempt transfer facilities. This should include minimal location, design, construction, and operating standards.
- A Type II landfill should be allowed to solidify industrial waste sludges onsite in containment and not require a separate construction permit and operating license for processing if the activity is described in the operations plan.
- Part 115 should accommodate the need to research, demonstrate, and develop new and innovative technologies or practices (pyrolysis, gasification, plasma arc, landfill reclamation, processing reclaimed materials, etc.). This may require special provisions in county solid waste management plans and minimum standards for protection of public health and the environment to enable the DEQ to authorize these projects, through permits, licenses, or other mechanisms.
- The dual permitting system of a construction permit and operating license should be evaluated for whether a single permit system would add administrative efficiencies and maintain the protections under the current system.
- The exemption that landfills have from needing a separate construction permit and operating license for processing when removing recyclable materials should also be extended to licensed (and general permitted) transfer facilities if they have the activity described in their operations plan.

Composting

Organics are the largest volume of material currently being landfilled across the U.S. Michigan banned yard waste from disposal in municipal solid waste landfills in 1994 and required composting facilities to register with the DEQ beginning in 2008. Minimal oversight of these operations has led to issues (e.g., nuisance odors) that make it difficult to site new compost facilities. The compost provisions under Part 115 should be amended to promote recycling and waste utilization and clarify and improve requirements as follows:

• The DEQ's oversight of yard clippings composting facilities should be reinforced with general permits, routine inspections, and enhanced site plan, operating, and training requirements.

- Any farm should be able to accept yard clippings that are land applied or composted and land applied according to the Generally Accepted Agricultural Management Practices that are developed under the Right to Farm regulations.
- Generator/hauler responsibility the statute must be clear that a person shall not deliver yard clippings to a site that is not registered.

For additional detail, please see the compost facility concepts in <u>Appendix B</u>.

Financial Assurance

Licensed disposal area operators provide financial assurance to ensure that the DEQ and taxpayers do not have to pay to cleanup, close, or provide for postclosure monitoring and maintenance of sites if the operator fails to do so. The amount of financial assurance required under Part 115 is not always adequate. The financial assurance provisions under Part 115 should be amended to promote recycling and waste utilization and clarify and improve requirements as follows:

- Financial assurance should be sufficient for the DEQ to contract with a third party to properly close and maintain a facility. While all potential costs may not be predictable, those that can be reasonably anticipated should be covered.
- Owners and operators of compost of general-permitted facilities should provide financial assurance, at least as much as owners and operators of licensed processing facilities must provide.
- To help ensure more accurate deposits, perpetual care fund increases should be based on the quantity of waste disposed as measured in tons rather than cubic yards. This will eliminate the need to use conversion factors (weight/volume) for various waste types and eliminate the need to consider compaction of the waste.
- The landfill perpetual care funds (trust or escrow account or PCF bond) should remain with the landfill after completion of postclosure, rather than being disbursed to the owner.
- The state's perpetual care account should be available for general permitted facilities as well.

• The state's perpetual care account should receive more funding than the current operating license application fees generate (approximately \$130,000 annually). This can be done with increased application fees, additional funding sources, or a combination of them.

For additional detail, please see the financial assurance concepts in <u>Appendix C</u>.

Postclosure

Owners and operators of landfills maintain them for at least 30 years after closure. There are concerns over what obligations should continue after that 30 year maintenance period is done. The postclosure provisions under Part 115 should be amended to clarify and improve requirements as follows:

- DEQ should have the ability to reduce or extend the postclosure care period based upon objective criteria.
- Part 115 should include due care obligations for owners of landfills that have completed postclosure.
- The DEQ should maintain an on-line registry of closed landfills.

Electric Utility Coal Combustion Residuals

The U.S. Environmental Protection Agency recently promulgated regulations for the storage and disposal of coal ash. Those federal self-implementing regulations overlap with many of the existing provisions under Part 115. The coal ash provisions under Part 115 should be amended to clarify and improve requirements as follows:

• Part 115 should be amended to be consistent with the federal limitations on the use of CCR as fill.

TENORM

A panel advised the DEQ in 2014-2015 on the disposal of Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM). Their <u>white paper</u> contains several recommendations that could be integrated into Part 115. The disposal provisions under Part 115 should be amended to clarify and improve requirements as follows:

• Part 115 should be clarified for what TENORM can be disposed in Type II landfills.

Funding

Resources are necessary to administer the Solid Waste Program. The funding provisions under Part 115 should be amended to promote recycling and waste utilization and clarify and improve requirements as follows:

 The DEQ and local governments should be provided with the funding necessary to implement the recommended materials management planning process and additional oversight provisions for municipal and commercial solid waste utilization activities and to support education and outreach.

