Draft Notes: Composting Stakeholder Workgroup Meeting
October 31, 2018 9 a.m.
Scribe: Tara Mae Albert, NHDES

Attendees:
Mike Nork (MAN), NHDES Solid Waste
Pam Hoyt-Denison (PHD), NHDES Solid Waste
Bill Meagher III (BILL), Louriero Engineering Assoc.
Sarah McGraw, NRRA
Chris Behling, EPA Region 1
Tara Albert, NHDES
Melanie Doiron, NHDES
Kim Scamman, Blue Farm, LLC
Judy Sears-Houston, NHDES Wastewater/Residuals
Paige Wilson, PSU Graduate Student
Matt Smith, UNH

Via Phone:
Marc Morgan (MM), Lebanon SW Facility

Introductions
MAN update:
- Goal to finish reviewing the Design Summary sheet today
- Hoping to have something tangible for this group to look at by Spring 2019
- Last meeting was in June of 2018 – discussed quality specifications and finished compost
  - Questions were raised that will help form the proposed amendments to the rules
- The goal for this session is to discuss the design requirements summary sheet for compost facilities.
  - Pad Design and Stormwater Requirements: need further discussion
  - Leachate vs. run off vs. run on

<u>PAD DESIGN/STORM WATER MGMT</u>:
Kim Scammon: Seepage, run off and uncontaminated run off are the concepts and terms in NRCS guidance.

MAN: We have some people here today who have looked into other states programs to see what they require for pad design and storm water management.

BILL: Prepared a matrix comparing pad design and stormwater requirements from other states' SW Regs – this will be placed in the folder for this meeting.

PHD: In NH, compost facilities are not one of the industry sectors governed by NPDES stormwater permits. Mostly delegated states have requirements but since NH is non-delegated

the state does not enforce NPDES Regulations; EPA takes ownership of the regulations and assures compliance.

MAN: Review the matrix for patterns.

BILL: One common pattern is designing for 25 year/24 hour storm events.

*** Opportunity for climate change, extreme weather events. Make sure the rules are written to include the most current data.

PHD: we need to snip the link between the 600 rules (for composting) and the 800 rules (for Landfills) regarding siting, site plans, etc. Should craft requirements specific to composting.

MM: concerned that we are talking too much about regulations. Concerned that smaller compost facilities may not be willing or able to follow high standards set for commercial scale facilities (complicated site plans, engineering expenses). Tiered structure would be appropriate. Have regulators even been to a composting facility?

MAN: we have discussed a tiered structure at past meetings; intention is to accommodate a wide variety of operations.

PHD: Reminder that purpose of this meeting is to review current rules to help guide amendments. The summary sheets distributed to the group are not a proposal, simply summary of current requirements relative to compost facilities. We recognize that updates are necessary. NHDES has invested effort into networking, increasing our knowledge-base, and working with outside parties in the interim to develop composting pilot projects to help inform revisions.

MAN: Update on composting pilots – NRRA & Town of Sunapee proposing to compost food waste including meat and dairy (requires a waiver). We have provided them guidance on submitting waiver request, currently awaiting submittal. Lewis Farm in Concord: Have talked to them about a waiver as well, no submittal as of yet.

PHD: NHDES is amenable between now and new rules to waiving existing rules to facilitate proposals for pilot projects that are well thought out.

<u>DESIGN SUMMARY DOCUMENT</u>

Page 3 in Summary Document – Additional Design Requirements for Handling and Storage Areas…

Start at item (g) at bottom of the page (left of here on 4/24/18)…Requirement for system to protect groundwater, management of liquid flows.

- Bill produced a matrix mentioned previously to help support discussion
- Paige has done some research as well, primarily in MA, ME, VT

The group needs to review the research in order to better address item (g).
The requirement for leachate collection system or functionally-equivalent control system – Kim: use of the word "leachate" may not be appropriate for most composting applications. Terminology from NRCS may be better suited.

Kim Scammon: Vegetative Treatment area may not work with true leachate; best thing to do is to mix it back into manure (or compost feedstocks) or send for treatment. Runoff from pad can go into veg. treatment strip or settlement device. Uncontaminated stormwater should be diverted around pad; goal is to minimize what needs to be collected/managed.

Judy: Guidance on "functionally-equivalent control system" can be referenced in a BMP. Rules can describe performance expectation, rather than detailed regulation with specificity. BMP guidance doc could also could discuss: setbacks, depth to groundwater, confining layers, using test pits, etc.

