

Durham Integrated Waste Management Advisory Committee

Present: Kim Nadeau; Doug Bullen, Public Works Rep; Shelley Mitchell; Jessie McKone; Neal Ferris, Acting Chair; Dale Velena; Jenna Jambeck, Recorder; Chuck Baldwin

7:37am Commence

Agenda Topics below correspond to numbered paragraphs that follow:

1. Welcome and Introductions (Neal)
2. public input
  - A. None
3. Guest presenters: David Cedarholm, Town Engineer

Shelagh Connelly, Resource Management, Inc. (RMI)

Dave: Durham was the first community in the nation to recycle sludge with composting. This ended because of odor and land application issues. The town of Durham's contract for disposal of sludge is ending at the end of 2007. Currently the sludge is composted at a facility in Merrimack. Durham needed to give 12-month notice for ending this contract so requests for bids were put out. RMI came in with competitive bids and various options. Last summer a pilot scale test of 1:1 sludge:wood ash was conducted with RMI. The wood ash removes odors and raises the pH to 12 for treatment. The pile is then tested for various constituents and remains until results are obtained. Some of the tests failed for the compost pilot study but it was blended with only a front-end loader (not very homogenized). The town would probably need one half-time personnel and a dedicated front end loader to blend the sludge and wood ash. The waste water treatment plant operators were skeptical and not overly excited about this on-site treatment possibility (remembering the past problems) and this summer there will be a new waste water treatment plant superintendent, who may be more open to these options.

Shelagh: (see also PowerPoint presentation handed out) RMI was founded 1994 and they employ 20-24 people and service Concord and surrounding areas, Manchester, Hooksett, Franklin and Winnepesaukee areas. Although Merrimack currently takes Durham's sludge they may not always be able to. The city of Merrimack owns and operates the facility/composting operation. They have a warehouse where they process Durham's sludge along with theirs. There is some resistance at the Durham wastewater treatment plant since currently the sludge is simply shipped off-site. Wood ash from biomass plants is used as an amendment for sludge to make biosolids. The wood ash may contain carbon or lime. Various biomass plants produce wood ash that is good for different purposes (e.g., some also provide potassium). Wastewater treatment plant sludge is sludge unless it is tested and meets the state and federal guidelines for biosolids. The beneficial use of biosolids is not trying to replace manure, but commercial fertilizers. RMI has successful examples of this. 10 years ago rules for biosolids were relaxed to federal rules in NH and there was a backlash as NH took in biosolids from all over New England. Because of this, NH rules are now very stringent and biosolids are tested for 177 constituents before approval for use in the state. Beneficial use of biosolids has been examined by Tom Ballesterio at UNH and statistics show that the only potential item of concern was nitrogen loading. A class B site that can use biosolids has to have a permit from the state. A class A site that can use biosolids has no site specific permit. This classification (and choice) is based upon what the farmer is growing and what their needs are. In a pilot scale test Durham had issues with PAH (Polycyclic Aromatic Hydrocarbons) in the sludge but with blending could meet the standards for class A or B. RMI employs best management practices for biosolids beneficial use and works with the Cooperative Extension at UNH. The town of Dover has a mixing unit and blends sludge daily with no odor problems. Dover produces 12,000 yards per year of finished compost. The town of Dover would provide their mixing unit for another trial in Durham. There are three options from RMI that may be employed for sludge management

- \$74 per wet ton to simply haul the sludge away; \$58 per wet ton to produce class B biosolids (add lime); \$32 per wet ton to produce class A biosolids (add wood ash)

Producing class A biosolids results in a \$52,000 per year savings (compared to producing Class B). This cost savings in management would provide money for labor and equipment for mixing (so it would not likely result in overall savings, at least initially). The cost per ton from RMI includes the wood ash needed for blending but not mixing equipment or the cost of testing. Testing is currently required by Merrimack right now, but there would be a small increase for the on-site management (\$200 per patch or a total of \$800-\$1000 per year).