Compliance and Enforcement

Regulatory oversight of solid waste disposal areas is essential to ensuring that the activities are protective of human health and the environment and that a level playing field is maintained among the providers of solid waste disposal services. The compliance and enforcement provisions under Part 115 should be amended to promote recycling and waste utilization, clarify and improve requirements, and eliminate unnecessary regulations as follows:

- The DEQ should be able to prioritize its routine inspections of sites based on risk and compliance history.
 - A site should be inspected to verify compliance prior to the issuance of a construction permit, operating license, or general permit, and then at least annually thereafter.
 - Quarterly inspections of licensed landfills should continue.
- The DEQ should have the ability to enter a site and conduct activities to prevent an imminent and substantial threat to the public or environment when an owner/operator has failed to do so and the DEQ has provided notice and opportunity for hearing. The DEQ currently has the right to access licensed facilities for inspections, and the ability to claim financial assurance monies to correct violations of closure, postclosure, and corrective action. However, because Part 115 is silent on the issue, the DEQ has historically sought permission from the site owner/operator or a court to conduct the activities for which the financial assurance was provided.

The DEQ should have the right to enter sites to determine compliance with Part 115, and when access is denied, the DEQ can currently obtain an inspection warrant for probable cause. Under Section 11516(3), the issuance of an operating license empowers the DEQ to enter a site to determine compliance at any reasonable time, regardless of whether there is probable cause. The DEQ should be similarly empowered to enter a site that obtains a general permit or other written authorization under Part 115 to manage a solid waste. This provision should not apply to inert materials and other materials that are otherwise exempt under Section 11506(1) from the definition of solid waste (e.g., listed site or source separated materials, diverted waste, beneficial use by-products, etc.).

Solid Waste Policy

Michigan adopted an updated <u>Solid Waste Policy</u> in 2007.

- 1. The Michigan Solid Waste Policy should be reviewed and updated as needed every 5 years.
- 2. Part 115 should support innovative policies and practices at the local level that promote the state's solid waste policy.

Appendix A- MMP Concepts

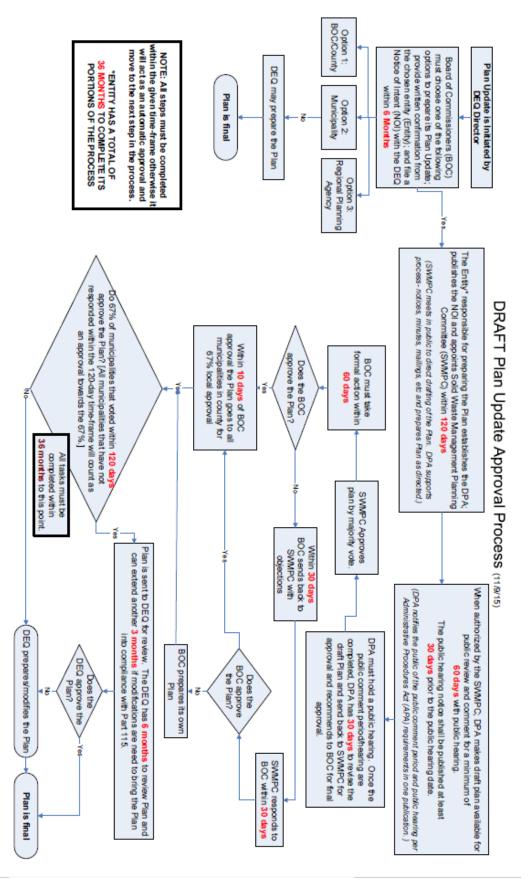
The following concepts were developed to support the principles for improving materials management planning. While they may not be the only considerations, they should be recognized when drafting amendments to Part 115.

- 1. A County may enact flow-controls to publically owned facilities only
- 2. A landfill expansion shall be deemed consistent with the MMP if the following items have been achieved: the facility has met all of the required Part 115 rules and regulations; and has an approval from the Host Community (i.e. Resolution, HCA, etc.)
- 3. A MMP shall contain a provision and an enforceable mechanism if a flow-control ordinance is enacted (i.e. hauler licenses, etc.). A county may enact an ordinance to direct flow to a publically owned facility that is operated by a private entity (Public/Private Partnerships). A county may enact an ordinance that restricts or limits imports to a publically owned facility within their county/region to protect their disposal capacity. Each county within a region may enact an ordinance to direct flow to a regional authority public owned facility.
- 4. Siting (Non-capacity driven). A MMP that contains a siting process shall contain a criterion that requires prior approval by the Host Community as part of the siting process (resolution, host community agreement, etc.). An approval shall not be unreasonably withheld or denied.
- 5. Capacity. To the extent practicable each MMP shall identify and demonstrate that the capacity for the managed materials meets the planning area's need.
- 6. Goals/Objectives. The MMP shall not be approved by the DEQ Director unless it identifies the resources (capacity, staff, education and outreach, etc.) needed for implementing the waste utilization goals.
- 7. Goals/Objectives. The State shall define how goals are measured and the MMP shall identify inputs for the calculations; utilizing the guidance tools provided by DEQ.
- 8. MMPs shall identify a responsible party for monitoring and implementing the MMP and provide any reporting to the DEQ if required.
- 9. No MMP shall designate a new landfill site.
- 10. No MMP shall designate a new municipal solid waste incinerator.

