

Penobscot Energy Recovery Company



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**A Waste-To-Energy Plant that works for
the citizens of Maine**

CLEAN RENEWABLE AND SAFE ENERGY

Penobscot Energy Recovery Company L.P. (*PERC*), was organized in 1983 for the purpose of developing and owning a 25.3 MW, 1,000 ton-per-day, waste-to-energy facility, located in Orrington, Maine. PERC processes over 300,000 tons of municipal solid waste (MSW) annually.

The Facility consists of two major systems: a front-end waste processing system and a power generation system. The front-end system is comprised of two independent processing lines which consist of flail mills, magnet separators, trommels, secondary shredders, and associated conveyors. This process shreds and separates the MSW into a uniform particle size (RDF) which is burned in the boilers. The non-combustible material from this process is further separated into ferrous metal (which is recycled) and front-end processing residue (glass and grit/OBW) which is delivered to a landfill for disposal.

The combustible portion of the waste, the RDF, is conveyed to the power generation system. The RDF is combusted, steam is generated by the boilers and sent to a turbine generator to generate electric power. Electric power, which is generated from the turbine generator is connected to the existing Bangor Hydro-Electric power transmission system. The steam from these boilers produces up to 25 MWH gross (21 MWH net) of electrical power. That is enough electrical power to supply 22,000 homes.

The PERC facility uses sophisticated modern Continuous Emission Monitoring (CEM) to maintain low levels of air emissions. All flue gases from the combustion process are monitored. Pollution Control equipment consists of Combustion Controls; Scrubber for acid gas control; and Bag Houses for particulate control. Environmental performance limits are monitored by CEM equipment which includes CO, SO₂, NO_x and Opacity. This data is collected and sent to the

Control Room data collection computer. This equipment along with highly skilled plant operators ensures emissions are kept as low as possible to protect the environment.

Contracts

MSW - The facility services 170+ communities, with a population of over 300,000 citizens, throughout central and northern Maine. These communities supply approximately two thirds of the MSW needs (200,000 tons) to the facility annually. The remaining MSW capacity is supplemented by a combination of commercial, in-state and out-of-state contracts. Wood and tire chips are also used as a supplemental fuel.

Power - The facility sells its net electrical output to Bangor Hydro Electric Company under a 30-year power sales agreement.

Residue Disposal - PERC has a contract with the Juniper Ridge Landfill, in Old Town, Maine, for disposal of G&G, N/P, ash and by-pass waste. The landfill is not owned or operated by PERC.

Building/Unit Layout

The PERC facility consists of a number of structures including the Administration Building, Maintenance Shop Building, Rolling Stock Maintenance Building, Scale House, MSW Process Building, Switch-Gear Area and the Boiler House building. The facility has two scales for recording of truck delivery information. The Process building serves as the delivery point and process area for the MSW. It also has a storage area for stockpiling of the RDF. Additionally electrical equipment, spare parts area, maintenance area and all associated equipment for MSW processing are within this structure.

The Boiler House area has two Riley boilers and all associated boiler and electrical equipment. In addition, the Control Room is located in the Boiler House. From this Control Room, both Boiler Processes and MSW Processing are monitored.



HEALTH AND SAFETY



The facility has a Safety Program administered by the on-site Safety Director. We provide training on all required areas of safety. The facility also performs continuing health checks throughout the year as well as industrial hygiene air sampling testing. In addition the plant has its own fire safety squad.

Permits

PERC has a number of Air and Solid Waste Permits. This includes Title V permit issued by the Maine DEP Bureau of Air Quality. PERC also has a Solid Waste permit issued by the Maine DEP.

Landfills in Maine

Landfill space and the smart utilization of the space continues to be a major debate with the State of Maine and the entire country. Landfill space should be looked at as a use of last resort. In addition to the energy recovery benefits of a Waste-to-Energy facility, PERC also significantly helps reduce the need for landfill space. Processing MSW and burning of MSW ensures that this valuable landfill space is used wisely. MSW processed through the PERC Waste-to-Energy plant is reduced in volume by about 90%, thereby saving valuable landfill space for future Maine citizens.