Farmers are already interested in a product that could be produced from Durham (one in Hampton and one in Lee). Shelley asked if the biosolids could be combined with the short paper fibers? Shelagh said RMI has a large project in Massachusetts that does this and the city of Dover also blends wood ash, paper fiber and sawdust to make a soil amendment. Neal asked if we could share mixing equipment with Dover and David said maybe. The question was raised if homeowner ash can be added to the blend, the answer is no, it is too variable a waste stream. There was some concern from the Committee on the potential for contaminants from pharmaceuticals (e.g., endocrine disruptors, etc.) in

wastewater. Shelagh replied these contaminants are an emerging concern and no one has all the answers now but the contaminants of concern do tend to be found more in the water fraction. Relevant studies are being conducted at universities and published in peer-reviewed journals and RMI can forward results to the Committee. RMI will eventually make a formal proposal and a phase II trial will be conducted with the equipment from Dover. The committee members would like to put a discussion of the RMI presentation on the agenda for next meeting. It was noted that the area near the waste water treatment plant is currently being considered for redevelopment.

4. Approval of minutes

5. Updates

Neal asked if anyone had taken any action about the e-mail from Scott Hovey and the Committee responded saying that since the swap shop could not be "policed" there was no action to be taken.

A. (& B): NH climate change resolution – March 13th ballot and Oyster River Carbon Challenge (ORCC): Dale announced she was making posters after the meeting and she also needs people to hold signs on election day. The ORCC will also have a table at the election. The IWMAC reiterated that the town resolution was approved by the Council and the IWMAC is supporting this decision. This support is separate from and different than those IWMAC members working at the ORCC table. Jessie announced that high school students will be holding signs at the entrance for the resolution and the ORCC table would be located at the exit if possible. Todd put this information in the Friday update.

B. See Above

C. IWMAC Newsletter status: Jessie announced the due date is Friday, March 9 for articles. Do we want to put household hazardous waste in this newsletter? Doug said we should keep it in but can shorten it to a half page. Members writing articles on the ORCC should coordinate so there is not repetitive information (Jessie will review this).

6. Report from public works

Durham is now managing a cardboard recycling dumpster located at store 24. The town receives \$2000 in revenue from cardboard recycling and now using Casella (instead of WM) is saving \$500 a month. Casella also services other locations including the high school and middle school.

A. Review of recycling letter to businesses: The letter was reviewed by the committee and changes were agreed upon. The letter was going to Doug to be put on town letterhead and Public Works will mail it out.

B. Placement of recycling containers in downtown Durham: It was decided that co-mingled recyclable containers will be placed in downtown Durham at 3-4 locations likely along Main Street (by Young's Restaurant and at either end of Main Street). The containers will likely be similar to what is at UNH and be added near the current barrel garbage cans on the street. Dale said it's important to have garbage with the recycling otherwise garbage will be put in the recycling. Dale and Doug will take a walk down Main Street to evaluate potential locations.

7. Other

A. Shelley and Todd discussed Katherine Lily, who is obtaining her master's degree in public administration. She is doing a study on whether a card and a sticker could provide various benefits to Durham residents which could potentially include: free entrance to Wagon Hill, free parking at the depot lot, longer downtown parking, discounts at local businesses, access to the UNH pool, and free access to the transfer station. Jessie reminded the Committee that we just changed the fee for the transfer station to \$10 and we need to have more discussion if it would be free. Volunteers working there would not have a benefit then.

B. Shelley said the annual report was published and that people should be aware of wildcat transit at UNH.

C. Jessie announced that she and Diana Carroll discussed that with the new town Council to come, the town should examine decreasing paper use. This could be done either with education or as a challenge. Just something to think about!

D. Shelley is going to be the chair for the April 3 meeting and develop an agenda. This agenda is to include biosolids discussion, ORCC, and NH CC resolution, recycling containers, the spring newsletter and the UNH commuter guide review Jenna Jambeck announced she will not be able to attend the April 3 meeting as she will be on business travel.

Meeting adjourned 9:55 a.m.

After the meeting email excerpt from Jenna Jambeck: I did not have a chance to give an update at the meeting (no time), but I have been compiling the NH Bill information related to solid waste since my first meeting. I have compiled a list of the bills, notes from the "Legislative updates" (directly cut and pasted from them), and a list of recent and upcoming hearings/meetings that I sent out by email. I will update this document every time a new bulletin comes out.

The most relevant bills, 503 and 540 propose to impose the \$2.50/\$1.00 per ton solid waste fee to fund state programs are under review and will be discussed through the summer, the most recent note says. Many people said these were unconstitutional and represented unfunded mandates. Any of the bills listed on the summary can be discussed at any future meeting. I will send the bill update out before each meeting for prior review.