Thermal Treatment Technologies for Resource Recovery

SHOWCASE

May 15, 2019
NS Regulation Changes

Change to municipal programs?
Regulation and Waste Management

2006 all first generation landfills closed or converted to C&D sites
- 7 second generation landfills operational
- EGSPA – kept 50% diversion goal, added disposal target of 300 kg/person

2016 amendments to separate thermal treatment from incineration
- Designated material bans continue to apply to all facilities
Regulatory Amendment Challenges

- Proponents identify designated banned materials as impediment to financing
- NSE has no intention to eliminate bans, but wants to provide regulatory clarity
- 2019 amendments allow thermal treatment facilities to receive waste containing banned materials
  - Operating approvals will require that facilities only accept waste from generators who practice source separation to an appropriate standard
Current Solid Waste Status

Established Province Wide Network:
- 23 waste transfer sites, 7 second generation landfills, 27 C&D disposal sites, 18 compost sites

Disposal rate 45% below national average – 423kg/person
- Disposing 121,000t C&D, 281,000t garbage

Diverting 110,000t C&D, 105,000t organics, 50,000t recyclables
- Plus tens of thousands of tonnes diverted in private sector

~ 4,000 FTE positions in the Province
Nova Scotia Landfills

# = Municipalities
Served by the Facility
Due to a fire in 2017, material in Cumberland County is being processed in Region 5.

Nova Scotia MRFs

# = Municipalities
Served by the Facility
Nova Scotia Organics Facilities

# = Municipalities
Served by the Facility
Here we are ...
Concerns and Considerations

Stranded Assets: From Landfills to Transfer Stations

- Potential for higher disposal costs for municipalities to subsidize new infrastructure while maintaining existing or abandoned infrastructure
- Potential loss of tipping fee revenue at landfills, transfer stations

Oversight for Thermal Treatment Facilities

- Approvals (how many can NS reasonably ‘feed’)
- Volume considerations
- Acceptable feedstock
Considerations & Concerns

Enforcement & Compliance Questions to the Province
- Will landfills receive a higher level of scrutiny if thermal treatment is considered diversion?
- Will solid waste from out of province be permitted?

Feedstock to be Used for Thermal Treatment
- What’s ‘really’ in?
- Options for how to manage items that cannot be accepted at thermal treatment facilities
Other Considerations

20-year Message: World Leaders
- Public acceptance
- Could reduce importance of waste reduction, reuse and recycling initiatives

Other Concerns:
- Impact to Diversion funding
- What if the technology fails?
- Why Nova Scotia?
Overview of Municipal Considerations

Social Acceptance, Environment
- Needs to allow for public buy-in, emphasizing waste prevention and diversion as more effective solutions for the management of solid waste
- How the technology affects the environment

Operational Efficiencies
- Overall impact to our highly integrated solid waste system

Fiscal Responsibility
- Short & long term financial implications
Welcome to our Thermal Treatment Proponents