Kim Scammon: NRCS – Technical arm of USDA – provides standards/BMPs for Compost facility and Waste Storage design. See Chapter 10 of Agricultural Waste Management Field Handbook: Seepage & Runoff – frequently occur from manure stacks or other piles – are to be controlled to protect surface and ground water. Uncontaminated run off – from roof or other non-contact areas – should be rerouted.

Seepage – high-strength moisture from within decomposing waste. i.e. leachate
Runoff – heavy precipitation on piles will produce runoff; not as strong as leachate.

Paige – Attended VT Compost Technical Training back in October. Learned some good BMP's – e.g. "keep clean water clean."

Bill: value to the leachate. Reincorporate into a wetting process during mixing/pile formation. Capture and recirculate into composting process. This one system uses post-consumer waste, everything on a concrete pad…collected and then put back through the process.

PHD: Will have to keep in mind scalability relative to stormwater/moisture mgmt. Is there a commonly-accepted vocabulary for these issues that NH should consider?

BILL: Not really. Maybe NRCS

Judy: Refer to water regulations for setting water standards and keeping them as such. Not adding too much specificity.

Kim Scammon: looking at stockpile requirements. Is a compost pile a "stockpile?"

MAN: Stockpiling requirements in the rules are derived from requirements for transfer facilities (chapter 400), not tailored specifically to composting – more relevant to temporary storage of waste materials. Would argue that a compost pile is not a stockpile, is a processing system.

Kim: Stockpiling of Pre vs. Post materials. Probably should have different requirements for storage/stockpiling of initial feedstocks vs. finished compost.

MAN: agree

Sarah: Scale…have we determined what requirements apply to different size facilities? VT defines Small, Med. & Large facilities….and also need to discuss feedstocks for risk factors.

PHD: Agree. We need to determine our thresholds in NH – this group has previously discussed incorporating a tiered system into rules; we have not yet defined how that might look. Will likely entail core requirements for all facilities and specific requirements depending on the size/volume and feedstocks accepted.

Page 4 in Summary Document – Roads and Traffic Control
(a)-(g) NHDES Solid Waste Bureau does not control local and state roads. This purpose of (a) just looks at entrance points. Generally only applies if there it is a large scale facility that may require a stoplight, or left-turn lane (depending on local requirements). Also can be pointed to when addressing complaints and/or concerns. The other requirements here are common senses rules, intended to be one-size fits all.

Judy: NHDES residuals management does have rules relative to transport of sludge

Drainage
(a)-(c) Site drainage features… (a) references RSA 585-A:17, relative to alteration of terrain.
PHD: This is a requirement regardless. Can be repealed, however, it is not going to change requirements for applicant/facility owner.

MAN: This section needs to be more specific for composting given the discussions we have already put forth. Items (b) and (c) are very specific to interference with landfill closure systems, but there are probably other considerations that should be addressed.

Protection of Landfill Closure Systems

Reinforces (b) and (c) in drainage. Basically, don't design or operate a facility in any way that damages or disrupts effectiveness of landfill closure systems. Relevant if composting facility is proposed on a landfill cap.

Page 5 – Wastewater systems.
Wastewater disposal/treatment, references requirements in RSA 485-A. Intended as a one-size-fits-all rule. Most commonly used at landfills that direct-pipe their leachate.

Judy: This could come into play if the facility is piping untreated leachate to a POTW or to a stormwater drain. Otherwise it will not be an issue for the majority of facilities.

- ACTION ITEM: Will look into this requirement to make sure it covers every facility and also does not create unintended consequences or conflict with local requirements for wastewater transmission.

Equipment
PHD: Item (a) probably derived from the days when more waste incinerators were in use statewide (e.g. municipal sites, hospital autoclaves). Wanted to ensure the equipment was installed according to manufacturer's specs. 503s. State was just looking at developing rules for those. Rules hail from rules as far back as 1991 and 1997.

Discussion regarding labeling of containers by haulers or municipalities.

MAN: Item (b) is not specific to composting facilities, more applicable to waste haulers or owners of containers
Judy: Residuals management has similar requirement that haulers have specific identification.

Access control
(a)-(c) Universal Requirements – focused on unauthorized access/illegal dumping

MAN: Should be performance based. Numerous ways to restrict unauthorized access.

Sarah: Asked if it was different than Dept. of Ag. Regulations?

Kim: Said yes. Ag only requires if there is a pit or some safety hazard.

MAN: What if a farm was collecting source separated residential or commercial food waste? Would then essentially become a solid waste facility and subject to these requirements. Are such requirements appropriate at a farm?

