COMPOST OPERATION STAKEHOLDER ADVISORY GROUP MEETING

DWM Building – Raleigh, NC
Oberlin Road

MEETING MINUTES

WENESDAY, AUGUST 25, 2010

In Attendance

James Pugh	DWQ - TACU	Brian Rosa	DPPEA
Joe Hack	Mecklenburg County	Michael Scott	DENR - DWM
David Goodrich	NCDWQ	Alan Hardison	NCACC
Craig Coker	NCCC/USCC	Liz Patterson	DENR - DWM
Billy Dunham	NC Dumper Group	Megan Mueller	NCDWM
Beth Buffington	DWQ - TACU	Jim Lanier	Earth Farms
Jennifer Jones	NCDWQ	Brian Rosa	DEAO
Scott Carpenter	NCWWA-WEA	Bethany Georgoulizs	DENR - DWQ
Stacey Smith	RSG, Consultants	Doug Lassiter	NC Septic Tank Ass.
Frank Franciosi	NCCC	Ken Pickle	DENR - DWQ
Jeryl Covington	NCSWANA.	David Halley	Facilitator
Steve Reid	DWQ - TACU	Jason Watkins	NCDENR - DWM
Steve Larson	Sun Gro Horticulture	Steve Cockman	McGill

12:30 PM **WELCOME: David Halley – Facilitator**

12:40 PM REVIEW OF LAST MEETING AND PREVIEW OF MEETING

The Steering committee – which includes Frank Franciosi, Ken Pickle, Scott Mouw, Bethany Georgoulias, Jon Risgaard and Michael Scott have continued to meet regularly to put together additional proposals for the group to look at. Five new proposals are being presented today (#12A, #13, #5, #14, and #17). They have been reviewed and approved by the Steering Committee. Today we will present these draft proposals. We will again discuss each and then try to reach consensus on approving each one. The definition of consensus is "it is not the position I started with, but one I can support".

The Monitoring Subcommittee – which includes Joe Hack (chairman), Frank Franciosi, Craig Coker, Jeryl Covington, Steve Larson, Bob Rubin, Ken Pickle, and Ryan Smith have also been meeting regularly to prepare and present their

proposal for monitoring parameters. They have completed their draft proposal and plan to share it with you today for feedback and approval.

1:00 PM REVIEW PROPOSALS

The following proposals were discussed and voted on (edits are contained in these minutes):

1. **Analytical Monitoring Requirements and Monitoring Matrix: #8**

2. **Revised Proposal for Notification Sites and Small Type 1's: #12A**

3. **Excluding Small Type 1 Facilities from Monitoring Requirements if Operating in accordance with 1400 Rules: #13**
4. **Off-Site Non-Discharge Process Waste Water Management Options that will be permitted: #5**
5. **Training and Certification of Operators: #17**

6. **DWQ will Develop a List of "Approved" Stormwater BMP's with the Target Completion Date of January 1, 2011: #14**
7. **General Permit Options for Small Type 2 and Small Type 3 Facilities: #18**

Consensus was reached on each one except for #5 Non-Discharge Process Wastewater Management Options and #17 Training and Certification of Operators. The rest were approved with some minor changes to original draft proposal.

We propose the following new component to the Compost Permitting Process:

Proposed New Component (#8 Analytical Monitoring Requirements for General Permits):

We propose the following new analytical monitoring requirements for general stormwater Permits:

This proposal assumes that most facilities will meet the requirement for a general stormwater Permit. Facilities still have the option for applying or may be required to apply for a site specific permit (individual stormwater permit).

Testing Parameters: The matrix (next page) provides "benchmarks for stormwater permit requirements.

