

NHDES WASTEWATER ENGINEERING BUREAU

RESIDUALS MANAGEMENT ENV-WQ 800 RULES UPDATE

OCTOBER 2016



Raymond
Gordon, and

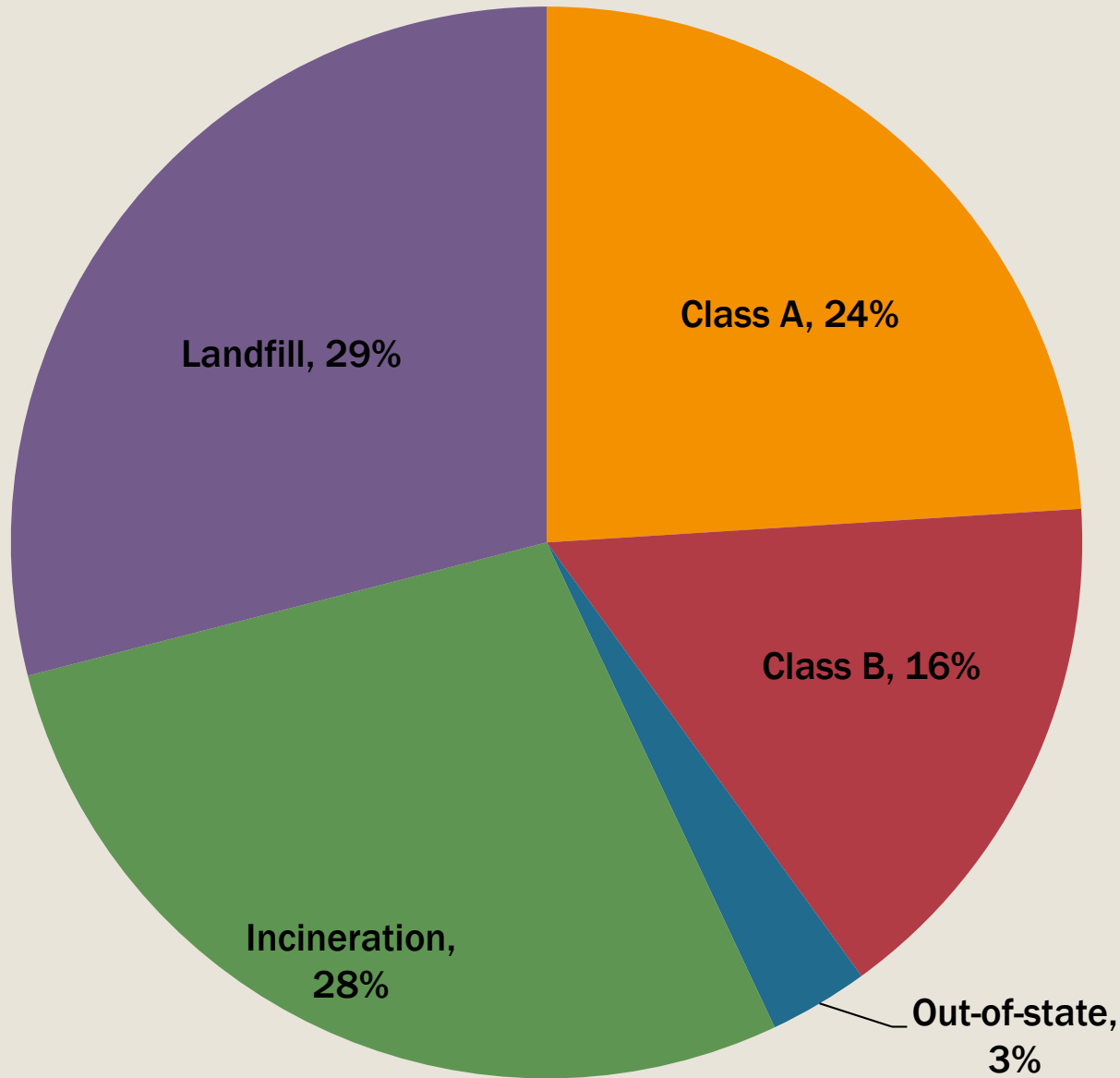
Judith E. Sears
Houston, P.E.



