

MATERIALS MANAGEMENT FACILITY



Landfill

- ✓ The regional landfill opened in 1992 in the Town of Rodman and provides reliable, environmentally-sound disposal of waste for residents, businesses and institutions in Jefferson, Lewis and St. Lawrence counties. It is open to permitted haulers only.
- ✓ The state-of-the-art facility features a double-liner system that provides primary and secondary leachate collection. (Leachate is liquid that has come in contact with waste.) The liner system, comprised of a soil layer and a layer of man-made materials, creates a six-foot barrier between the waste and the environment. The containment system has never been compromised.
- ✓ The landfill features an extensive leachate collection and containment system. Leachate is collected through a pumping and piping system in the ground and stored temporarily in three 1.1-million-gallon onsite tanks before being transported by Authority tanker trucks to the City of Watertown for treatment.
- ✓ The Authority is permitted to construct and operate a 154-acre landfill. The Authority owns 1,543 acres, which provides for ample buffer between the landfill and its surroundings.
- ✓ The site features two recreational trails that are open to the public for hiking, cross-country skiing, snowshoeing and other non-motorized activities.
- ✓ In 2009 the Authority partnered with an energy company to create a gas-to-energy plant that converts methane, a by-product of waste, into electricity using four 1.6-megawatt generators. The electricity generated is enough to power over 4,300 homes.
- ✓ The Town of Rodman receives annual host community benefits based on the tonnage of waste received at the landfill.



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Landfill Expansion

- ✓ Understanding that the original landfill cells would one day reach capacity, planning for an expansion began in 2006. The expansion extends the life of the existing landfill by approximately 50 years and secures uninterrupted, long-term disposal capacity that is locally-controlled, environmentally sound and cost-efficient, a critical resource for the economic stability and security of the region.
- ✓ There were three primary steps in the environmental review and permitting process for the landfill expansion: U.S. Army Corps of Engineers federal wetlands permitting, the State Environmental Quality Review Act (SEQRA) process, and NYS DEC permitting. The process began in 2010 and provided many opportunities for citizen and agency input and questions. All required permits were received by the Authority in early 2018.
- ✓ Construction on the expansion began in 2018 and finished in 2022. The expansion area is approximately 88 acres, of which 76 acres will be under liner.
- ✓ The protection of groundwater is a primary goal and is achieved by locating the landfill expansion in an area where the soil has a high clay content, thus restricting the quick movement of any contaminants, the construction of a double-composite liner system, a network of groundwater monitoring wells surrounding the lined waste disposal area, and monitoring activities that track the effectiveness of the liner system.
- ✓ Individual "cells" will be constructed as part of the landfill expansion as additional disposal capacity is needed. The total expansion will consist of nine cells, numbered 12 through 20. Two new cells have been constructed so far. The estimated life of the new cells in total is 50 years; the actual life depends upon the volume of waste received.
- ✓ A new perimeter access road, storm water retaining ponds, storage buildings, leachate pumping stations and groundwater monitoring wells were built onsite as part of the expansion project. In total, the Authority samples at 33 groundwater monitoring wells around the site to ensure there are no negative impacts from landfill operations. As additional cells are constructed, additional monitoring wells will also be installed.
- ✓ New litter fence was installed around the new cells to contain waste that may be blown around by the wind. Staff routinely collect the waste caught by the litter fence.
- ✓ The project includes an extensive effort to restore and protect wetlands. Based on the expansion footprint, approximately 12 acres of federally-regulated wetlands and 2,143 feet of stream were impacted. As part of the onsite mitigation plan, preservation of 45,651 feet of headwater streams, 107 acres of wetlands and 328 acres of stream and wetland buffers are being restored and will be protected in perpetuity.
- ✓ The Authority completed an offsite wetland and stream restoration and enhancement project in the same watershed along Skinner Road in the Town of Ellisburg on property owned by the NYS DEC. An agricultural field owned by the DEC was converted to 28 acres of wetlands, and 650 feet of stream bank along Skinner Creek was stabilized. This project created wildlife habitat, improved water quality and helps mitigate runoff in the area.
- ✓ Over 3,000 native tree seedlings were planted to help replace some trees that had to be harvested on the expansion site.

Cell Closure

- ✓ The life of a landfill also includes the closure of waste areas once they have reached capacity. This is an on-going process. In 2021, a 14.5-acre section was permanently capped with a waterproof membrane. The cap is sealed and covered with a thick layer of soil, then seeded. Every capped section is monitored and maintained in perpetuity. Capping helps reduce leachate generation and control odors.