

Briefing Document: Bethlehem Landfill Company Consent Order and Agreement

Executive Summary

On January 14, 2026, the Pennsylvania Department of Environmental Protection (Department) and the Bethlehem Landfill Company (BLC) entered into a Consent Order and Agreement (COA) to resolve a series of significant environmental violations at BLC's municipal waste landfill in Lower Saucon Township, Northampton County. The COA follows a multi-year period (2020–2025) characterized by recurring failures in landfill gas management, inadequate waste cover, and persistent offsite odors that impacted local residents.

As part of the settlement, BLC has paid a civil penalty of **\$137,750.00**. The agreement mandates a strict schedule for corrective actions, including the installation of new gas extraction wells, the completion of over eight acres of final and temporary capping by mid-2026, and the implementation of enhanced odor monitoring and communication protocols. Failure to meet these deadlines will subject BLC to stipulated daily civil penalties ranging from \$250 to \$500 per violation.

Detailed Examination of Violations (2020–2025)

The Department's findings detail a pattern of non-compliance across several operational categories, primarily focusing on landfill cover integrity and air quality standards.

1. Landfill Cover and Capping Failures

- **Final Cover Delays:** A 2020 review revealed BLC failed to place final cover in several areas within one year after waste disposal ceased, as required by the Southeastern Realignment expansion plan.
- **Daily Cover Deficiencies:** In April 2022, BLC reported supply chain issues for daily cover materials. Subsequent inspections found exposed, uncompacted waste and an inadequate five-day supply of cover material onsite.
- **Inadequate Intermediate Cover:** Inspections throughout 2024 and early 2025 consistently identified fissures, leachate seeps, and "flagging" (exposed waste) on the southeast slopes. Despite Department warnings, BLC's internal inspections incorrectly documented these areas as having "Proper" integrity.
- **ADC Foam Failure:** In April 2024, BLC's Alternate Daily Cover (ADC) foam failed to control odors and litter. The manufacturer, Atmos, found "substantial biological growth" in the bulk storage tank that compromised the foam's integrity.

2. Air Quality and Landfill Gas (LFG) Management

- **Elevated Methane Levels:** Surface Emissions Monitoring (SEM) in December 2024 identified ten readings exceeding 500 ppm of methane on the southeast slope.
- **Offsite Malodors:** Between January and December 2024, the Department's Emergency Response Team confirmed landfill gas and garbage odors at residential locations on several streets, including Johnston Avenue, Madison Avenue, Main Street, and Riverside Drive.
- **Reporting Failures:** Since May 2023, BLC has failed to consistently submit required monthly reports and memos regarding enhanced surface monitoring as part of its Nuisance Minimization and Control Plan.

Legal and Regulatory Framework

The Department determined that BLC's actions constituted "unlawful conduct" and a "statutory nuisance" under several Pennsylvania laws:

- **Solid Waste Management Act (35 P.S. §§ 6018.101-6018.1003):** Specifically regarding waste compaction, daily/intermediate cover thickness (minimum 12 inches for intermediate), and final capping timelines.
- **Air Pollution Control Act (35 P.S. § 4001 et seq.):** Prohibiting the emission of malodorous air contaminants detectable outside the property line.
- **25 Pa. Code Chapters 123, 127, and 273:** Governing municipal waste landfill operations, odor control, and permit compliance.

Mandated Corrective Actions

The COA outlines specific engineering and procedural requirements to bring the facility into compliance:

Infrastructure and Capping Requirements

Action Item	Deadline
Temporary Capping (3.1 acres in Southeast Realignment)	March 31, 2026
Final Capping (5.4 acres in Southeast Realignment)	June 30, 2026
Gas Extraction Installation (9 vertical wells, 3 horizontal wells, piping)	Within 90 days of execution
As-Built Drawings (Details of gas well placement and construction)	30 days post-installation

Procedural and Reporting Requirements

- **Archaea Plant Communication:** Within 30 days, BLC must submit a Standard Operating Procedure (SOP) for communications with the Archaea Gas-to-Energy Plant regarding operational issues.
 - **Nuisance Minimization and Control Plan (NMCP):** BLC must submit a revised NMCP that details specific mitigation measures rather than merely referencing other documents.
 - **Enhanced Odor Mitigation Plan:** A revised plan must be submitted to include:
 - Identification protocols for sources of elevated SEM readings.
 - Monthly submission of SEM data points and location maps.
 - Comparative written evaluations identifying trends and required corrective measures.
-

Financial Obligations and Enforcement

Civil Penalties

- **Initial Settlement:** BLC consented to a civil penalty of **\$137,750.00**, paid in full upon signing the agreement.
- **Stipulated Penalties:** Ongoing compliance is enforced through daily fines for future delays:
 - **\$500 per day** for failure to meet capping or gas well installation deadlines.
 - **\$250 per day** for failure to submit required documents, SOPs, or revised plans.

Enforcement Provisions

The Department maintains the right to pursue additional remedies, including further civil penalties or legal action, if BLC fails to comply with the COA. BLC has waived its right to appeal the Department's decisions under this agreement to the Environmental Hearing Board.