Phase 14 Landfill: Consistency with the Solid Waste Management Hierarchy and Recycling Standards

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Consistency with Solid Waste Management Hierarchy

The Crossroads Facility has been and continues to be fully consistent with and supportive of all tiers within the State's Waste Hierarchy.

- Existing programs continue
- New initiatives launch

Existing and New Initiatives

Services Currently Provided by WMDSM and that will Continue with Phase 14		Additional Services Proposed with Phase 14
- Waste Evaluation and Sustainability Consulting	REDUCE	- Waste Evaluation and Sustainability Education Classes and Workshops
- Battery Diversion - E-Waste Diversion - Beneficial Tire Reuse Program	REUSE	- Textile Diversion and Reuse Program - Hazardous Materials Collection and Reuse Program
- Beneficial Tire Reuse Program - Single-Sort Recycling Program - E-Waste Diversion Program - Battery Diversion Program	RECYCLE	- Transfer Station Upgrades - Textile Diversion and Reuse Program
- Cardboard Recycling Program - <u>Woodwaste</u> Recycling Program	COMPOST	- Organic Diversion and Compost Facility
- Landfill Gas Renewable Energy Power Plant - Tire Incineration for Power Generation - Leachate Recirculation	WASTE TO ENERGY	- Waste Diversion to and from WTE Facilities
- Phase 8 Secure Landfill	LANDFILL	- Phase 14 Secure Landfill

REDUCE

The Phase 14 project incorporates a number of innovative programs specifically designed to reduce waste.

- Waste Evaluations
 - Companies
 - Municipalities



REUSE

Consistent with the Hierarchy, the Phase 14 project incorporates a number of innovative reuse programs.

2019

- Battery Diversion
- E-Waste Diversion
- Beneficial Tire Reuse Program
- Hazardous Material Collection and Reuse
- Textile Diversion

2020





RECYCLE

The Phase 14 project continues and enhances the highly successful Crossroads Recycling Programs.

- Accepts and manages recyclables at regional level for municipalities and businesses through Single-Sort Program
- Continues existing recycling programs for cardboard, woodwaste, batteries, e-waste and tires
- Proposed substantial upgrade to Airport Road Transfer Station

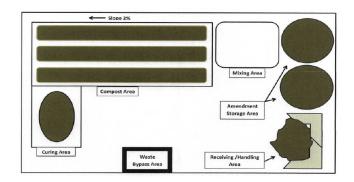


The general conceptual design for the upgraded Airport Road Transfer Station will be similar to this facility.

COMPOST

Consistent with the Hierarchy, the Phase 14 project incorporates a number of measures to divert food waste from the landfill.

- Organics Diversion and Compost Program
 - Farmington Partnership





WMDSM provided critical assistance to the development of a composting program in Farmington, Maine in 2019.

Photo by Mark King, Maine DEP, Food Scraps Composting Pilot Program Report, 10, (January 2019).

WASTE TO ENERGY

The Crossroads Facility includes a gas-toenergy plant that collects landfill gas and converts it to electricity.

- According to US EPA's Hierarchy, collection and combustion of landfill gas fits within its third of four tiers, as a waste-to-energy facility (see figure to right).
- ► In 2019, the Crossroads energy plant collected and combusted 490 million standard cubic feet of landfill gas which generated over 24 million kilowatt hours of electricity.

U.S. EPA Hierarchy

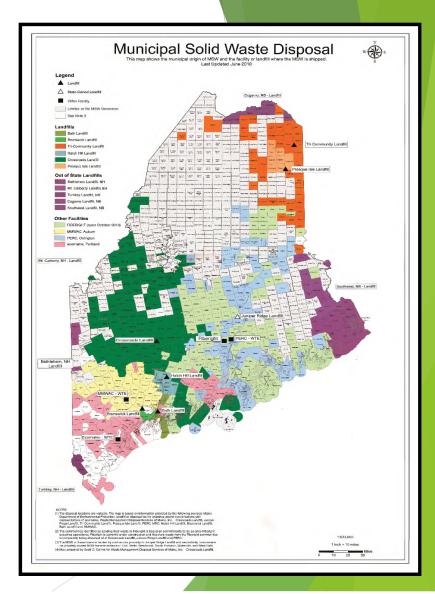




LANDFILL

The Phase 14 project is a critical component of an overall integrated program for managing solid waste for municipalities and businesses throughout Maine.

- Complement to Waste to Energy and processing facilities: disposal of residuals, bypass, ash and FEPR.
- Disposal option for wastes that cannot be incinerated, recycled or reused: i.e., special wastes and CDD.
- Cost-effective MSW disposal for large geographic region.



Crossroads programs ensure the volume of waste to be landfilled at the Facility has been reduced to the maximum extent practicable.

- Single-Sort Recycling Program
- Organics Diversion and Compost Program
- Battery Diversion Program
- Textile Diversion Program
- ► E-waste Diversion Program
- Cardboard Recycling Program
- Woodwaste Recycling Program
- Transfer Station Upgrade



Consistency with State Recycling and Source Reduction Programs

Phase 14 continues and enhances Crossroads' Recycling programs including Single-Sort, Cardboard, Battery, E-Waste, Woodwaste and Tires.

Phase 14 continues and expands source reduction programs such as Waste Evaluations, Hazardous Material and Textile Collection Programs.



Consistency with Recycling Provisions of State Materials Management Plan

- Compliance with Solid Waste Hierarchy
 - Phase 14 is consistent with the Hierarchy
- ► Food Recovery Hierarchies
 - Phase 14 is consistent with Food Recovery Hierarchy as demonstrated by its Organics Diversion and Compost Program

