

Spring 2019 Solid Waste Interested Parties Meeting

May 15, 2019

Fitchburg





9:30	Welcome	Joe Van Rossum
9:35	WMM program updates Staffing Guidance General program/rule development Legislative	Joe Van Rossum
10:00	Proposed repeal of unauthorized rules	Joe Van Rossum
10:10	Recycling and infectious waste updates	Jennifer Semrau
10:20	Drafting environmental monitoring exceedance notifications	Joe Lourigan
10:30	PFAS DNR status and workplan summary	Kate Strom Hiorns
10:40	PFAS 101 applied to solid waste	Ken Quinn
11:25	PFAS basic chemistry and methods	Nathan Eklund
12:10	Questions and wrap up	



DNR Program Updates

Joe Van Rossum



WISCONSIN
DEPT. OF NATURAL RESOURCES



Staffing

- David Albino – BSIT Section Chief
- Nicole Cox – NER EPA
- Lola Hoon – SCR EPA
- Carolyn Cooper – Hydro - SCR



Recruitments in the works

- Hazardous waste Specialist (2)
- Hydrogeologist – NER
- WM Engineer – Entry (SER or SCR)
- Waste Mgt Specialist – CO



Budget

- Legislative phase
 - Joint Committee on Finance
 - Expect requests for information
- Governor's budget request
 - Flat – slight increase



Guidance

- Working through issues related to Act 369
 - Definition of guidance
 - Inventory/prioritization
- Notification through Leg. Ref. Bureau
- 21-day comment period



Guidance cont.

- Glass management – final
- Electronics Recycling – 21-day (5/27)
- Shingles processing – 21-day
- Reducing and Terminating
Groundwater Monitoring at LF – 21-day



General Program

- WMM – Study Group – 6/7 Stevens Point
- Haz Waste Webinar Series
- Social media engagement
 - E-cycle
 - Recycling
 - Composting
- Green & Healthy Schools
 - 473 registered schools
 - 2,000 subscribers to monthly newsletter



General Program

- Customer Service
 - Consolidated billing
 - E-signature
 - E-pay
- IT systems planned enhancements
 - Lab monitoring data submittals
 - Landfill tonnage reporting



Rule Making

In process

- NR 538 – EIA comments
- NR 600 Series – EIA comments

Scope statement development

- E-cycle Wisconsin/Electronics recycling
- CCR Facilities – state permit program



2017 Act 108

- Identify unauthorized rules
- Report to legislature in odd-numbered years
- Authority was based on law that has been repealed or amended
- Agency plan for addressing
- Waste & Materials Management identified 7 rules



Act 108 Continued

- NR 186 – Grants for solid waste management plans
- NR 543 – Recycling market development priorities
- NR 544.20 to .27 – RU alternative compliance
- NR 546 – Newspaper recycling fee
- NR 548 – S.W Reduction and demo grants
- NR 549 – RU Efficiency incentive grants
- NR 555 – Waste tire removal & recovery



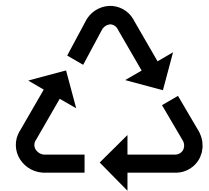
Recycling and Infectious Waste Updates

Jennifer Semrau



Recycling Updates

- Depressed commodity market values, with increased processing costs, continue to affect recycling economics
- Many national, state and local reports and articles
- Mandated recycling program remains
 - No formal requests to landfill banned items
 - Ensuring recycling services still being provided
- DNR using its outreach tools (e-newsletters, presentations, social media, etc.) to promote 'recycling right'





MRF survey

- Sent to 40 self-certified MRFs serving WI Responsible Units (RUs)
- Requested response by May 15th
- As of May 8th, ~50% response rate
- Survey asks
 - What do you accept (paper, metal, glass and plastic categories)
 - For items not accepted for recycling,
 - Not formally accepted but still recycled anyway
 - Not accepted and detrimental to the operations
 - Not accepted and non-detrimental to the operations
 - Ranking of the 5 biggest sources of contamination
 - What materials have you had trouble finding markets



MRF Survey

- Initial results
 - Top 3 items MRFs are struggling to market (in order)
 - Mixed bulky rigid plastics
 - Plastics #3-7
 - Mixed paper
 - Biggest contaminants
 - Plastic bags/film
 - Foam polystyrene
 - Food contamination
 - Bulky plastic
 - Cords/light strings/tanglers
 - Honorable mentions: needles/sharps, propane cylinders, shredded paper
- As of May 8th, several large MRFs yet to respond