Frequency: Initial monitoring shall be quarterly; frequency of monitoring may be decreased, based on one or a combination of the following:

- Four (4) consecutive quarterly monitoring events showing no exceedances of benchmark values
- Verifiable, documented implementation of a storm water pollution prevention plan
- Implementation of structural BMPs to minimize potential for off-site water quality impacts
- During the period of semi-annual monitoring any exceedances will revert back to quarterly monitoring schedule.
- The permittee petitions NCDENR for a lower frequency

The reduction in monitoring shall only be for the monitored constituents that are below bench mark value unless otherwise approved by NCDENR

Monitoring Committee Group Consensus: Yes

Notes:

- Considerations should be given to older existing facilities, it is understood that the Steering Committee is currently working on a proposal (Proposal #2) for older facilities. They are giving consideration to older facilities and giving them some time to comply with new monitoring parameters. ;
- As TDML's are imposed on a stream now or in future DWQ may issue an Individual Discharge Permit; a General Permit may be issued on a case by case basis.
- Certain benchmark values should be evaluated/determined based on both TMDL's in a particular watershed and feedstock characteristics in the compost operation
- Quarterly monitoring was proposed consistent with some existing stormwater permits;
- Considerations were given to Fecal Coliform versus E Coli in the monitoring. The Steering Committee supports keeping Fecal Coli form, but with note in proposal that if EPA supports its use later on, that the DWQ would support switching to E. Coli as a pathogen indicator. ;
- Type III facilities may accept manures in feedstock which may also trigger E Coli testing;.
- The Committee considered quantitative vs. qualitative monitoring as the primary means of monitoring, The Monitoring Committee supports the use of field parameter monitoring

devices like DO meter, pH meter, conductivity meter, and NTU meter for rapid response management tools, but feel these parameters should not replace the primary quantitative monitoring protocols such as analyses for BOD, COD, nutrients, metals, etc. The Monitoring Committee feels that a well run compost facility with a regular qualitative monitoring program is a good means of addressing issues of water quality. The Monitoring Committee suggests that field monitoring devices, along with visual cues (e.g., color, odor, etc.), be voluntary and introduced in future training to help Compost Facilities address issues and perform better housekeeping in a timelier manner

- Monitoring Committee recommends that the compost quantitative data be collected and analyzed to see if any conclusions or recommendations are warranted.
- Monitoring Committee recommends as information is collected and analyzed that DWQ and a Compost User Committee will report, review and analyze and compiled results and provide programmatic recommendations to the legislative committee responsible for 1100 legislation. Monitor effectiveness of new proposals.
- Monitoring Committee recommends that DWQ be clear on where monitoring compliance points are located. Should be a component of a training program.
- Benchmarks are not violations, they are triggers for action. Progressive steps to be taken for action needs to be defined.
- Revised benchmarks for Cu, Pb, and Zn are the result of the Classifications and Standards Unit's Triennial Review. They are proposed to be considered this fall so the Monitoring Committee feels that the more prudent course is to include them now in the recommendation to DWQ. If unanticipated snags occur in the finalization of the metals benchmarks, it is acknowledged that DWQ may be need to develop other values, or may be forced to stick with the current values.

Why we support this new component:

- Provides general layout to permittee of expectations during permitting and design;
- Balances monitoring requirements with facility types and feedstocks. ;
- It acknowledges nutrient sensitive watersheds or impaired water issues (TMDL);
- Provides a consistent mechanism for permit monitoring requirements.
- We have built in some flexibility
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Stakeholder Advisory Group Consensus for #8: Analytical Monitoring Requirements & Monitoring Matrix:

√ **This proposal was accepted by all stakeholders present. Minor edits to text.**

We propose the following new component to the Compost Permitting Process:

Proposed New Component (#12a: Notification Sites/Small Type 1's): REVISION FROM #12

Small Type 1 Facilities will no longer be required to notify the Solid Waste Section prior to operation and on an annual basis as to: (i) Facility location, (ii) Name, address and phone number of owner and operator, (iii) Type and amount of wastes received, (iv) Composting process to be used, and (v) Intended distribution of the finished product. The Small Type I facilities will not be required to have a DWM or DWQ permit for operation. The Solid Waste Section will propose to the Public Health Commission that the current rule ((15A NCAC 13B .1402(g)(3)) that requires these facilities to submit annual notifications be repealed ~~be repealed~~ allowing staff additional time for permitting and compliance activities for the major facility types. The Solid Waste Section proposes submitting a letter to all of the Small Type I facilities by April 15, 2011 outlining the requirements for these facilities. The letter will include the following information:

- The requirements of a Small Type I facility to include the operational requirements as set forth in Rule 15A NCAC 13B .1406 and setbacks listed in 15A NCAC 13B. 1404(a)(1)-(10).
- The facility operational area and capacity limitations - less than 2 acres for a facility footprint and must process or store less than 6,000 cubic yards of material per quarter.
- The potential for compliance action – Facilities will be inspected by DWM on a complaint basis. Facilities that exceed the operational or siting requirements will be subject to enforcement actions and may be required to obtain a Large Type I composting permit.
- The potential for DWQ involvement- DWQ may visit the site and determine if there is a water quality violation or threat to water quality that needs to be corrected by facility; and the facility may be subject to administrative penalties and permitting requirements.

