

MNCC's suggestions regarding the ALJ's comments

July 28, 2014

**#189 & 210 (pgs. 49 54) Small Compost sites**

The ALJ found MPCA language defective for the following reasons:

- It refers to only “some” of the obligations that will be imposed on small compost sites
- It does not describe the obligations in a sufficiently specific manner to enable the members of the public to fully understand the scope of these requirements
- It doesn't explain why small compost sites should be exempt from air pollution rules and soil contamination requirements
- Need to “correct the defects” in Subp. 99a, D, which included:
  - Not be located in floodplain, shoreland or wetland
  - Include reference to small sites obligation to comply with air pollution rules
  - Minimize soil contamination that were in the rule as originally proposed,
  - Site relevant statutory or rule provisions at the end of Item D.

The ALJ's solution was to revert back to language published 1-6-2014. That language incorporated a number of citations to different parts of the solid waste rule. The MNCC did not object to the requirements referred to in the original language, but stated that this group of composters are not required to have state permit and are not use to being regulated. As a result the MNCC suggested that the most common sense approach would be to incorporate the solid waste rule language being sited directly into the Small Compost site definition. The language below, with changes recommended by the ALJ in yellow, was the language changes suggested by the MNCC to incorporate all of the sections of the solid waste rule sited in the original definition:

Subp. 99a. **Small Compost site.** “Small compost site” means community gardens, urban farms, apartment buildings, town homes, schools, commercial offices, small businesses and non-profits where a member of which is an owner, occupant or lessee of the property that:

A. ~~is used to~~ compost:

- (1) food scraps;
- (2) yard waste;
- (3) poultry litter generated on site only if the compost produced in used on site;
- (4) non-recyclable paper; or
- (5) compostable materials meeting ASTM D6400 or ASTM D6868, ~~incorporated by reference under part 7035.0605;~~and
- (6) incidental amounts of fats, oils, grease meat, dairy and animal manures; and
- (7) other materials as approved by the local unit of government

B. does not accept large quantities of fats, oils, grease, meat, dairy, and animal manure,

C. does not accept diapers, sanitary products, household or industrial hazardous waste, sewage wastes, septic tank pumpings, infectious waste, used motor oil and filters, or radioactive waste;

D. does not exceed 100 cubic yards on site at any one time, including collected raw materials and compost being processed, but excluding carbon materials and finished compost;

E. is where the materials under item A are managed to minimize odor, prevent groundwater and surface water contamination, minimize air pollutant hazardous to health and the environment, minimize contamination of soil and the creation of nuisances and public health risks; and

F. is not located in a floodplain, shoreland, or wetland.

G. A municipality may adopt a regulation that allows source-separated organic materials, as defined in part 7035.0300, subp. 105a, in addition to those materials defined in part 7035.0300, subp. 99a.

By implementing the above changes the Agency places all of the requirements for the Small Compost site in one location and creates a one-stop-shop situation. In addition, the proposed item L in 7035.2525 could be eliminated.

A second issue is the original language for small compost sites stated:

(3) poultry litter generated on site only if the compost produced is used on site;

With the advent of cities allowing the raising of chickens in a residential setting, a need was created to manage those materials in a manner safe for public health and the environment. While urban farmers may raise chickens and generate bedding/manure, there is a quantity of bedding/manure that is not generated by urban farmers, but by single family dwellings. The language above would prevent urban farmers from accepting that material and forcing residential chicken growers to dispose of the bedding/manure in their municipal garbage, or illegally compost it in their backyard compost bins.

It is the position of the MNCC that this does not serve to protect the public health or the environment and that the quantities of bedding/manure would be small enough to be safely handled by small compost sites. The MNCC makes the following suggestion:

(3) poultry litter generated on site or in residential chicken operations maybe composted if the compost produced is used on site;

Finally, if the issue is that small compost site operators do not have to undergo training, that language could be added to require training. Originally that language was proposed by staff, but deleted by legal staff. The reason for deleting the training language was that the Agency was not permitting these types of facilities so could not enforce the training provision. However, the January 12014, definition of small compost site includes references to numerous sections of the solid waste rule that, based on the previous legal staff's opinion, cannot be enforced. Yet they are in the proposed rule. This is an inconsistency that is hard to understand. How can some requirement be enforced and not others when all requirements are for a facility not permitted by the state?

Recommendations: The MNCC recommends the change stated above.

### **#200 (pg 52) Definition of "Vector" or "Vector Intrusion"**

The ALJ ruled the compost rule is defective because a "reasonable" expectation has not been set for what "vector" or "Vector intrusion" constitutes. She suggested that the sewage sludge rule definition for vector be used as a guide.