- 11. Ordinance. Retain the ability for counties to enact local ordinances (flow-control, etc.) under Part 115.
- 12. Siting (Capacity Driven). The MMP shall not mandate the siting of any type of facility.
- Siting (Non-capacity driven). All disposal areas and municipal and commercial waste (MCW) utilization facilities that are permitted through a site specific or general permit shall be consistent with the MMP.
- 14. Siting (Non-capacity driven). All facilities sited shall be consistent with the framework established for achieving the County/Region's waste utilization goals.
- 15. Siting (Non-capacity driven). Any facility that requires a permit shall be consistent with the MMP.
- 16. Siting (Non-capacity driven). The department shall conduct an independent review of the MMP to ensure that the proposed facility complies and is consistent with the MMP; and shall have the final say on consistency with the Plan.
- 17. Siting (Non-capacity driven). The MMP shall determine which types of facilities should be sited and/or developed to properly direct its managed materials.
- 18. Siting of captive Type III landfills shall be deemed automatically consistent with the MMP, so long as they are associated with an onsite industrial facility. NOTES: This requirement will not over-rule local zoning because the facility would have to meet local zoning prior to being built. And this principal would not give a captive facility that ability to develop a landfill site off-site without being consistent with the MMP.
- 19. The MMP shall include objective standards that enable the county to determine if expansions are consistent with the MMP.
- 20. The MMP shall not prohibit the development of waste utilization facilities and activities.
- 21. The MMP shall promote the development of waste utilization facilities and activities.
- 22. Each County or Planning Region must at a minimum have a meeting with other county planning agency contacts that are a part of its wasteshed (an area of the state that shares a common solid waste disposal system) or counties where its materials are managed (recycling, composting, , incineration, waste to energy, anaerobic digesters, other waste transfer and processing facilities, etc.

- 23. The MMPs should not be construed to establish a right to develop a disposal area beyond what is authorized in a permit or license.
- 24. A MMP shall contain an "Adjacent Community Process" whereby each adjacent community within a 2 mile radius of a proposed landfill expansion must: 1) be notified of the proposed facility and given the opportunity to provide comments and concerns related to the expansion or development of the facility; 2) to the extent practicable each concern shall be considered by the facility and the MMP; and 3) documentation demonstrating this process shall be included as part of the siting and development process. A MMP shall contain a similar process for processing and transfer facilities and waste utilization facilities for each community within a 1 mile radius.

Back to Materials Management Planning



Appendix B- Compost Concepts

The following concepts were developed to support the principles for improving compost facility oversight. While they may not be the only considerations, they should be recognized when drafting amendments to Part 115.

- Large sites should provide bonding for closure and any money spent on enforcement by the DEQ, townships, or other groups that may be impacted by the facility. Sites that are owned and operated by local government should be exempt from the bonding requirement.
- The DEQ should maintain a list of medium sized compost sites and review design, operation, and marketing plans for compost sites and perform a yearly site inspection of all registered sites prior to renewing the registration. An initial inspection must be done prior to a new site registration being issued.
- 3. A site design plan should be submitted to the DEQ to review and approve prior to a site being registered. Requirements would address isolation distances, pad design, water management, site access control, berms/fencing, signage, equipment, and material flow.
- Existing facilities should comply with new requirements within 1 year of enactment. Existing facilities may ask the DEQ to approve alternate isolation distances but design and operating requirements must apply to both existing and new facilities.
- 5. Sufficient funding should be provided to support 4 FTE for compost oversight. Funding could come from: registration fees; general fund; inspection fees; surcharge based on volume of material delivered to the site each year; surcharge based on volume on site at the end of each year.
- 6. A general permit should be required of facilities that exceed a certain volume and/or material type threshold. General permits should be annual rather than every three years. Additional requirements for large sites would include proof of consistency with local zoning and special use permits, site design plan, operation plan, bonding, and marketing plan. The DEQ must have the right to deny a registration for a site that is found to be in violation.
- Local government control commercial composting (i.e. non-farms) facilities must comply with local zoning requirements; local zoning should not be preempted by the county or state for siting a composting facility.
- Material type agree with the concept that many states and the US Composting Council (USCC) propose of different regulations based on the volume and type of material

Appendix B- Compost Concepts

handled and the size. Different regulations may be appropriate for the following: Leaves only; Grass, leaves, and brush; Grass, leaves, brush, food waste, slaughter waste, natural farm mortality, and food processing waste; All other organic materials not listed above.