Now and For the Future

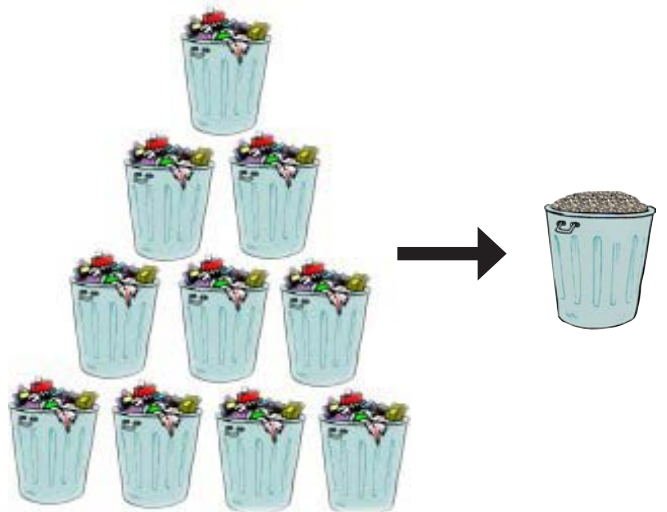
PERC has been and continues to conduct vigorous preventive maintenance practices. Based on PERC's current maintenance practices, the facility will be operating well beyond any of its current contracts.

PERC endorses the State of Maine's solid waste hierarchy - Reduce, Reuse, Recycle, Incinerate and Landfill in its continued provision of a long term environmentally sound and affordable waste disposal solution for Maine communities.

Air Emissions of Waste-to-Energy and Fossil Fuel Power Plants Pound per megawatt hour			
Facility Type	Carbon Dioxide	Sulfur Dioxide	Nitrogen Oxides
Coal	2,249	13	6
Oil	1,672	12	4
Natural Gas	1,135	0.1	1.7
WTE	832	0.8	5.4

(2005 SWANA Applied Research Foundation by Jeremy O'Brien)

Saving Landfill Space in Maine



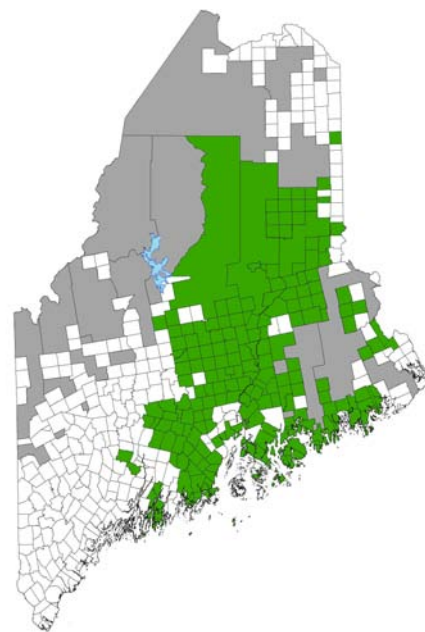
For every ten garbage cans of solid waste delivered to PERC, the Waste-to-Energy process reduces the volume requiring disposal at the landfill to just one garbage can of residue.

Municipal Review Committee

A public-private waste-to-energy partnership that works for Maine.

The PERC facility and the Municipal Review Committee (MRC) work in partnership to provide reliable, reasonably priced environmentally responsible waste disposal services to nearly 30 percent of Maine households. Equity Chapter Municipalities currently own approximately 25% of the PERC facility as limited partners. These municipalities have formed the Municipal Review Committee, Inc. to act as their agent. The MRC oversees the operation of the PERC facility on behalf of the communities. The unique ownership structure of PERC, including a substantial financial investment by the towns, ensures a high degree of cooperation toward shared objectives. Maintaining stable costs and reliable service is dependent on both consistent application of the Maine Solid Waste Management and Recycling Act and an on-going, reasonably priced disposal site for waste-to-energy facilities residue.

The raw material demands of the Facility are met primarily by long-term waste handling agreements with approximately 170 municipalities, refuse disposal districts, public waste disposal corporations and other public entities in Maine. In all, over 200 municipalities, which contributed approximately 65% of the facilities raw material, dispose of waste through PERC.



The Green indicates the Maine communities that utilize PERC to dispose of their MSW.

Host Community:

Penobscot Energy Recovery Company (PERC) is located 5 miles south of Bangor Maine, in Orrington on a 42-acre site. From the start, PERC has enjoyed a very good relationship with the Host Community.

Operation and Maintenance Agreement:

ESOCO Orrington, LLC operates and maintains the Facility. To learn more about the Penobscot Energy Recovery Company facility, or to schedule a tour, please contact:

Penobscot Energy Recovery Company

29 Industrial Way
Orrington, Maine 04474
207-825-4566

THE RIGHT CHOICE FOR MAINE'S FUTURE