Monitoring Committee Group Consensus: Yes

Notes:

- Small type I compost facilities are not required to have a solid waste permit under 15A NCAC 13B .1402(g)(3). These facilities are allowed to accept yard and garden waste, silvicultural waste, untreated and unpainted wood waste or any combination thereof.
- Facilities are currently required to notify the Solid Waste Section prior to operation and on an annual basis as to:

  - Facility location
  - Name, address and phone number or owner and operator
  - Type and amount of wastes received
  - Composting process to be used; and
  - Intended distribution of the finished product

- The facilities must also agree to operate in accordance with operational requirements as set forth in Rule 15A NCAC 13B .1406 and setbacks listed in 15A NCAC 13B .1404(a)(1)-(10).
- Siting requirements are:

- Outside of the 100 yr floodplain
- 50’ to property lines
- 200’ to residences
- 100’ to wells
- 50’ to perennial streams / rivers
- Located in accordance with 15A NCAC 2B .0200
- 25’ to swales or berms to allow adequate access for fire fighting equipment
- A site shall not cause a discharge of materials or fill materials into waters or wetlands of the state.
- A site shall not cause a discharge of pollutants into waters of the state that is in violation of the NPDES requirements
- A site shall not cause non-point source pollution of waters of the state that violates assigned water quality standards.

- A site shall meet the following groundwater requirements:

- A site shall not contravene groundwater standards as established under 15A NCAC 2L
- The depth to the seasonal high water table shall be maintained at a minimum of 12 inches

Why we support this new component:

- Small Type I facilities will be allowed to continue to operate without being subject to the permitting and fee requirements of large facilities.
- DWM will be able to focus on large facility types for compliance and permitting actions.
- DWQ supports this new component because currently existing rules will continue to be available to prohibit any discharge with the potential to cause or contribute to the violation of Water Quality Standards or to degrade existing uses. DWQ response on a complaint basis preserves DWQ’s ability to regulate where needed on a case-by-case basis.”
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Stakeholder Advisory Group Consensus for #12A: Revised Proposal for Notification Sites and Small Type 1 Facilities:

√ **This proposal was accepted by all stakeholders present. Minor edits to text.**

We propose the following new component to the Compost Permitting Process:

Proposed New Component (#13: Excluding Small Type 1 Facilities from Monitoring Requirements if operating in accordance with the 1400 rules):

We recommended that Small Type 1 Facilities that fall under the current category of notification sites and are not required to have a DWM or DWQ permit for operation be excluded from monitoring requirements.

The objectives of protecting public welfare and the environment can be accomplished without an individual permit or general stormwater permit because:

- Small Type 1 notification facilities are limited to an area of less than 2 acres and a total processing or storage quantity less than ~~of~~ 6,000 cubic yards per quarter.
- Given the nature of the composting feedstocks, the small footprint area, and the relatively small quantities of managed materials on-site, there is less potential for a significant runoff-induced pollution burden to arise from these small facilities, and less risk of violations of NC ambient water quality standards as a result of runoff from these sites.
- Siting requirements of a Small Type 1 notification facility should limit the potential for the site to discharge to the surface waters of the state.

Steering Committee Consensus: Yes

Notes:

- DWM will notify current Small Type 1 Facilities that these changes are applicable as long as they remain a Small Type 1 Facility. As soon as they exceed their facility parameters they would be required to comply with the next level of permitting procedures.
- DWQ and DWM will continue to respond to complaints regarding individual Small Type 1 Compost Facilities.
- Even though a DWM and DWQ permit may not be required the facility may still be subject to DWQ and DWM inspection.

Why we support this new component:

- Not permitting and/or inspecting Small Type 1 Facilities will conserve staff resources for higher environmental protection priorities.