- 9. Operation criteria an operations plan should be submitted to the DEQ for review and approval prior to a site being registered for any site over 1,000 cubic yards or organic material, other than just leaves. The plan should include; volume limits, height limits, staff training, debagging requirement, storm water management, leafate management, speculative accumulation, record keeping, testing of finished product, and final closure plan.
- 10. Quality of end product the end product must be tested and meet the quality requirements from the US Composting Council or other appropriate organization approved by the DEQ.
- Training owners/operators/appropriate site staff must receive proper training based on the amount and type of material handled. This might include: "Composting 101"; Advanced composting ; Trouble shooting; Developing markets
- 12. A tiered matrix approach to regulation of compost facilities should be established consistent with state or national recognized guidelines.
- 13. Larger volumes can be accepted at farms that have developed a nutrient management plan under a Concentrated Animal Feeding Operation permit, under the Michigan Agriculture Environmental Assurance Program, or by a certified crop advisor.

Back to Composting

The following concepts were developed to support the principles for improving financial assurance provisions. While they may not be the only considerations, they should be recognized when drafting amendments to Part 115.

- 1. Transfer facility and processing plant standard amount should increase from \$4,000 to \$20,000.
- 2. Type II landfill:
 - a. Either add a new itemized cost to account for minimal operating costs (utilities, onsite staff, equipment, security, site maintenance, etc.) or increase current itemized costs.
 - b. Add a new itemized cost to operate and maintain LDF gas management system.
 - c. Increase leachate management costs for pumping and hauling leachate to a realistic amount. Given the expected reduction in leachate generation over time, a pre- and postclosure estimate for leachate management should be considered as well. Increase would be a multiplier of 5 to 8 over current estimates, depending.
- 3. Type III landfill:
 - a. Change from current standard amount of \$20,000 per acre, \$1 M maximum, to calculating as Type II landfills under Section 11523a.
 - b. Enable Type III to use financial test, and to add the value of the PCF to the amount of the bond when demonstrating the total amount of financial assurance required.
- 4. Do not limit the use of the financial test to 70% of the financial assurance amount if the criteria under Part 111 are satisfied, and if the owner or operator provides the new, higher amount of financial assurance.
- 5. Phase in the increased financial assurance requirements. Transfer facilities and processing plants provide the new amount upon renewal of the operating license but not sooner than two years from the effective date of amendatory act. Landfills provide the new amount upon renewal of the operating license but not sooner than five years from the effective date of the amendatory act.

6. A pooled trust fund similar to how public schools share liability should be considered as a financial assurance mechanism.

Back to Financial Assurance

The following represent areas where not changes are recommended under Part 115.

Authorizations

- Opportunities for public input on permitted facilities, beginning with the county plan, are fine.
- The 10% disposal threshold for determining whether an activity requires a construction permit and operating license for processing is fine.
- The construction permit and operating license application processes are fine.
- The five year operating license period is fine.

Certified Local Agencies

The ability to certify a local agency (e.g., county health department) should be retained, and Part 115 should not limit local government from administering a solid waste program consistent with Part 115.

Compliance & Enforcement

- The abilities of the state and local governments and citizens to seek relief under Part 115 are appropriate.
- The fines and penalties under Part 115 are appropriate given the DEQ's application of them using its penalty matrix that weighs duration and severity and history of noncompliance.

<u>Compost</u>

Prohibit the disposal of yard clippings in licensed landfills unless they are diseased/infested, screening rejects, or in the case of an emergency.

Electric Utility Coal Combustion Residuals

Michigan should not amend its state solid waste management plan or Part 115 and its rules to adopt the new federal coal combustion residuals regulations. Regulation of Coal Combustion Residuals (CCR) in Michigan under Part 115 under current system is fine.

Liquid Waste/Industrial Waste Sludges

Industrial waste sludges should remain subject to regulation under both Parts 115 and 121, with current exemptions for beneficial uses.

Materials Management Planning

The DEQ Director shall continue to be the final decision maker on a County Plan to ensure that all County Plans meet state requirements.

Appendix D- No Changes