54 WASTEWATER TREATMENT FACILITIES



2012



NH SLUDGE DISPOSAL PRACTICES:

Based on
81,672
wet tons



- **Incineration:**

- **Env-A 600 & 40 CFR Part 60, Subpart O**



**APPLICABLE
STATE RULES**

**RESIDUALS
MANAGEMENT**

**One
Incinerator
Manchester
WWTF**



- Solid Waste –
 - RSA 149M
 - Env-Sw 100 through 2100



**APPLICABLE
STATE RULES**

**RESIDUALS
MANAGEMENT**

**6 Landfills
(Most with
Restrictions)**



- Federal Regulations - 40 CFR Part 503



**APPLICABLE
STATE RULES**

**RESIDUALS
MANAGEMENT**



- Land Application – RSA 485-A
 - Sludge Env-Wq 800



**APPLICABLE
STATE RULES**

**RESIDUALS
MANAGEMENT**

**17 NH WWTF's
& 5 Out-of-
State
Facilities
Maintain
Sludge Quality
Certifications**





RULE CHANGES

Sludge Env-Wq 800



RULE CHANGES

■ Few Changes Overall

■ No Changes to Standards for:

- Site/Facility
- Land Application
- Sludge Quality

■ Minor Changes:

- Haulers
- Soil Testing

■ Most significant Changes:

- Sludge Testing (scope and frequency)
- Permit term (site & facilities permits)
- Notification/Public comment
- Land application restrictions clarified (Class A, water treatment sludge, and short paper fiber (SPF)).

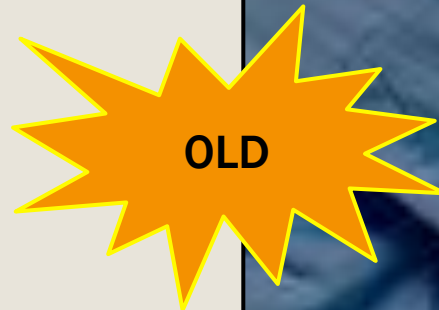
SLUDGE QUALITY CERTIFICATION



- DES Method to Ensure Acceptable Quality Sludge
- Permit issued to Generators for Land Application
- Confidence in Sludge quality = Public Acceptance

SLUDGE QUALITY CERTIFICATION

- 4 Samples Required for Testing
- At least 60 days apart over a year
- 158 Analytes
 - Metals
 - VOC's
 - SVOC's
 - PCB's,
 - Nutrients
 - Dioxins



SLUDGE QUALITY CERTIFICATION



- Post Production Report in Dry Tons
- 2 or 4 Samples Required for Testing (Per Volume)
- 30 Days apart
- Removed Testing
 - Chlorinated Pesticides
 - Total Cyanide
 - Most Dioxin

NEW

RULE CHANGES FOR SLUDGE HAULER

- Removed requirement Identifying the contents as “Sludge”
- Referenced 49 CFR 390.21 - Marking



SLUDGE FACILITY AND LAND APPLICATION RULE CHANGES



- Public hearing if petitioned.
- 30-day public comment period.
- Notification to Local River Advisory Committee.



SLUDGE FACILITY AND LAND APPLICATION RULE CHANGES



- Deny application if no response within **60-days**.
- Site/LA Permit Term: Increased from 5 years to **10 years**.





LAND APPLICATION

SITE PERMIT SOIL TESTING CHANGES

- More Timing Flexibility for:
 - Annual, and
 - End-of-permit term (renewals).



NUTRIENT MANAGEMENT CHANGES

- Manual of Best Management Practices for Land Application of Biosolids – **March 2015**
 - **Including Phosphorous**



University of
New Hampshire

Cooperative Extension

NEW LAND APPLICATION RESTRICTIONS



Clarified for:

