

# WASTE & MATERIALS MANAGEMENT STUDY GROUP –Notes: November 2, 2023

Location: DNR Office, 101 S Webster St, Madison and Zoom

Member Attendance:  Curry,  Doverspike,  Karwoski,  Ketchum,  Knudtson,  Mathewson,  Morgan,  Pellitteri,  Sexton,  Welch

Guests: 3 additional attendees listened using Zoom

DNR WA Attendance:  Krausensky,  Murray,  Semrau,  Sholly,  Strom Hiorns,  Waples,  Wolbert

Time/ Presenter	Topic	
9:00	<b>Welcome/Agenda Review/Minutes</b>	<p>Meleesa Johnson has resigned from the Study Group; Lynn Morgan thanked her for her many years of service. This is also Lynn Morgan's last meeting; Julie Ketchum, WM, will be taking Lynn's spot.</p> <p>Agenda approved with moving the battery discussion after sharps discussion. Chad Doverspike motioned to approve minutes; seconded by Tim Curry. Approved with the addition of "treatment systems" to the PFAS discussion.</p>
9:05	<b>Annual Review of Group Charter Nominate New Group Co-Chair Meetings in 2024 – Continue Quarterly?</b>	<p>Kate Strom Hiorns reviewed the group charter and list of sectors/organizations the Study Group members represent. Discussion on adding a composting/organics representative. To fill vacancy, DNR could solicit interest via Solid Waste News. Study Group members should direct interested individuals to contact K. Strom Hiorns. J. Ketchum volunteered to serve as new Co-Chair.</p> <p>Yes, continue with quarterly meetings. Feb, May, Aug, Nov.</p>
9:10 Wolbert	<b>DNR Updates</b>	<p>Staffing/Budget:</p> <ul style="list-style-type: none"> <li>• Secretary Payne resigned, no announcement of new appointment.</li> <li>• State Compensation Plan – passed Joint Committee on Employee Relations. Includes salary increases for inflation, hotel/meal reimbursement increases and additional increases for engineers. This should help with recruiting. However, the challenge is the budget is fixed, so when each employee makes more, cannot hire as many people.</li> </ul> <p>Q: Can department increase fees? Are they in code or statutes?  A: Some are in code, such as plan review (\$0.15/ton), and others are in statute, such as recycling fee. However even code fee increases would not increase until 2026.</p> <p>Grant Activities:</p> <ul style="list-style-type: none"> <li>• CCR – Still submitting for state approval. \$278K for inspections of CCR sites and staff.</li> </ul>

		<ul style="list-style-type: none"> <li>• SWIFR – Received \$551K. Three focus areas: 1. Hire new project position; 2. Contract for statewide food waste management plan; 3. Contract with non-regulatory agency to work one-on-one with businesses, schools, farms, municipalities and others on food waste diversion.</li> <li>• Batteries – DOE Outreach and Education. Working with National Center for Electronic Recycling, The Recycling Partnership, Call2Recycle, Michigan and local governments. DNR would likely not be the applicant. Grants of \$1.3 to \$5 million available. Announce in late spring, grant received in fall.</li> <li>• Brad Wolbert stated battery disposal is a top issue for many stakeholder groups (WMM Study Group, Council on Recycling, Associated Recyclers of WI)</li> </ul>
<p>9:45 Semrau</p>	<p><b>Recycling rulemaking update, feedback</b></p>	<p>Jennifer Semrau presented slides with recycling rule updates and changes for responsible units, haulers, and materials recovery facilities.</p> <ul style="list-style-type: none"> <li>• Draft Fiscal Estimate &amp; Economic Analysis and Draft Rule (Board Order) completed; solicitation of information for economic impact analysis (EIA) occurred Oct. 2-23.</li> <li>• Solicitation notice was distributed via direct email to potentially affected parties (RUs, MRFs, haulers, etc.), various stakeholder groups (AROW, SWANA, WI Towns Association, etc.) and GovDelivery newsletters.</li> <li>• 1 EIA comment received from National Waste and Recycling Association (WI Chapter) indicating it does not support Owner Financial Responsibility (OFR) for MRFs.</li> <li>• NWRA stated OFR language is “very vague,” should not exempt MRFs receiving less than 5,000 tons/year and could result in increased insurance premiums.</li> <li>• Comment demonstrated need to explain better OFR criteria (in NR 520) and importance of evaluating and minimizing fiscal effects on small businesses.</li> <li>• Do not intend to remove OFR requirement at this time.</li> <li>• Other comments received pertained to rule language, including one which revealed need for more clarification on haulers providing residential tonnage to RUs. Change was made to this section.</li> <li>• Next: Public hearing to be scheduled in mid-January, with minimum 30-day notice published in Administrative Register and notification to stakeholders.</li> </ul> <p>Q: Will both public and private MRFs be required to attain OFR? A: Yes. Q: Will OFR requirement be phased in? A: OFR will be required within 12 months after the effective date of the rule for existing facilities (accepting more than 5,000 tons).</p>
<p>10:00 Strom Hiorns</p>	<p><b>Landfills and Solid Waste Fees rulemaking update, feedback</b></p>	<p>Kate Strom Hiorns covered updates on Landfill and Solid Waste Fees rulemaking process.</p>

