Draft Notes: Composting Stakeholder Workgroup Meeting
March 30, 2018
Scribes: Todd Moore, Melanie Doiron & Tara Albert

Attendees:
Paige Wilson – PSU Graduate Student
Kim Scamman P.E. – Blue Farm LLC
Kristen Simard – Star Island Corp
Matt Smith - UNH
Bill Meagher – Loureiro Engineering
Tara Albert (TMA) – NHDES Solid Waste
Judy Houston – NHDES Water Division, WWEB - Residuals Management Section
Melanie Doiron – NHDES Solid Waste
Mark Richardson – Town of Hampton (formerly)
Mike Nork (MAN) – NHDES Solid Waste
Pamela Hoyt-Denison (PHD) – NHDES Solid Waste

Via Phone:
Deb Darby – Organix Solutions
Jessica Saturly Hall (joined on phone later) – Upper Valley Compost Co.

MAN intro: Purpose of meeting = discuss operating & design requirements. Start with operating because likely more discussion.
-noted MAN/PHD started outline of siting requirements based on setback requirements discussed a last meeting where siting requirements refer to landfill rules - "will be severed" (I liked this comment!)
PHD – example: initial review indicates setbacks should be for certain site features v.s. entire 'facility'
PHD – review of other state's (e.g., ME) rules enlightening. NH may have to make significant revisions to structure/content of siting requirements

Judy Houston: Noted any time sludge/septage included, operation would be subject to Env-Wq 800. Class A sludge has to meet specific standards, Class A does not need a site permit or facility permit. ~~Class B sludge includes facility permit w… (?) Water Div. rules are not necessarily changing any time soon~~ If Class B sludge used in composting, currently requires a Sludge Facility Permit, as well as a SWMB facility permit. We'll have to deal with this internally. The Sludge Management Rules were just updated in 2016, so will not be able to change them anytime soon.

Matt Smith – create a regulatory flow chart for composting, with both solid waste and sludge/septage requirements – would help simplify understanding the process/decision tree

MAN: Put sludge issues in a 'parking lot' for now. Overall Goals: Base requirements on accepted science and/or established industry practices to address food waste composting in NH. Using other states programs/models as guide. Need to first establish BMP's that would apply universally, then we can talk more specifically about permit frameworks.
Noted that rule structure will include cross-references to other chapters of solid waste rules (but guidance document to follow that will lay out all requirements in one place)

PHD – suggested focusing on general requirements 1st. NHDES will then figure out how to incorporate into the rules.
PHD – noted (based on last meeting), NHDES will sever tie to landfill siting rules.

START DISCUSSION
MAN: Noted current operating requirements are driven by compost classes. Thinks should be based off initial feedstocks instead. Matt Smith agrees. Noted that basing requirements on feedstock was also discussed at previous meetings.
TMA noted could tailor requirements based on feedstock.

All agree: base operating and design requirements on feedstock.

PHD: Are there 'universal' operating requirements for composting that apply regardless of methodology?

PHD noted universal operating requirements such as control dust, litter, etc.
TAM: performance requirement. General = fexible, but requires interpretation/plans
flexible
Matt Smith: BMP's can help.

Judy: agrees operating plan should be required. Unsure whether should conform to Env-Sw 1105.11 relative to need for certified operator (discussion of training/certification to follow at later time)

Matt: Does leachate include condensate?
PHD: rules don't specifically address condensate add "condensate" to leachate definition, and regulate condensate separately from stormwater runoff (NRCS def)

Matt: some processes create significant condensate (esp. systems w/ forced aeration). Condensate different than leachate but still may contain nutrients (nitrogen) that would need to be managed. In some cases can be used as a wetting agent and incorporated into the active system. Leachate is usually minimal volume, however condensate could be 1,000s of gallons

Bill M & Kim S: Noted difference between leachate (low flow, high strength) and 'contact water' (high flow, low strength). E.g., pile w/no precipitation = low amounts high nutrient load leachate. During precip event, high amount of low nutrient load 'contact water'. Typical design = contact water (stormwater) treated with vegetative treatment area. Leachate managed differently. E.g., leachate to a tank, contact stormwater bypasses to vegetative swale.

Materials likely to generate leachate if stockpiled without incorporating bulking agents – animal manures, silage, fish gurry, possibly food waste stockpiles

Action Item= Kim S. to look @ NRCS standards to see if there are leachate/contact water requirements that can be used as reference

(Jessica Saturly Hall joined on phone)

Summary of 'leachate' discussion:
Leachate
Contact Water
Condensate
Non-contact stormwater
All different. Different levels of management appropriate.

Compost Classes:
MAN suggest scrapping existing compost classes. Base requirements on feedstock. Use USCC model rules: feedstock drives design, operating, and product testing and end use

Kristen Simard: Should requirements also be based on end use?

Jessica Saturly-Hall: Does/should NHDES get involved in end-use?
PHD: OK with operating requirements, but notes NHDES should still be involved in end use if there is potential health or environmental impacts.

Matt Smith: could keep classes, but have it in the 'marketing' section of the rules.

Judy: Thinks compost class should drive operating requirements. (I don't recall saying this.)

Jessica: noted that testing compost can be expensive. Noted, relative to feedstock, can produce poor quality compost.