Stakeholder Advisory Group Consensus for #13: *Excluding Small Type 1 Facilities from Monitoring Requirements if Operating in Accordance with 1400 Rules*:

√ **This proposal was accepted by all stakeholders present. Minor edits text.**

We propose the following new component to the Compost Permitting Process:

Proposed New Component (#5: Current off-site non-discharge process wastewater management options that will be permitted):

For facilities where the process water generated as part of the compost process cannot be contained and managed within the DWM permitted site, the water would be called process wastewater and the following are the current DWQ permitting alternatives available for the disposal or reuse of the wastewater via a non-discharge or land application system.

The only offsite permitted systems available now are:

- **Pump and Haul Systems under 15A NCAC 2T .0200**
  A Pump and Haul permit can be issued provided the facility has to have at least 24 hours worth of storage, based on up to a 25 year 24 hour storm event design, and must demonstrate that there is an agreement with a wastewater treatment facility to accept the waste. DWQ's regional offices issues and administer pump and haul permits.

- **Spray Irrigation Systems under 15A NCAC 2T .0500**
  These facilities spray or drip irrigate the wastewater onto approved areas or sites. There are a number of specified site investigation/permit application requirements for this disposal method that will likely result in minimum treatment requirements and specified limits for BOD, TSS, ammonia and fecal coliform.

- **High Rate Infiltration Systems under 15A NCAC 2T .0700**
  These facilities apply wastewater to approved areas at a rate exceeding 0.156 gpd/ft2 in Coastal Areas and at rates exceeding 1.5 gpd/ft2 in Non-Coastal Areas. This disposal method requires tertiary treatment and specified limits for BOD, TSS, ammonia, nitrate, and fecal coliform.

- **Reclaimed Water Systems under 15A NCAC 2T .0900**
  High-quality tertiary-treated wastewater that meets quality standards under .0906 is applied to approved areas, or furnished to distribution lines with certain restrictions on where and how it can be used. This disposal method has minimum treatment requirements and specified limits for BOD, TSS, ammonia, turbidity and fecal coliform.

Steering Committee Consensus: Yes

Notes:

- These options, with the exception of Pump and Haul Systems, will require treatment. The only exception is for Spray Irrigation Systems where it can be shown by calculation or modeling that groundwater impacts will not be realized at the Compliance Boundary of the facility.

- With the exception of Pump and Haul Systems, all industrial waste stream facilities that are to receive a Non-Discharge permit must undergo a hydrogeologic investigation as per .0504(e), .0704(e), and .0905(e). The hydrogeologic investigation and modeling must

support that application rates and effluent concentrations will not result in contravention of groundwater standards.

- Process water generated as part of the compost process that can be contained and managed within the DWM permitted site will not require a DWQ non-discharge permit, provided that DWM permit conditions include provisions on management of the process water to be protective of surface waters and groundwater quality. Management practices may include recycling of the process water back into the compost process.

- Stakeholders would like DWQ to investigate a possible rule change that would treat biosolid residuals not as wastewater (if they meet certain water quality standards) so that it could be spread offsite without expensive permitting procedures (hydrological studies). DWQ is currently pursuing this and other off-site discharge options. These other options will require approval and/or most likely a rule change to be acceptable. Support of this recommendation will have to be in the form of a separate proposal from the Stakeholders.

Why we support this new component:

- This component allows for the Department to regulate the compost process under a single permit issued by DWM, provided that the generated process water is managed on site. If the process water cannot be managed on site, then a DWQ permit is required for proper treatment and disposal of the wastewater.

- The non-discharge permitting options represent a number of choices that are alternatives to the traditional method of discharging to surface water. The type of Non-Discharge Permit that is best suited to a given facility will depend on the individual characteristics of the facility.