Outreach Focuses

- **Anti-Contamination/Recycling Right**
- **Battery management**
 - Remains one of the top viewed recycling pages
 - Particular focus on lithium ion batteries- fire risk
- **Collaborated with EPA Region 5 on webinar “Fire Risk in the Waste Handling and Recycling Industry” (April 18th)**
 - Featured speakers from Fire Rover, Starr Companies, Advanced Disposal, WDNR and US EPA
 - Included fire data and info on risk, planning, prevention, BMPs
 - 136 participants
 - Webinar [recording](#) available
- **Relaunched Healthcare Waste News (Jan. 2019)**



Infectious Waste & Other Annual Reports

- Infectious Waste and Medical Waste Reduction Annual Report
 - Due March 1st
 - ~1,000 reporting entities
 - 893 submitted reports (others may be exempt, closed or non-filers)
- MRF Annual Report (Self-Certification)
 - Due March 30th
 - 40 submittals (all by deadline)
- Responsible Unit (RU) Annual Report
 - Due April 30th
 - 1069 submittals (all by deadline)
 - No RUs will be placed on probation



Infectious Waste Update

- Sharps collection stations
 - Existing list was out-of-date and a static pdf, sorted by county
 - Sent email and hard copy letter to all registered sharps collection stations
 - Stations need to reregister via an online [form](#) by May 31st
 - Registration is required to provide exemption from storage facility licensing for sharps
 - As of May 8th, 191 sites have registered
 - New display will be a ShinyApps [map](#) (similar to E-cycle WI electronic recycling information) and a downloadable statewide list



Ag Plastics Recycling



- Revolution Plastics placed over 4,000 dumpsters at WI farms to collect ag plastic including silage bags, bunker covers, grain bags, etc.
- Over 3 million pounds diverted per month
- Contamination and improperly filled dumpsters growing problems



Ag Plastics Recycling

- Financials of ag plastic recycling with Revolution unsustainable
- Revolution met with leadership with DNR and DATCP in Dec.
- In April, sought funding assistance from WI counties
- To bring interested parties together, Ag Plastics Stakeholder meeting being planned
- DNR, DATCP, UW-Extension and Revolution Plastics
- June 6th, Madison
- More info to come



Questions?

Jennifer Semrau

Waste Reduction and Diversion
Coordinator

608-267-7550

Jennifer.Semrau@wisconsin.gov



Drafting Environmental Monitoring Exceedance Notifications

Joe Lourigan

Reporting NR 140 Standard Exceedances

NR 507.30 Notification and response when values attain or exceed a standard. The owner or operator of a solid waste facility shall notify the department in writing and respond as follows when a groundwater standard at the point of standards application or an explosive gas level has been attained or exceeded at the following devices:



Reporting NR 140 Standard Exceedances

(1) ALL GROUNDWATER MONITORING WELLS. (a) The owner or operator shall notify the department in writing if any value attains or exceeds a groundwater standard. The notification shall specify the parameters for which standards have been attained or exceeded and the wells at which the standard was attained or exceeded and it shall provide a preliminary analysis of the cause and significance of each concentration in accordance with s. NR

140.24 (1) (a) or 140.26 (1) (a). The sampling results and 2 copies of the notification shall be submitted to the department within 60 days from the end of the sampling period.

(b) When a groundwater standard has been attained or exceeded, the owner or operator shall respond in accordance with ch. NR 508.



Reporting NR 140 Standard Exceedances

What Should the preliminary analysis say?

- Identify the attribution or suspected/potential source(s) of exceeded parameters. If the origin is attributed to background please provide some explanation supporting this (e.g., comparing upgradient/downgradient conc's, reference materials, previous department decisions/opinions). If origin cannot be identified indicate as unknown.
- *Please be advised that repeated exceedances without a plausible cause/source may result in a request for additional investigation and/or the involvement of other programs within the department (e.g., Remediation & Redevelopment).*



Reporting NR 140 Standard Exceedances

What Should the preliminary analysis say?