Kim Scammon noted: finished product evaluation will have to consider agricultural use

PHD: noted NHDES may not follow compost into market, but that will have to be based on confidence that we do not have to. E.g., if compost with litter/glass is spread, NHDES will get complaints.
Back to operating requirements…..

Management of Incoming Waste:
Matt Smith: #4. Doesn't think that the receiving facility should have to know where to take/how to manage 'other' waste. PHD noted purpose was to prevent people from not being allowed to drop it off, then driving down the road and dumping it. PHD believes requirement not that hard, and facilities should be able to give some direction. Doesn't believe that it would be a big problem.
Judy H. noted could be guidance.

Jessica S-H: List of prohibited wastes long, complex.
PHD: Noted base requirements that apply to all.
Discussion re: liquid waste as prohibited waste:
- NHDES recognizes that blanket prohibition on liquid waste may not be appropriate for composting.

MAN: Noted may also need to look at 'bulky waste" relative to stumps and only untreated wood which could be used as bulking agent if put through a grinder – common for commercial composters that accept yard waste to have a grinding operation on site
Kim Scammon: maybe base acceptability based on 'organic' materials. E.g., can take vegetable oil, what about dairy or brewery liquid waste? All liquid waste must be managed w/appropriate controls. need to further define which are acceptable to compost.

TMA: does infectious waste include infected animal corpses?
Kim Scammon: noted farms of certain size need emergency outbreak animal mortality procedures.
Kim Scammon: suggest looking at NY solid waste regulations. Maybe composting/A-D regulations. NY also trying to blend CAFO & solid waste regulations. Look there for examples: some of these issues may be addressed.

PHD noted also: sludge/septage is on the list of prohibited wastes (& possible disconnects with wastewater engineering rules?) small compost operation PbN allows septage & sludge
Infectious waste: Should recognize/allow use of guidance for composting diseased animals.

Residual Wastes
General questions re: definitions
Matt: noted would be nice to have definition pop up in hover-over when reading document electronically.
Bill M.: Further explanation re: requirement to have 2 locations to dispose of waste. PHD: scalable requirement – may apply more to facilities dealing with larger volumes of waste
Mark R. Noted operating plans don't require two disposal options noted.
Judy: noted 'residuals' in ~~water~~ residuals management rules is different than 'residual waste' in SW rules which is from composting process

P/T Requirements
1) keep requirements from 40 CFR 503. Delete Class AA/A references.
2) MAN: Current rules for where/how to take temps (i.e. what depth) should be revised? Perhaps this is something better suited in a guidance doc. rather than stipulating in rule
3) Windrow methods
Discussion regarding technical operating/process requirements (time, temp, turning, etc.)
Kim Scamman: noted in USCC model rule "….requirements appropriate for method"
Jessica: language relatibe to turning windrow ("exterior to interior"). Not always required. Just need to make sure all solid waste exposed to composting conditions.
Suggestion: Reword "Assure all solid waste is exposed to composting conditions"

(TAM: did not bring this up at meeting: What is purpose of these requirements? Why does NHDES need to control?)

3) Aerated Static pile. Discussion re: different types, covers. Decided method/cover doesn't matter as long as reach time/time. for ASP, need insulating layer' need more details for this option - in guidance doc.?
Conclusion: rule requirement for 3 & 4 (aerated & enclosed) = 55degC for 3 days.
5) (measurement methods). Decision = delete 5a.-c.. They are 'such as' anyway.
6) Limit temperature measurement requirements to only that required for demonstrating requirement time/temp requirements.

Matt: No need to specify max temp (some facilities may choose to sanitize their process. But important to remember risk of spontaneous combustion if temp exceeds 160 F, at that point heating of pile can transition from a biological process to chemical)

where to take temperature - representative of composting activity - put specifics in guidance doc.

Note: P/T requirements do not currently include requirements relative to preventing fires.
Matt Smith: noted existing guidance by Bob Rynk – On Farm Composting Manual
Reference BMPs

MAN: Skip testing requirements for now.

Recordkeeping:
1) destination of compost. Necessary? Flag for discussion re: how far does NHDES follow compost into the market?
2) Source, description and quantity.

Jessica S-H: this requirement could be intense. For example, some facilities allow homeowners to drop off material. PHD - bulking agents received as 'product', not waste, so don't have to record these quantities.
PHD noted: MAN & PHD agree need to look at what is required – blanket term for source may be sufficient (e.g. residential, commercial, etc.)
Agreed: need to clarify.

TMA: noted re: quantity. NHDES would be more interested in 2.5 tons v.s. 2 buckets/lbs.
Jessica S-H: likes idea of scaling requirements based on amounts. Referenced table in Env-Sw 600 as an example.
General discussion re: scaling requirements based on scale of operation.

Discussion re: horse manure. PHD noted exempt by statute. Others noted issues with syringes, potential presence of persistent pesticides.

Meeting adjourned. Stopped discussion at "Recordkeeping" – left off at sampling log in (item 2b)

MAN: for next meeting, MAN/PHD hope to incorporate prior comments from siting requirements. Pick up where left off in recordkeeping at next meeting and also get to design requirements if possible.

Kim Scammon: has called NRCS re: basis for setbacks. Will forward information once she receives reply. Also will look into NRCS standards on leachate/contact water to see if there are requirements that can be used as reference