

**STATEMENT OF BASIS**  
**Shelby County Landfill**  
**Shelby, County**  
**Facility No. 411-0068**

Introduction

The Shelby County Commission has applied for a Major Source Operating Permit (MSOP) for the Shelby County Landfill, which is a municipal solid waste (MSW) landfill. This proposed Title V MSOP issuance has been developed in accordance with the provisions of ADEM Admin Code r. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of the permit.

The facility originally began operations in 1997. This is the initial issuance.

The facility is located in Shelby County, which is in compliance with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against Shelby County Landfill necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID AL0000000111700068).

Potential emissions are as follows:

<b>Pollutant</b>	<b>Potential Emissions (tpy)</b>
PM <sub>10</sub>	3.08
SO <sub>2</sub>	6.04
NO <sub>x</sub>	7.24
CO	143.89
NMOC (Uncontrolled)	68.87
NMOC (Controlled)	18.25
VOC	8.79
HAPs	12.5
Toluene	8.67

No other criteria pollutants are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold of 100 tons per year.

Requirements

*X001: MSW Landfill*

Shelby County is subject to NSPS, 40 CFR 60, Subpart XXX, which includes standards of performance for MSW landfills that commenced construction, reconstruction, or modification after July 17, 2014, because it has a design capacity greater than  $2.5 \times 10^6$

cubic meters and  $2.5 \times 10^6$  megagrams and had a modification in the form of a design capacity increase in 2022. Shelby County's uncontrolled non-methane organic compounds (NMOC) emissions have exceeded the 34 megagrams per year threshold, and the landfill has voluntarily installed a gas collection and control system (GCCS). 40 CFR 60.762(b)(2)(ii) grants the landfill a 30-month period from the date of submittal of the first annual NMOC report after the NMOC emission rate exceeded 34 megagrams per year before the site will become subject to the operational standards and monitoring, recordkeeping, and reporting requirements for a GCCS. Shelby County's 30-month period ends on March 17, 2024. Until that time, Shelby County is required to continue submitting an NMOC report annually.

As of 2023, the uncontrolled NMOC emissions have also exceeded 50 megagrams per year. Because of this, Shelby County Landfill will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills, 40 CFR 63, Subpart AAAA at the end of its 30-month install and startup period on March 17, 2024, under NSPS XXX. Subpart AAAA also requires MSW landfills to keep the records and reports specified in the general provisions of 40 CFR 60. Recent changes to Subpart AAAA include an operating temperature increase for gas field wells from 131 F to 145 F, an end to meeting an oxygen standard of 5% or less (though monitoring is still required), and changes to the procedures for correcting exceedances. The startup, shutdown, and malfunction (SSM) requirements no longer apply as of September 27, 2021. The standards of Subpart AAAA will still apply during SSM and instances of SSM will be reported in the semiannual report instead of a separate SSM report.

In addition to the requirements of the NSPS and the NESHAP, the flare will also be subject to the requirements of 40 CFR 60.18 that cover general control device and work practice requirements.

*X002: MSW Landfill Asbestos NESHAP*

The landfill has also accepted waste containing asbestos, making it subject to the NESHAP 40 CFR 61, Subpart M. Subpart M contains standards for covering asbestos containing waste and details the records that must be kept and reports that must be submitted on asbestos containing waste.

*X003: Facility-Wide Fugitive Dust Control*

The landfill is required to take reasonable measures to prevent fugitive dust that travels beyond the landfill property line. The MSOP outlines actions the site must take in different areas of the landfill to meet the dust control requirements. There is also a requirement to monitor visually on a weekly basis. The landfill will be required to maintain records of dust inspections and include information on monitoring of fugitive dust control measures in the semi-annual report to the Department.

The potential VOC emissions from the landfill are less than 250 tons per year; therefore, the facility is not subject to the Prevention of Significant Deterioration (PSD).

#### Monitoring of emissions

Shelby County Landfill will maintain records on site records of the design capacity report, waste in place, and year to year waste acceptance rates and other records to show compliance with the NSPS of 40 CFR 60, Subpart XXX and 40 CFR 63, Subpart AAAA.

The flare will be monitored to ensure the continuous presence of a flame. The flare will be operated in accordance with the requirements of 40 CFR 60.18.

Compliance Assurance Monitoring (CAM) is not applicable as Shelby County is subject to NSPS and MACT standards that were both promulgated after November 15, 1990. According to 40 CFR 64.2(b)(1)(i) on exemptions from CAM, emission limitations or standards proposed after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act are exempt from CAM requirements, and there are no other source specific standards applicable to this facility.

#### Recordkeeping and Reporting Requirements:

Shelby County Landfill is required to keep records including, but not limited to, the current amount of solid waste in place, year-by-year waste acceptance rates, above required monitoring and testing of the GCCS for a minimum of 5 years. These records will be evaluated by the Department during the annual inspection. The facility is also required to submit a deviation report on a semi-annual basis and an Annual Compliance Certification (ACC).

#### Environmental Justice

An Environmental Justice analysis was performed utilizing EPA's EJSCREEN tool and the Council on Environmental Quality's (CEQ) Climate and Economic Justice screening tool (Justice 40). This permit is for an existing facility and no modifications or increases in emissions will result from the issuance of this permit; therefore, it was determined that enhanced outreach is not necessary.

#### Recommendation:

I recommend that the Shelby County Waste Disposal Center be issued the enclosed Title V Permit No. 411-0068 for a Municipal Solid Waste Landfill with a design capacity of greater than  $2.5 \times 10^6$  megagrams with a gas collection system and flare.

---

John Robert Gill  
Chemical Branch  
Air Division  
May 8, 2024