- Describe any tangible changes in concentrations/extent/status from last sampling round, whether or not the conc's are within the historical range, and indicate any trends or projections if possible.
- Indicate if you believe any observed changes are “significant” (in a qualitative or statistical sense). A discussion of potential receptors, or a lack thereof, may be appropriate when discussing the significance of exceedances.



Reporting NR 140 Standard Exceedances

Don'ts:

- Please do not refer to previously submitted preliminary cause and significance reports. Each submittal should be able to stand on its own.
- Please to not provide a contact name and phone number to call in lieu of providing the code requirement, which is a summary of exceedances and a preliminary analysis of the cause and significance of the exceedances.



Reporting NR 140 Standard Exceedances

Examples:

- We believe the cause of sulfate PAL exceedance in well MW-12 is from oxidation of sulfide minerals in the geological formation. The landfill leachate data does not show elevated sulfate levels and the concentration observed in MW-12 is similar to what was observed in upgradient monitoring wells at the site. Other substances, such as VOCs have not been observed at this well. Given these factors, it does not appear that the sulfate exceedance is significant at this time.
- The chloride PAL exceedance appears to be the result of runoff from the county road during the winter. During the winter salt was applied to the road and the well is located adjacent to the road in the right-of-way. The PAL exceedance does not appear to be significant at this time.
- The PAL exceedance of benzene in well MW-5 is not known at this time. This is the first detection of benzene in this well and other monitoring wells have not shown a benzene exceedance. A gas generator to power an air compressor was used to collect the samples. It's not clear if this played a role in the exceedance. VOCs will be collected during the next sampling event at MW-5 to determine if the benzene concentration is confirmed. We do not believe the PAL exceedance is significant at this time.

Questions?

- Contact the DNR hydrogeologist assigned to your facility.
- Contact Joe Lourigan at (608) 267-9386 or Joseph.Lourigan@Wisconsin.gov



DNR PFAS Status and Workplan Summary

Kate Strom Hiorns

What is PFAS?

- Per- and Polyfluoroalkyl Substances
 - Carbon and Fluorine bonded chemicals
 - Used for over 50 years
 - Oil- and water-repellant properties (nonstick, stain-proof)
 - In products like carpets, cookware, food packaging, fire fighting foams



Image: itrweb.org



What is PFAS?

- Approximately 5,000 PFAS compounds
- Persistent
- Bioaccumulative
- Transported through water, soil, and atmosphere
 - Human exposure mostly occurs through drinking water or food



Goal for the Department of Natural Resources:

- Reduce the risk of human and environmental exposure to PFAS
- How?
 - Learn potential pathways of exposure
 - Learn how to test for PFAS and establish safe exposure levels
 - Learn how to prevent exposure





Department-wide efforts so far:

- Remediation and Redevelopment Program taking the lead
 - PFAS Technical Advisory Group – next meets 5/31, 10:00-2:00
 - <https://dnr.wi.gov/topic/Contaminants/PFASGroup.html>
 - Recently hired 2 people with emerging contaminants focus
- PFAS and emerging contaminants webpages developed
 - <https://dnr.wi.gov/topic/Contaminants/PFAS.html>
- INFORMATION GATHERING



What's next:

- DHS currently determining safe groundwater quality standards to be codified in NR 140
- Development of sampling standards and WI laboratory certification methods for certain PFAS compounds
- Case-by-case determination of need to sample for PFAS at sites with possible contamination
- UW-Madison submittal for 2.5 year research project on evaluation and management of landfilled PFAS in WI



What's next for the W&MM Program:

- If PFAS-containing materials are disposed of in landfills, at compost sites, or by landspreading, what is the potential impact to groundwater, surface water, and drinking water?
 - List of wastes that commonly contain PFAS
 - List of closed and active landfills that likely have those wastes, what engineering features are present, and potential for impact
 - Determine acceptable PFAS levels at wastewater treatment plants and potential for leachate treatment
 - Develop best management practices for disposal of PFAS-containing waste
- INFORMATION GATHERING



PFAS 101 Applied to Solid Waste

Ken Quinn

Technical Director
TRC Environmental



PFAS Basic Chemistry and Methods

Nathan Eklund

PFAS Program Manager
PACE Analytical



Questions?

Meeting slides and future agendas will be posted on the SWIP webpage

<https://dnr.wi.gov/topic/Waste/SWIP.html>

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