PHD: This has come up in other permits. Usually comes up for situations with limited customer base. Willing to be flexible and use this as a case-by-case. … Common sense rule and control. Does not want it to become a midnight dumping place?

We need to review scalability of this requirement.

BREAK

Surrounding Properties
Mostly performance requirements for nuisance. Another universal requirement.

Design Plans and Specifications, content and Format
MAN: Another opportunity for scalability – When and to whom do these requirements apply?

PHD: We do need to look at this closely. Be clear, in its current form this rule is saying "when design plans are required as part of an application, then those plans will adhere to these requirements". When we determine the scalability for facilities these rules may or may not apply. The PE stamp is by state law and NHDES has a policy/fact sheet on how to apply this statute relative to professional services. We need to determine whether the design plan follows the 'practice of engineering' and if it does, then requires P.E.'s stamp. --- RSA 310-A practice of engineering relates to safeguarding life, health or property.

BILL: Suggests that (f) covers the smaller facilities. Provides an option for alternative plans

PHD: suggests that item (d) read "when required" instead of "as required" to clarify that not all situations involve the practice of engineering and may not require a P.E.'s stamp.

Kim: In NY, there was a manure pit that broke and released millions of gallons. In response NY developed a guidance list defining features/situations that involve the practice of engineering. Very helpful resource. Could be an opportunity for NH to develop more specific guidance on types of situations that require engineering.

PHD: Or perhaps at least provide more specificity about how these requirements apply to each "tier" of composting facility.

Kim: if a farm wants a funding from USDA for specific projects, required to have a nutrient management plan. Funding hinges on prerequisites, but if they comply, then cost of surveys and engineering may be covered.

*** Tara Albert possible education opportunity *** to bring in farmers and others with a representative from NRCS. We could facilitate applications for funding to help these facilities move forward on off-site food waste composting at their facilities/farms.

PHD: We need to really look at the rules and determine the applicability. Scalability is going to come in to play. Should revisit item (f) to add clarity about when alternative design plans might be acceptable.

END REVIEW OF SUMMARY DOCUMENT

MAN: Other thoughts, business, issues that need to be addressed?

JUDY: How will revised draft be compiled? Rewrite Env-Sw 600 completely?

PHD: Explains the rule writing process including required annotation to show what has been changed.

MAN: will likely start by writing up a "clean-slate" version of what we want Chapter 600 to look like, then go back and figure out what/how to annotate. Will also involve looking at other Chapters/sections of the rules to make sure appropriate revisions are made in those sections as they may relate to composting facilities (e.g. Chapters 1000, 1100, definitions, etc.).

Consider the following re Scalability:

- Feedstock
- Size: Throughput in volume or tonnage? Physical footprint?

Performance-based requirements as appropriate. Flexibility for smaller scale facilities.

Potential permit structure relative to a "tiered" system of facilities. Currently NH has 3 main permitting "BUCKETS." Will likely continue with this framework:

- Permit-Exempt
- Permit-by-Notification
- Standard Permit

- Possible 4th "bucket": General Permit – essentially a registration system, little or no reporting, training requirements. Currently being considered for other types of facilities and composting could be added.

Paige: Offered to look at other state permitting structures.

NHDES will work on identifying common situations/types of composting facilities that would fall within each "bucket." This framework will help us conceptualize the tier system and will guide revision of the rules (fit the structure of the rules around the facility categories identified).

PHD: All facilities are subject to rules in chapter 1000 (including permit-exempt facilities). Operating more than 90 days (i.e. long-term operations) subject to 1100. Then look at rules in chapters 400 through 800 depending on specific facility type. 400 is transfer stations. 500 is processing/treatment. 600 is specific to composting. 700 is incinerators. 800 is landfills. 900 is additional requirements that apply if the facility will handle specific types of waste (tires, asbestos, etc.)

300 relates to permit application content, processing and suspension/revocation procedures

Once rules are revised, goal is to develop a sister guidance document to help general populace with navigating requirements and BMPs. This project may involve input from a subgroup of this stakeholder workgroup.

NEXT STEPS

MAN will communicate via email with a status report in/around February. The status report may include:

- Suggested permitting framework (anticipated types of facilities and where they might fall into the 3 permit "buckets")
- Ambitious Goal: DRAFT "clean slate" revised rules (more likely to have this by mid-late Spring).

Once we have a draft revision, will circulate to group for feedback. Schedule a meeting when and if it would be productive.

Dismiss at 11:39.