

Landfill Gas Collection System Expansion Starts 2026 Capital Investments

LLARC is working on several projects this year to improve the facility's environmental controls and services to the public, beginning with the addition of 10 methane gas collection wells and piping infrastructure. The timely construction of these wells is critical to controlling odors from closed and capped landfill cells. LLARC personnel monitor solid waste placement and decomposition data to plan proactive investments in the landfill's gas recovery system.

The new wells cover an area of approximately 1.8 acres and will be integrated into LLARC's waste-to-energy system that produces approximately three megawatts of renewable electricity at an on-site power plant. Engineering services were provided by SCS Engineering of Denver, Lancaster County, and construction is being completed by Kinsley Construction of York. The project is scheduled for completion in April.



A bald eagle scans for prey atop one of LLARC's methane gas collection wells.

Photo by Randy Savage, lead operator

STAY CONNECTED

CCSWA Signs New Community Agreement Initial Steps in Proposed Expansion

CCSWA and Caernarvon Township entered into a new "Host Community Agreement" this month, an early step in the process of applying to the state Department of Environmental Protection (PADEP) for a modest expansion of LLARC. The agreement was negotiated with the township during several public meetings and offers enhanced benefits, including a 13 percent increase in host fees paid to the township that will escalate in future years by similar amounts, based in part on solid waste volumes disposed at LLARC.

The expansion plan, shown on the right, includes 8.6 acres of land designated for new disposal space, along with the construction of two new stormwater basins that will reduce the peak



flow to the unnamed tributary along Bootjack Road. The stormwater flow reduction was requested by the Caernarvon Supervisors. The additional disposal area, located to the north of the primary facility, is expected to provide 10-12 years of capacity.

These agreements are an important initial element in PADEP's landfill permitting procedures, allowing municipal waste management facilities to support local governments' priorities as well as provide financial benefits through host fees.

Pennsylvania's solid waste facility permitting regulations are among the most comprehensive in the U.S., and provide meaningful opportunities for public and municipal government participation as applications are reviewed. CCSWA looks forward to engaging with state regulators and stakeholders in the community as it prepares to file an application for the expansion of LLARC.



Material Recovery and Recycling in 2025

LLARC works to continuously improve its municipal recycling and material recovery programs, as highlighted by the total volume of 11 different materials collected and diverted from the waste stream last year, summarized below. While compostables like wood waste, leaves and grass make up the largest amount, LLARC also recycled 191 tons of scrap metal, 123 tons of e-waste and 58 tons of appliances, along with a full range of other household recyclables.



More on LLARC's efforts to support municipal recycling programs and invest in the facility's household hazardous waste management capabilities will be featured in upcoming newsletters.

MATERIALS	TONS IN 2025
Plastic Bags	1.43
Styrofoam	2.04
Mixed Paper	38.94
Comingled Bottles/Can	39.62
Corrugated Cardboard	52.01
Appliances	58.46
E-Waste	123.75
Scrap Metal	191.14
Hardwood/Skids	342.58
Leaves/Grass	1,995.43
Wood Waste	2,617.01

Maintaining Operational Controls & Preventing Nuisances

Last year's LLARC newsletters summarized the facility's leachate controls and liner systems as important parts of the landfill's environmental management program to protect local land and water resources. Several day-to-day operational controls are also important elements of that program, working to prevent off-site impacts in the community.

Incoming solid waste is first screened by personnel to divert material that might be incompatible with the facility's state permits, with waste then disposed of at a small "working face," a limited area designated to support daily operations. Solid waste is compacted, and the area is covered at the end of each day with approved materials to control odors. If odors are detected around the working face, deodorizing misting systems are used to reduce them.

Portable fences are placed around the working face to capture lightweight paper, plastic and similar materials, keeping them from becoming airborne. LLARC limits operations or even closes on extremely windy days, as necessary, to prevent materials from blowing off-site. Finally, landfill staff regularly patrol areas of the property and along with the local length of Division Highway, to collect any material that may have escaped on-site controls.



Portable litter fences line a portion of the landfill working face.

Dust controls include the frequent use of water trucks along access roads and personnel assigned to spray water on areas around the working face on dry days. Trucks leaving the landfill must go through a tire wash station to prevent mud from accumulating along Division Highway, with water trucks utilized as needed along the roadway.

Taken together, these controls allow LLARC to achieve its goal of managing solid waste without impacting neighboring properties or the community at large.



December marked LLARC's 15th annual disabled veterans' deer hunt, allowing the facility to honor our veterans by providing them with a safe and enjoyable hunting opportunity. Here is the significance of the event's experience, in the words of a volunteer and organizer:

"It means so much for veterans to be able to get together for something positive like this, because we too often have to gather for things that aren't so great. I can say that this has honestly saved some of my guys' lives."

Volunteer Anthony Piccioni, Former USMC, Captain, Infantry Officer

"To be able to put this hunt on is an honor and a privilege, and a small thing that we can do to give back to these great service members of our country. It's the best two days of my entire work year."

Organizer Zachary Bair, USDA Wildlife Services District Supervisor/Wildlife Biologist