NEW YORK STATE | Department of Environmental Conservation

Plenary Session
PFAS Concerns in the Waste Industry: DMM Perspective

Federation of New York Solid Waste Conference
The Sagamore, Bolton Landing
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Agenda

- Background
- Pollution Prevention
- Recycling of Biosolids
- Inactive Landfill Initiative
- MSW Landfill Leachate Rulemaking

Background

- Q: Where is it coming from?
- A: Many sources, including discarded consumer products such as:
  - Treated apparel, carpet, and aftermarket treatments for these products
  - Packaging, including fluorinated plastic containers and older food packaging
  - Cosmetics and personal care products (makeup, dental floss, etc.)
  - Automotive products (protective finishes)
  - Paints and sealants
  - Many other niche uses (both consumer and industrial)

Background

- Q: Which PFAS?
- A: Many different PFAS compounds, including:
  - Fluoropolymers – used in non-stick coatings, temperature resistant coatings and many industrial processes
  - Fluorotelomer alcohols (8:2 FTOH, 6:2 FTOH, etc.) – used in food packaging, various consumer and industrial applications
  - Fluorotelomer sulfonates (6:2 FTS, etc.) – used in AFFF, industrial processes
  - Perfluorinated sulfonic acids (PFOS, PFHxS, PFBS, etc.) – previously used in many consumer and industrial applications
  - Breakdown products of the fluorotelomers, including perfluorinated carboxylic acids (PFOA, PFNA, PFHxA, etc.)

Pollution Prevention

- New York is trying to stop PFAS from entering the waste stream through legislative prohibitions on the sale of products containing PFAS:
  - PFAS in Food Packaging Law (effective 12/31/22)
  - PFAS in Apparel Law (effective 1/1/25)
  - PFAS restrictions under Carpet Collection Law (effective 12/31/26)

Recycling of Biosolids – PFAS Concerns

- Of the 600 WRRFs in New York State, about 100 recycle their biosolids

- USEPA is completing a risk assessment to determine allowable PFAS levels in recycled biosolids – expected to be made public in December 2024?

- To reduce risk, DEC's DMM is:
  - Sampling all WRRFs that recycle including biosolids, influent, and effluent
  - Funding research at SUNY ESF to analyze samples and evaluate correlations

  - Implementing DMM7 to reduce industrial influences that raise levels in biosolids by requiring pretreatment if industrial sources are present:
    < 20 ppb PFOA or PFOS: domestic sources
    20 – 50 ppb: potential industrial sources
    > 50 ppb: industrial sources likely

Recycling of Biosolids – PFAS Concerns

- DMM7 Requirements
  - < 20 ppb PFOA or PFOS: no restriction on recycling
  - 20 – 50 ppb: Additional Sampling; Restrict recycling after 1 year if not below 20ppb
  - > 50 ppb: Restrict recycling until below 20ppb

- Early biosolids sampling results (12 samples):

  PFOA: 12 of 12: less then 20 ppb

  PFOS: 7 of 12 less than 20 ppb
  PFOS: 4 of 12: 20-50 ppb for
  PFOS: 1 o 12: slightly above 50 ppb

Inactive Landfill Initiative

2024 Status Report – to be released July 2024

- 500 site groundwater investigations completed statewide. 600 other sites currently at different stages of investigation, sampling and evaluation.

Summary of Results

- PFOA or PFOS above NYS MCL (10 ppt) – 340 sites (68%)
- 1,4-Dioxane above NYS MCL (1 ppb) – 125 sites (25%)

- 1,225 private drinking water (DW) well locations sampled
  - PFOA or PFOS above NYS MCL (10 ppt) – 223 DW locations (18%)
  - 1,4-Dioxane above NYS MCL (1 ppb) – 29 DW locations (2%)

MSW Landfill Leachate Rulemaking

- Would require MSW landfill leachate to be treated prior to discharge to WRRF or SPDES discharge point
- Two stakeholder meetings held to receive feedback and ideas
- Working toward release of proposed rulemaking during Summer 2024

- In its current form, focused adjustments to 6 NYCRR Parts 360 and 363:
  - Leachate treatment may occur at the generating landfill or at an offsite location;
  - Location that treats leachate must be permitted under Part 360 Series as a leachate treatment facility;
  - Treatment method will not be specified; instead, minimum performance/contaminant removal requirements will be specified;
  - Will apply to all operating landfills at time of adoption, with built-in timeframes for planning, design, testing, and construction

Thank You

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