U.S. Environmental Protection Agency Office of Inspector General

20-P-0236 July 30, 2020

At a Glance

Why We Did This Project

We conducted this audit to determine whether active municipal solid waste landfills are operating under the appropriate air quality permit. As waste in an MSW landfill decomposes, it emits methane, carbon dioxide, and nonmethane organic compounds that can cause adverse health and environmental effects. The Clean Air Act and U.S. Environmental Protection Agency regulations require:

- MSW landfills to report their waste capacity to the appropriate state agencies.
- Large MSW landfills to obtain what are commonly called "Title V permits" from their state air permitting authorities.
- Large MSW landfills to calculate whether their emissions will exceed regulatory levels and, if so, install emissions controls.
- States to submit plans to the EPA requesting approval to implement the EPA's MSW landfill air emissions regulations for existing MSW landfills, as well as annual progress reports.
- The EPA to approve state plans or implement a federal plan.

This report addresses the following:

Improving air quality.

This project addresses these top EPA management challenges:

- Complying with internal control (data quality).
- Overseeing states implementing EPA programs.

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List of OIG reports.

EPA Needs to Improve Oversight of How States Implement Air Emissions Regulations for Municipal Solid Waste Landfills

What We Found

We identified 12 active MSW landfills in the two states we audited, Georgia and Texas, that could be operating without the required Title V permits. The Georgia and Texas state agencies responsible for issuing Title V permits to MSW landfills did not always obtain the data needed to verify whether the landfills required a Title V permit and whether landfill emissions exceeded allowable levels. In four instances, the regulatory requirements were misinterpreted.

Effective EPA oversight of state implementation of landfill air emissions requirements helps achieve air quality, public health, and environmental goals set by the Clean Air Act.

The EPA did not identify deficiencies in how Georgia and Texas implemented Clean Air Act regulations to control air emissions from MSW landfills. For example, to oversee state implementation of the 1996 regulations to address emissions from existing MSW landfills, EPA Regions 4 and 6 should have—but did not—verify whether Georgia and Texas submitted (1) complete state plans requesting approval to implement these regulations and (2) the required annual progress reports. EPA review of these documents is necessary to provide assurance that states have an adequate plan for and are effectively implementing and enforcing MSW landfill emissions regulations in accordance with federal requirements.

Without effective state implementation and EPA oversight of Clean Air Act regulations for MSW landfills, these landfills could operate for years without required emissions controls. As a result, MSW landfills could emit more air pollutants than allowed under a Title V permit, and state efforts to meet the EPA's air quality standards for ozone and fine particulate matter could be hindered. The EPA revised its Clean Air Act regulations for MSW landfills in 2016 and requested that states submit new plans for existing MSW landfills. Implementation of the revised regulations provides the EPA with an opportunity to verify that the new plans are complete, annual progress reports are submitted, and proper oversight is conducted.

Recommendations and Planned Agency Corrective Actions

We recommend that the regional administrators for Regions 4 and 6 require that Georgia and Texas determine whether the MSW landfills identified in this report need to obtain Title V permits and install emissions controls. We also recommend that the EPA develop guidance for Clean Air Act MSW-landfill requirements that addresses the review and oversight of the Title V permitting process, the approval of state plans, the review of annual progress reports, and the periodic review of implementation and enforcement. We consider four of our seven recommendations resolved with corrective actions pending. The remaining three are unresolved.