		<ul style="list-style-type: none"> <li>• Conclude rule drafting, put in board order, develop economic impact analysis (EIA) by Feb/Mar.</li> <li>• EIA posted for public comment expected in May.</li> <li>• Advisory Committee meeting was 10/18/23; discussed fees in NR 520 (landfill license surcharge fee, plan review and inspection fees) and reviewed draft changes to NR 507 – Environmental Monitoring.</li> <li>• Presented economic analysis of increasing landfill license surcharge fee from \$0.15 to \$0.25/ton and proposed use of fees with minimum funding goals.</li> <li>• Presented plan review costs versus department fees.</li> <li>• Brad Wolbert said an increased landfill license surcharge fee is more predictable than plan review fees.</li> </ul> <p>Q: Can the department provide an outline on when comments can be submitted? A: Getting input now.</p> <p>Q: When is the formal public comment period? A: Public hearing in fall, 2024. Informal comments can be submitted until the end of June. Also tracking changes in a spreadsheet and sharing with Advisory Committee.</p> <p>Q: Are their expedited fees? A: Yes, already exist.</p> <p>Q: How was the landfill license surcharge fee increase calculated? A: CPI Calculator.</p> <p>Brad Wolbert: Agency Finance Dept. would like 25% balance, but per code cannot exceed for three consecutive years (or need to reduce fees).</p> <p>Q: Will increasing fees helping with hiring, especially engineer salaries? A: Comp plan determines salaries, but can offer positions as Entry, Advanced or Senior.</p> <p>Q: C&amp;D facilities don't pay tonnage fees, correct? A: Correct, no scales.</p> <p>Q: Any facilities exempt from fees? A: Recycling facilities only pay ISI; exempt to encourage recycling activities.</p> <p>Q: What about composting facilities? A: Exempt from fees (except ISI) as a diversion activity.</p> <p>Lynn Morgan: Plan review fees don't need to cover 100% as they don't include revenue from tip fee and admin fee.</p> <p>B. Wolbert: Budget includes all sources of funding. Stakeholders should let us know what information they need to see to approve increased fees.</p> <p>Next Advisory Committee meeting in January; next WMM Study Group meeting in Feb.</p>
<p>10:30 Knudtson</p>	<p><b>Handling Sharps and Needles in Waste Streams</b></p>	<p>Brandon Knudtson led an open discussion on the handling of sharps and needles in the waste streams. Hilltopper's service area includes a large homeless population which utilizes a park. Hilltopper crew members collect material by hand, and they are concerned about worker safety. Safety manager rode with route truck and viewed sharps. The city has told Hilltopper to reach out to the fire department, however the fire department indicated sharps in waste containers is not their issue (they will respond to loose sharps on the ground). The county provides some sharps containers, but the city has discontinued. How do others handle this?</p>

