Attendees:
Paige Wilson – PSU Graduate Student
Kim Scamman P.E. – Blue Farm LLC
Tara Albert (TMA) – NHDES Solid Waste
Mike Nork (MAN) – NHDES Solid Waste
Pamela Hoyt-Denison (PHD) – NHDES Solid Waste
Felicia Morrisette – RMI
Ian Grimes – RMI Intern/PSU Undergrad

Via Phone:
Jessica Saturly Hall – Upper Valley Compost Co.
Matt Smith – UNH

MAN -- Overview of last month's meeting in which the group began to look at the composting facility operating requirements contained in the summary documents previously prepared by NHDES. Discussed how we discovered that some items in the current operating requirements section were more relevant to finished quality standards than actual day-to-day facility operations. Moreover, some operating requirements are actually in design requirements and vice versa.

Goal for today – continue review of operating requirements, then start on design requirements (one area that may need attention is **pad design** – the rules are currently vague/silent on pad requirements).

Down the road we can tackle other questions:

- finished compost quality specs (to what degree does the state want to regulate the product? Other agencies may already be involved with regulating finished compost – porbably start talking about this at June meeting of this workgroup)
- Should state of NH adopt some sort of stated policy/goal relating to composting of food waste?
    - Diversion goal? Infrastructure development goal (e.g. XX number of facilities by 2025)?

The below notes follow the group's review of the "Composting Facility Operating Requirements" summary document (see page 5 – 'Recordkeeping,' where the group left off after 3/30 meeting)

Operating Requirements

Recordkeeping

- Current structure of recordkeeping requirements are tied to the compost classes (Class AA or Class A), but that will change if we alter/do away with compost classes
    - Can make the whole structure of the rules more direct if requirements follow from the nature of the feedstocks being managed rather than a desired end-product specification

2b – needs to be more general. E.g. 'sampling/testing log as required depending on feedstocks managed'

- Operator needs to keep a sampling log, as necessary. Depending on the type of composting. Somewhere in the operating requirements…needs to be by feedstock type or facility type. There needs to be a statement on the quality of the compost in order to remit a final product (QA/QC)

3 – Daily temperature log…does this really need to be done?

- Kim suggests to strike the word daily.
- Jessica suggests that daily temperature is good, but more for the operator…it shows where you are in the process.
- Regulations need operator to show that PFRP requirements have been met. – need a record to show time/temp has been achieved

3 viii. – strike calibration data for the temperature device

side conversation regarding temperature and QA/QC measuremtns.

- Should we reference to 40CFR Part 503, or spell it out? ***check out processing/treatment requirements on page 3 of summary document.
- Mike and Felicia suggest using language from 503's verbatim.

4. – Why do we care about bypass waste? Do we need to require people keep track of how much waste is captured and removed prior to processing?

- Pam suggests that all P/T facilities need to determine how much bypass waste they have at the facility. Gross quantities of waste.
- At a small composting facility it will be negligible. This requirement may need to be scaled based on size/nature of the facility.
- Flag this requirement for removal?
- Where did this requirement come from? Probably a universal requirement for all solid waste facilities (Env-Sw 1100?)

5. – non-compostables and residuals
   - This tracks the same as the prior.
   - Be mindful of leachate is currently considered a residual waste
   - Agricultural sector – storm water, contact water and leachate
   - Leachate is low flow but high strength, precipitation runoff is high flow but usually low strength
   - Leachate should be minimal if wastes are managed quickly after receipt and compost process is well-managed.

6. locations to which compost is distributed – strike this
7. maintain records at facility….
   - 7f – strike this, or create carve out for certain types of facilities
   - 7d – use of word "destination" in reference to wastes received by a composting facility is probably not appropriate (destination would seem to imply final disposal site, i.e. landfill)

<u>Reporting</u>

1. Report results of laboratory analysis on a quarterly basis.
   - Facility should maintain this information on file and submit to NHDES only on request
   - What types of laboratory analyses are necessary?
   - Discuss this further during quality specs conversation (June 1 meeting?). What types of tests, when necessary and how often?
   - Probably dependent on the feedstocks - driving different tests
2. Facility should retain copies of lab reports but only submit them to the State of New Hampshire as requested
3. & 4. – incidents should have a time frame included (i.e. report incidents w/ in X amount of time).
   - Fielding complaints. This covers both the operators, the state as well as the complainant.

