

INDUSTRIAL WASTEWATER LAND APPLICATION WHITE PAPER 10/07 REVISED (AS) EXECUTIVE SUMMARY

Overview

1. Focus/Objective is evaluation of landspreading industrial waters with long & short-term recommendations to DNR oversight and regulations, especially Contract Haulers and Centralized Waste Treatment (CWT) facilities who handle large volumes including:
 - Industrial NR214
 - Farm Manure & WW NR243
 - Bio-solids NR204
 - Septage/Holding Tank NR113
 - Solid Waste NR518
 - a. Most restrictive landspreading/handling criteria applies to waste mixtures and manure
 - b. Most notable difference in restrictions is winter time landspreading for NR214
 - c. Other provisions deal with unique nature of particular waste
2. Landspreading represents historical reuse/utilization of wastes in WI.
3. Landspreading is significant benefit as fertilizer and soil conditioner.
4. Landspreading is significant economical incentive over mechanical treatment & landfill.
5. Discussion is extremely biased toward suspicion of Independent Contractors and landspreading of potentially hazardous material.

Recommendations

Short-Term

1. New permit language for all contract haulers (including daily logs: storage to discharge, pre-notification, additional analyses, new material evaluation requirements).
2. Increase DNR field presence & compliance evaluation efforts (lab hygiene tests).
3. DNR work with trade organizations to develop best management for odor control.
4. Re-evaluate NR101 & groundwater (GW) fees for discharge by contract hauler.
5. Routine soil test – plus water extractable P (no explanation).
6. DNR team to identify additional code changes appropriate for future.
7. Reporting/tracking procedures/methods evaluation.
8. DNR permits section and air management to develop protocol for odor issue.
9. Site approval criteria review/formalize to protect GW and improve consistency (sites must be reapproved).

Long-Term

1. Independent study – winter landspreading industrial waste & runoff (UW?).
2. Work group to evaluate potential rule changes:
 - a. Nutrient loading per Nutrient Management Plan (NMP)
 - b. Expanded operator certification
 - c. Correct unjustified inconsistencies among land application rules
 - d. Winter landspreading restrictions
 - e. Restricted soil types
 - f. Further define beneficial use
 - g. Assign continual responsibility for landspreading to generator/processor

WDNR Perceptions/Expressions/Control

Industrial Wastewater, By-product Solids and Sludge:

- Expressed concern over potential runoff to surface water during winter landspreading
- DNR states their promotion of good management practices/use of best available sites has reduced runoff potential
- White Paper Team visited sites where landspreading occurred on frozen or snow covered ground: *“No instances of runoff have been identified in situations where the wastes were applied in accordance with NR214 requirements and using good management practices..... Staff have not, however, received many public complaints of runoff. In situations where runoff was identified in a follow up to a citizen complaint, improper application was generally the cause.”*

Independent Contractors Landspreading of Industrial Wastes:

- 11 large WI contractors, 9 provide storage of varying capacity for co-mingled waste
- 5 of 9 storage facilities accept municipal bio-solids plus industrial waste
- Industrial waste is often high in BOD and tends to release extreme odors
- When bio-solids mixed with industrial waste, the more restrictive requirements of NR214 or NR204 apply

Proposed Measures to Control Independent Contractors:

- Daily notification to WDNR of landspread site activity and written per load verification of waste composition
- Daily signed manifests which ties processor/generator waste to land application site

Anticipated Repercussions of Proposed Changes:

- Violations/enforcement action will significantly increase
- Economic impact will be increased cost to industry, consumers and tax payers
- Reduction in competitive status for development/expansion in WI

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(3 of 6 have left WDNR or changed jobs)