Recommendations: The MNCC reviewed that language and puts forward the following suggestion for a definition for vector and vector intrusion:

- Vector = birds, rodents, insects or other organisms capable of transporting infectious agents.
- Vector intrusion = invasion of vectors

**#204 (pg 523-ALJ rpt., pg 31 of SONAR) MNDOT Transportation Manual incorporated by reference**

The ALJ commented that the reference to MNDOT's Transportation Manual being incorporated by reference in 7035.2836, subp. 9(b) should instead be incorporated into 7035.0605. The MNCC has no objection to this, but wonders why the same manual is not referenced when describing a "hard-packed, all weather surface" on page 27 of the SONAR. The SONAE description is:

"An example of a soil surface that minimizes infiltration would be 12 inches thick and have a 100% by weight passing through a 1" sieve and a minimum of 15% by weight passing through #200 sieve. The soils should be compacted within 5% of the optimum moisture content and reach an in-place" unit weight of 140 pounds per cubic foot.

In conversations with the MPCA staff, it is the MNCC's understanding that with the exception of a depth of 12" (the MNDOT Transportation manual states 24") this description comes from the MNDOT Transportation manual and is the specifications for a gravel road using a Class I gravel. However, there is confusion regarding this specification as previous discussions were that a Class V gravel would be acceptable as a hard pack, drivable surface.

Clarity around this issue is necessary as those proposing to construct a compost facility need to clearly understand what will be considered a "hard packed, all weather surface" could be considered an impermeable surface.

Further, both the AET and EOR reports (attachment 1 and 2), point out that Minnesota and many other states consider a gravel road constructed with Class V gravel an impermeable surface. Indeed, MPCA storm water staff considered a Class V gravelly road an impermeable surface. This is yet another double standard.

Recommendations: Perhaps the compromise is to reinstate the three soil types and require that a "hard packed, drivable surface" under the tipping/mixing and processing areas need to meet MNDOT Class V gravel road specifications.

**#212 (pg 55) Establish a process within the rule to provide for review of municipal ordinances by the "Commissioner"**

This item was discussed above under #189 and 210, so the discussion here will focus on Agency review of municipal ordinances for allowing small sites to accept materials other than those specified by the definition for small sites:

7035.2525, subp. 2 Exceptions

L. small compost sites must only comply with parts 7035.2535, sub part 1, items A to E and 7035.2525, subparts 1 and 2, items A and B. A municipality may adopt a regulation that allows source-separated organic materials, as defined in part 7035.0300, subp. 105a. in addition to those materials defined in part 7035.0300, subp. 99a *after review by the commissioner of those additional materials and review of the provision for control of potential impacts associated with those additional materials.*

Recommendations: The MNCC believes that 7035.2525, subp 2 L, should be deleted entirely for the reasons stated in #189 and 210 and because it does not believe it is necessary for the MPCA to review local ordinances the following reasons:

- Local governments regulate all manner of activities. This activity is a very small expansion of the backyard provisions. Those facilities have been successfully regulated by local government for many years.
- This requirement creates a barrier to diverting SSO materials.
- If the concern is that these types of facility operators are not trained, then added that to the requirements.

#### **#216 (pg 56-57) 5" water table issue**

Recommendation: The State of MN has a certification process to certified soil scientist, therefore the MNCC believes the only professional having the training and qualifications to make determinations on soil types and the 5" depth to water table is a soil scientist.

#### **#236 (pg. 63) compost pile saturation - free flowing water**

The assertion that there is a hydraulic head that builds up under a compost windrow was made by Barr Engineering and accepted by MPCA staff, has no basis in fact. In fact this assertion flies in the face of all research done on the compost process. The Barr Engineering professional admitted to having no knowledge of the operations of a compost facility and his presentation seemed to be based more on the operations of a landfill. Landfills are essentially built as a bowl with a leachate collection system at the bottom to siphon off water that accumulates at the bottom of the landfill. Landfills actually do build up a hydraulic head.

Compost facilities, on the other hand operate on a gently sloped flat surface that is designed to drain contact water or storm water to a treatment system. Professor Halbach, who has over 25 years of experience working with compost facility design and operations submitted a letter (see attachment 3) that has been disregarded over the information submitted by Barr Engineering. It is difficult to understand how the information submitted by someone who admits to having no knowledge of composting can be given preference over a professional who has over 25 years of experience in the field.

The MNCC does not want to even suggest that there are not some issues with ponding on a compost pad. That would be misleading and untrue. Ponding does occur as a result of rutting from heavy equipment operating on the compost site. This mainly occurs in the Spring when the surface of the pad begins to melt but the subsurface is still frozen, allowing water to remain on the pad and soften the top 6-8 inches. It can also occur in periods of extended precipitation when the top 3-4 inches of the pads surface is softened and rutting occurs. However, permit conditions require the operators to maintain the flat surface, so any damage to the compost surface must be repaired as soon as possible to restore the flat operating surface, maintaining drainage to the treatment systems and preventing infiltration through the pad and into sub soils.

The MPCA staff failed to show any data to substantiate its support of the claim that a hydraulic head builds up under compost windrows and instead basis it decision on the presentation of one person who admits to having no experience in composting and was hired by a landfill industry group. Staff chose to

ignore the 25 years of professional experience by a University Professor, years of research on compost facility operations and the experience of many industry professionals, most of whom do not own compost facilities and actually are regulators at the county level.