- Class A
- **Water**
Treatment
Sludge
- Short Paper
Fiber

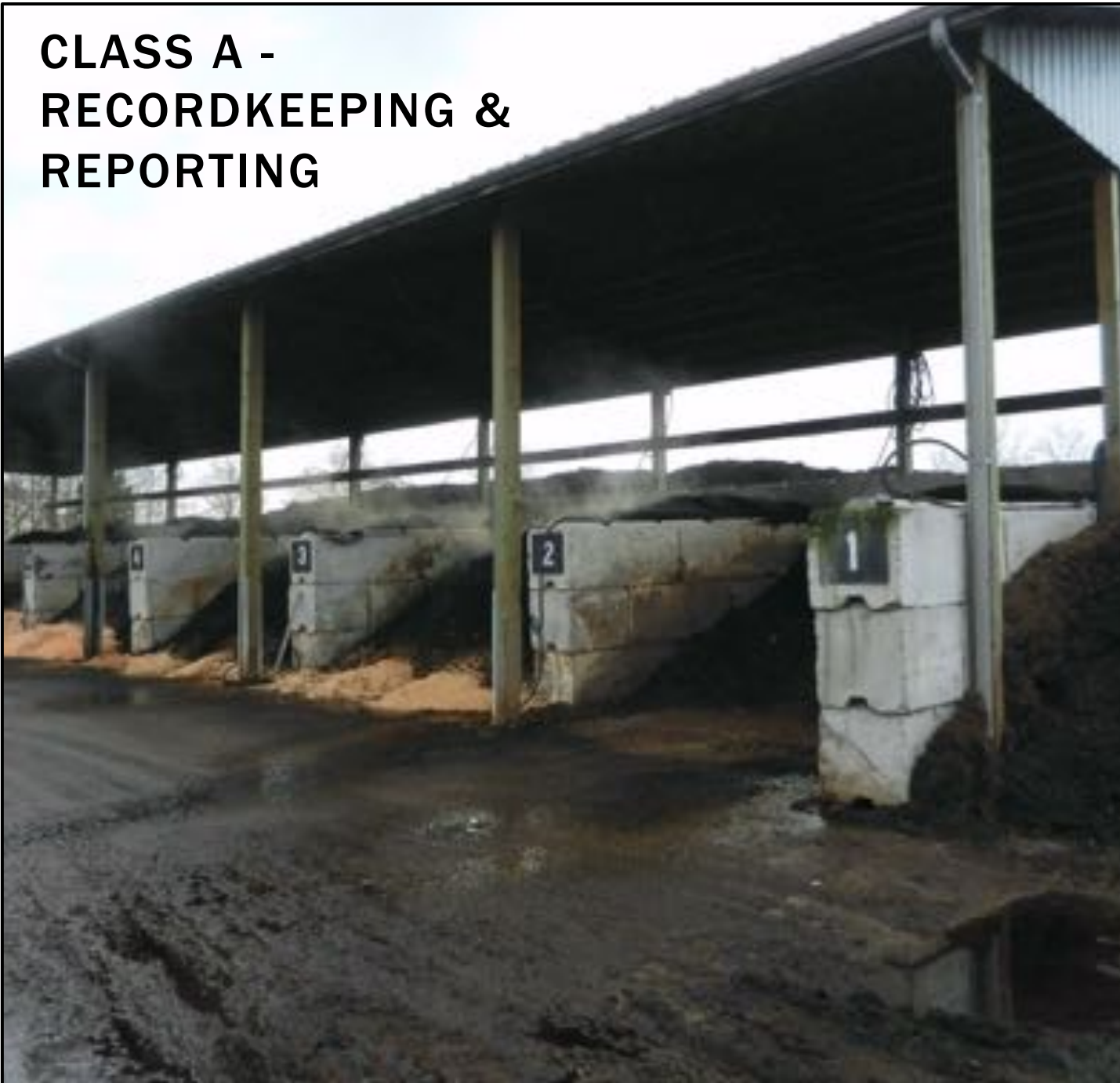


CLASS A – APPLICATION RATE



Shall not exceed **200 lbs. Nitrogen/Acre** without a Certified Crop Advisor recommendation.

CLASS A - RECORDKEEPING & REPORTING



For ≥ 50 cy
Composted &
Uncomposted
Class A:

- Keep Records for both:
 - Recipient, Location & Amount.
- Report: Compost (only) Location to NHDES upon request.

RECLAMATION

Requires a site permit:

- **>1,500 lbs. Nitrogen/Acre;**
or
- **Outside 30:1 to 40:1 Carbon to Nitrogen Ratio**



SHORT PAPER FIBER



Limits application to 35 dry tons/acre, or a 2% increase in soil organic matter.



UNMIXED WATER TREATMENT SLUDGE

- Land application prohibited.
- Permit required for unmixed use.





CONTACTS & INFORMATION

**NH Department of Environmental Services
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RMS: <http://des.nh.gov/organization/divisions/water/wweb/septslud.htm>

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QUESTIONS?