		<p>J. Ketchum: When medical waste is received at the Ramsey County, MN transfer station they go back to the tenants and involve state agency. But public education/homeless is a difference scenario.</p> <p>L. Morgan: Have you tried connecting with other major cities? A: Starting with Study Group discussion. The city has turned a blind eye. As a hauler, Hilltopper wants to step up.</p> <p>L. Morgan: Have you considered reaching out to Gunderson?</p> <p>C. Doverspike: Number of stakeholders- users, police, fire departments, haulers, health clinics</p> <p>L. Morgan: La Crosse area homeless support groups</p> <p>K. Strom Hiorns: NWRA, WCSWMA, other haulers</p>
<p>11:30 Sexton &amp; Don Tatro, Director of State &amp; Local Policy, Redwood Materials</p>	<p><b>Batteries Discussion, Subgroup Activity, Next Steps</b></p>	<p>Bart Sexton shared that members of the battery subgroup (Chris Blan, Brown County; Julie Ketchum, WM; Andrea Lorenz, Foth; David Pellitteri, Pellitteri Waste Systems; himself) had two phone conversations/meetings. Group working on a position paper. Focusing more on lithium ion and education. Enforcement as a potential tool.</p> <p>D. Pellitteri: Insurance concerns. A non-profit article indicated insurance increased 10%.</p> <p>B. Sexton: Met with Senator Cory Tomczyk. He is willing to advance recommendation but wants to hear what industry wants. The idea that the state could subsidize insurance was as a 'no.' Working on paper for the Study Group.</p> <p>J. Ketchum: If you ban, then where do they go? Need to have collection and disposal options.</p> <p>C. Doverspike: Brown County Hazardous Waste Facility is now taking all batteries for free. Estimated expense of \$5,000-\$7,000/year versus expense of fire. All batteries accepted, including alkalines, but not battery containing devices (BCDs).</p> <p>B. Sexton: How is it working? A: Have seen increase in batteries collected, but just began in August.</p> <p>K. Strom Hiorns: DNR is working to compile a list of battery collection locations around the state.</p> <p>Sarah Murray: Three main data sources include E-cycle, Call2Recycle (includes Lowes, Home Depot), WI Recycling Markets Directory (WRMD). Goal is to make updates to the directory. Identifying counties where there are no collection opportunities.</p> <p>B. Sexton: Challenge to keep updated: A: E-cycle and Call2Recycle are well maintained now and working on WRMD.</p> <p>B. Sexton: Keep battery disposal and recycling separate- do not want them in the recycling cart.</p> <p>J. Semrau: Included with the recycling rule revision is a requirement that Responsible Units include batteries in their recycling education.</p>

S. Murray: Sample language and resources will be provided.  
B. Sexton: Require retailers to provide education if they sell batteries.  
L. Morgan: Has lead acid battery management been successful? Group discussion.

Don Tatro provided a presentation on Redwood Materials, a battery recycler.

- Redwood founded by a co-founder of Tesla.
- There are two issues: need for lithium for new products and what to do with batteries at end of life.
- 500% growth of lithium-ion batteries. Market demand outpacing supply.
- Mining from countries with poor human rights.
- U.S. car manufacturers have set goals for EVs (electric vehicles). Battery manufacturing focusing on EVs.
- Redwood recycles beyond black mass into new battery parts- anode (copper foil) and cathode. Anode is ~10% the cost of EV, cathode is ~55%.
- Redwood receives end of life batteries from consumers or car manufacturers/dealers (EVs).
- Process at different temperatures.
- Redwood working with Amazon, Lyft, Ford, Toyota, Audi and Panasonic.
- Goal to transition from 100 gigawatt (GW) hours (powers 1M EVs) to 500 GW hours (5M EVs) by 2030.
- Breaking ground on facility in South Carolina; also have facility in Nevada.
- Redwood started in consumer recycling as people just started mailing them batteries.
- Importance of education.
- The largest lithium ion mine is people's 'junk drawers.'
- 150M phones are thrown out per year with only 17% recycled.
- Redwood has partnered with e-cycle recyclers, Rotary and Audi, collecting consumer batteries. Last year recycled 40,000 metric tons (100,000 EVs).
- Hope in near future to announce partnership with major retailer.

Q: How do costs compare to virgin? A: Pretty even and don't experience a loss of quality with feedstock (like paper).

D. Tatro: Launched a dismantler portal. User will receive a quote for EV recycling, then ship to Redwood.

Q: Service area? A: All of U.S. and Canada.

Q: Is a core charge needed for EVs, like lead acid? A: Wouldn't need it as it won't be a consumer recycling the batteries. Bipartisan Infrastructure Law- 30% recycled content in EVs incentivized. Manufacturers want recycled content.

Q: Collection a big expense? A: Combat through consolidation with collection partners.

Q: Does the national retailer alluded to have locations in Wisconsin? A: Yes.

		<p>Q: Testing for material quality? A: Yes. Also get scrap from battery manufacturers.</p> <p>Q: Recycling at plant? A: Capture 95% of materials.</p> <p>Q: Lithium recovery? A: 95%+, reintroduced with loop processing until captured.</p> <p>Q: EVs versus vapes versus electric toothbrushes- is the processing of small devices cost effective? A: Yes, doing that now.</p> <p>Q: Perhaps a deposit on smaller goods? A: Maybe but retailers concerned. Preferable not to charge the retailer or consumer. Call2Recycle doesn't.</p> <p>Q: What percentage of batteries are recycled? A: Best guess 15-20%. 80% is a lot to go after.</p>
12:00	<b>Topics for next meeting, Adjourn</b>	<p>Next meeting: Feb. 1, 2024. Location: Steven's Point?</p> <p>Topics: Discuss and consider battery issue paper</p>