5. Annual Facility Report – look at the current AFR form and make updates to include relevant fields for composting operations.
   - Scalable, should not apply to permit exempt facilities (perhaps also general permit facilities?)

<u>Operator Qualifications/Facility Staffing</u>

- Customize this. Operators should show/prove technical ability but training does not necessarily need to be through the NHDES Solid Waste Operator Training (SWOT) program as currently required by Env-Sw 1600.
- Scalable…need to look at the tier-system. Staff qualifications need to be expressed in the rules.
- Vermont model – state & NRCS host training classes once a year for land-spreading of manure – 5 hrs class followed by an exam
- Paige Wilson has offered to compile a list of composting training already available.

Financial Assurance

- Statute requires that the permittee be responsible to close the facility
- Scalable – would be more applicable to larger facilities that pose greater financial risk should they need to close. As a general rule the facility should be financially responsible for its own closure.

Design Requirements *(See "Composting Facility Design Requirements" summary document)*

General Design Requirements

- No comments

Design Features and Appurtenances

- Very general features, only required if the operation would warrant it. Please read through (b) before teasing through (a)
- Applicability should be clarified only for permitted facilities?

General Waste Handling and Storage Area Design Requirements

- (f) – concern putrescible waste is potential nutrient leaching….need to include a qualifying statement that wastes must be actively managed.
- Possibly eliminate it all together. – we don't lose anything.
- No one in the group expressed any other concerns.

Additional Design Requirements for Handling and Storage Areas for Waste and Materials

- The four bullets at the top should be clarified. Product stored at the facility…is it being actively managed.
- These requirements are geared towards stockpiles at the facility… relevant to active composting?

- These standards derive from Env-Sw 500, which refer to standards in Env-Sw 400 for transfer stations…not necessarily applicable to composting facility. Probably need to sever this tie between Env-Sw 600 (Composting) and Env-Sw 500/Env-Sw 400
- The design standards for composting facilities should address items relevant to composting
    - Dust, litter, Odors/Noise/Nuisances, Vectors, Groundwater/Surface water, Fire Hazards, Traffic
    - Probably best to keep rule requirements performance-based rather than overly prescriptive (specifics can be provided in a separate guidance document)

Pad Design

- Referenced on page 3 in item (b)(1). – underlain by an asphalt, concrete or packed soil surface. The rules do not adequately address pad design specific to composting
- Kim referenced NRCS Conservation Standard 313-CPS-1….page 7
- This document applies to waste storage facilities, "Stacking Facility" – temporary stack of material/stockpile
- At next meeting we will delve into more conversation about pad design

Storm water/Contact water Management

- Referenced indirectly on page 3 in item (g) – prevent surface or groundwater contamination "by means of a leachate collection system or *functionally equivalent control system.*" Wastewater also referenced on page 5, points to RSA 485-A
- Probably need more guidance on this

*Meeting adjourned **Left off on page 3***

Homework – come to next meeting prepared to discuss pad design considerations. May review the US Composting Council Model Rule Template to see how pad design is addressed. Also may look at NRCS Conservation Practice Standard # 313 – Waste Storage Facility. Things to keep in mind when reviewing:

    - When is a pad necessary?
    - What materials/construction methods are appropriate?
    - How does hydrogeology of a site factor into it?
- Homework - Kim to delve further into NRCS # 313, provide executive summary of highlights? Will share with group

- Homework – Research other pad design or general design resources that may be out there.

Side note: Learning Resources available for this workgroup –

- NRCS Website has a Technical Service Providers (TSP) Page which can be used to identify **USDA "Ag-Learn"** online modules that would be relevant to composting, facility design, etc. A lot of soils and hydrology training. Very technical.
- Also **NRCS conservation practice standard documents**, e.g. Code 590 (Nutrient Management), Code 313 (Waste Storage Facilities), code 317 (Composting Facility)
    - Kim Scammon to prepare a brief bulleted list of major highlights in these NRCS resources