Stakeholder Advisory Group Consensus for ((#5: Non-discharge process wastewater management options that will be permitted:

√ **Unable to obtain consensus on this proposal. Stakeholders like the three new off-site options that Jon Risgaard had presented for consideration to his department head. Group liked Jon's efforts to create a more cost effective option for disposal of process wastewater offsite. These new options may require a rule change and/or approval by the DWQ. The group asked Steering Committee to draft a letter encouraging timely review of Jon's recommendations. The group would also like Steering Committee to redraft this proposal in support of these new options.**

Proposed New Component (#14: DWQ will develop a list of "approved" Stormwater BMP's with the target completion date of January 1, 2011.):

This new component would provide a list of traditional and non-traditional stormwater Best Management Practices (BMP's) that could be used for Large Type 1, Type 2, Type 3, Type 4, and DWQ Residual Compost facilities.

Steering Committee Consensus: Yes

Notes:

- DWQ will utilize the CH2M Hill Study document as a resource.
- Explain the risk to human health and the environment.
- Provides a list of potential constituents found in process water by feedstock processed.
- Recommends BMP's, procedures, and structural controls to prevent adverse impacts to the waters of the state by managing quantity and quality.
- BMP's could be engineered and constructed systems or institutional, education or pollution prevention practices.
- BMP's are identified by purpose and effectiveness.
- BMP's will be ranked based on space efficiency, cost and level of complexity and number of benchmark constituents potentially controlled.
- A committee will be created to review and provide feedback on draft of BMP's guidelines created by DWQ.

Why we support this change:

- Helps facilities to reduce potential source volumes.
- Helps to improve "housekeeping" issues and operational practices.
- Provides a list of options for treatment by facility or feedstock type.
- Identifies space and cost issues.

Stakeholder Advisory Group Consensus for #14: *DWQ will develop a list of "approved" stormwater BMP's with the Target Date of January 1, 2011)*:

√ **This proposal was accepted by all stakeholders present.**

We propose the following new component to the Compost Permitting Process:

Proposed New Component (#17: Training and Certification of Operators):

A new component would require training and certification of Compost Operators for DWM Large Type 1, Large Type 2, Type 3, Type 4 and DWQ residual compost facilities by January 1, 2012. (2013?)

Steering Committee Consensus: Yes.

Notes:

- NCCC (Training Agency?) will be responsible for holding annual certification training and testing in North Carolina.
- NCCC will also track of certification and Continuing Education Unit (CEU) credits of Certified Operators.
- NCCC will develop training (40 hour course) and test.
- NCCC will be qualifying agency for CEU credits.
- NCCC may offer the training twice in 2011 (Spring & Fall).
- When DWM/DWQ permits a compost facility they will request proof of certification or insert as a condition of the permit that certification will be obtained within specified period.

Why we support this change:

- Helps to reduce potential safety issues.
- Helps to improve "housekeeping" issues.
- Improves operations and efficiently.
- Helps to improve professionalism of industry and facility.
- Will teach and demonstrate water management practices.
- Will help track facilities and compost facility locations.
- Will help to improve product quality
- Creates a venue to discuss new changes to the compost permitting process.

Stakeholder Advisory Group Consensus for ((#17: Training and Certification of Operators:

√ **Unable to obtain consensus on this proposal. Stakeholders would like Steering Committee to redraft with more general language. It was recommended that a committee meet with State Certification Agency to review proposal.**

3:00 PM NEXT STEPS

Dave asked group what they would like to see in a final report of work done by this Stakeholder Group. Here are suggestions from group:

- Definition of Terms
- Facility Descriptions
- Summary of process to get proposals
- Advisory Group Members
- Proposals (In Priority order)
- Process flow diagram
- Next Steps

The group also discussed forming a committee following this process to meet regularly and follow up on action items.

Parking Lot Items:

- Draft proposal in support of Jon Risgaard's recommendations for off-site discharge.
- Have a meeting with state certification agency to review training program and certification of compost operators.
- Draft letter to send to Director (Colleen) supporting Jon's recommendations and requesting timely response to his request.
- Need to properly notify Public Health Department and Local Government about new rules for notification sites.
- Need to prioritize our proposals.
- We need to review HB 1100 Legislation to ensure we have completed what we have been asked to do.
- Need some good editors for final document (Joe Hack, Ken Pickle and Stacey Smith volunteered)

* Meeting minutes from this meeting and documents to be posted on public side of NCDENR Portal

Next Meetings schedule: September 29, 2010
12:30– 4:30 PM
Yates Mill County Park

Minutes compiled and submitted by:

David Halley, True North Organizational Development Services