**#237 (pg. 64) more weight give to Liner Study**

Grant #3 had two phases. Phase I was similar to the two previous grants and added to the body of information collected during those two grants. Phase II was completely different from the first two grants and Phase I of the third grant. There is no other study like Phase II and the data set from Phase II is very small resulting in ad sample size that is not a statistically valid. All scientific studies have strengths and weaknesses and Phase II had at least as many, maybe more, negatives than the two previous grants and Phase I. The Phase II study data used so heavily to justify the changes to the rule was, and still is, preliminary and should not have been used to make changes to the rule until all of the data had undergone QA/QC and the strength and weaknesses were fully assessed.

MPCA staff has not presented any antidotal or real data that shows that there are problems with ground water contamination at any Minnesota compost sites or, for that matter, any others sites in the US. There is absolutely no justification for the changes to the rule that has eliminated the 3 soil types resulting in the elimination of over 90% of the state from consideration for a “hard packed, drivable surface” (see AET report, attachment 1). This one change has negated any progress that the proposed rule would have made and regulations will continue to be a barrier to the growth of the industry and the recycling of SSOM.

Recommendations: Agency staff needs to provide real data on problems that have occurred with ground water contamination at Minnesota or US compost sites to substantiate the changes to the compost rule.

**#248-254 (pg. 67-69) residual definition-“free of rejects”**

The MNCC has consistently objected to the rule language that treats residuals the same as rejects. While the MNCC appreciates the efforts on the part of the Agency to clarify the languages, the MNCC believes that there are still serious defects in the language.

In addition, the ALJ also stated that further clarification was needed.

The MNCC believes that clarification is need to clearly identify rejects from the tipping are versus rejects from the compostable materials that are screened after the materials has reached PFRP and the maturity standard specified in the rule. Rejects from the tipping/mixing area could contain any of the raw materials suggested in the definition of rejects, 7035.0300, subp 92a. Specifically, 7035.0300, subp 92a, items C and D.

However, feed stocks that have gone through the PFRP and meet the maturity standard allowing it to be moved to the curing area does not have most of the materials referenced in 7035.0300, subp 92a, items C and D. Specifically, the only materials that would remain would be bits of plastic, glass and metal. The majority of the material would be woody wastes and rocks. Based on actual operations, the MNCC recommendation is:

Recommendation: The MNCC again restates it request that water generated in the curing and finished compost areas be consider storm water if the facility can meet the following criteria:

- Rejects (defined as plastic, glass, metal) are less than 3% by dry weight,
- That naturally occurring materials, such as woody waste and rocks, not be considered a reject, and
- That the facility's operations plan define the procedure to be used to demonstrate it meets the 3% by dry weight standard.

If the material tested fails to meet the qualification above it must be stored on a pad.

**#255-257 (pg. 69 & 70) issue with SSO management plan**

The ALJ recommended that the Agency clarify the language in the proposed rule "...to clarify its expectations regarding the waste analysis plan". The MNCC believes that the ALJ is correct in instructing the Agency to add clarifying language regarding the waste analysis plan. A number of scenarios could trigger the requirement for testing, or not, of feed stock. The following are a few examples:

Scenario 1: A compost facility is permitted under the SSOM regulations and has a management plan that identifies specific generator types (residential, commercial generators of SSOM and yard waste). The facility would like to take a new industrial waste generator that does not fit under the SSOM acceptable material, regardless the material would need to be tested because it is a new material.

Scenario 2: A compost facility is permitted under the SSOM regulations and has a management plan that identifies specific generator types (residential, commercial generators of SSOM and yard waste). The facility would like to take a new industrial waste generator that fits under the SSOM acceptable material, regardless the material would need to be tested because it is a new material.

Scenario 3: A compost facility is permitted under the SSOM regulations and has a management plan that identifies specific generator types (residential, commercial generators of SSOM and yard waste). Regardless of these requirements testing would be required as each new residential or commercial generator is added to the haulers route.

It is the understanding of the MNCC that Scenario 1 is what the provision was intended to cover. However, because of the lack of specificity in the rule or SONAR, the MNCC is concerned that scenario 2 and 3 could also result in testing, even though the feed stocks are not new, only the generator is new.

The MNCC believes that as long as the feed stock meets the definition of SSOM materials and the management plan specifies the generator types, testing should not be required.

Further, it should be pointed out that many compost facility operators test the incoming feed stocks for NPK and moisture content to assure the best C:N and moisture content is achieved for the compost process. They do not typically test for metals, pesticides, PCB's, PFC or other constituents that have been part of the testing protocol for the most recent Carver grant.

Recommendation: The experience from the Carver grant has raised concern that a broader array of constituents would be required to be tested. These are very expensive tests and would increase the barriers to composting SSOM. The MNCC believes that the Agency needs to specify the parameter that may be required to be tested.