

**STATEMENT OF BASIS
GENPAK, LLC (Hope Hull, Facility #2)
Montgomery County
Facility No. 209-0087**

Genpak, LLC has applied for renewal of Major Source Operating Permit (MSOP) No. 209-0087. This proposed Title V MSOP renewal 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 was originally constructed in 2001. The fourth renewal Title V MSOP was issued on January 6, 2020, and expired on December 26, 2024. The renewal application was received on June 24, 2024. ADEM Admin. Cond r. 335-3-16-12(c) states “If a timely and complete application for a permit renewal is submitted, but the Department fails to take final action to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied and any permit shield granted for the permit shall continue in effect during that time”; therefore, the current MSOP was administratively continued.

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

There are no current or ongoing enforcement actions against Genpak, LLC 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 AL110013335408).

The current MSOP consists of Line #001: Extrusion and Thermoformer Operations.

No major additions or changes to the current MSOP are occurring during this renewal. Minor changes include updating the general permit provisos to better reflect current Department policies.

EMISSIONS

The facility is a major source with respect to Title V for volatile organic compounds (VOCs). No other criteria pollutants are emitted in sufficient quantities, actually or potentially, to exceed the Prevention of Significant Deterioration (PSD) threshold of 250 tons per year.

Given Genpak’s annual total polystyrene usage of **38,237,400 lb/yr** and expected hours of operation of 8,760 hr/yr or 730 hr/month, emissions can be calculated as follows.

A. Polystyrene used: approximately 3,186,450 lb/mon or 4,365 lb/hr

- B. Blowing agent is 3.3% of polystyrene by weight $(4,365) \times (0.033) = 144.05 \text{ lb/hr}$ (**630.93 tpy**)
- C. Permitted blowing agent required in polystyrene foam = **93%**
 *Roll storage, extrusion die and thermoforming losses equal the 7% losses
- D. Maximum recycle percentage is $34.9\% + 7\% \text{ retention losses} = 41.9\%$ total expected losses
- E. Allowable blowing agent usage = $\text{VOC limit} / \text{total blowing agent losses} = 249.1 \text{ tpy} / 0.419 = \mathbf{594.5 \text{ tpy}}$ of blowing agent usage.

Genpak will maintain their current rolling 12-month emission limitations for Unit 001 of 249.1 tons of VOC. There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) or New Source Performance Standards (NSPS) applicable to the operations at Genpak.

Genpak has the potential to emit 4.25 tons of particulate matter (PM) per year, which is calculated from vendor data related to the settling characteristics of fluff entry into Genpak's silos. The fluff silo baghouses are not considered control equipment as their function is integral to the operation of the fluff silos.

Unit No. X001 – Extrusion and Thermoformer Operations

Overview

Genpak produces foam polystyrene food trays and containers using a tandem system of extruded polystyrene foam sheet (XPS). There are four raw materials used in this manufacturing operation: polystyrene pellets, a VOC blowing agent, plastic laminate, and a nucleating agent.

This unit currently operates ten thermoformers, six fluff storage silos with bin vent baghouses, four extrusion lines, two repelletizers, one 30,000-gallon iso-pentane storage tank, one 18,000-gallon n-butane storage tank, one 12-ton carbon dioxide (CO₂) receiver tank and associated equipment. Emissions from this process are vented to the atmosphere.

Equipment for this process was initially permitted in Air Permit 209-0087-X001 on June 8, 2001, which included the VOC limit of 249.1 tons per rolling 12 months. The requirements and limitations from this permit were incorporated into the initial Title V permit on September 9, 2004.

Emission Standards/Limitations

Opacity and Particulate Matter (PM)

This unit is subject to the state allowable particulate limit and the state opacity limit for general industries.

Volatile Organic Compounds (VOC)

VOC emissions from this unit are limited to 249.1 tons during any 12-month rolling period in order to stay below the significant thresholds for PSD. This limit has been conservatively estimated to equate to 594.5 tons of iso-pentane or n-butane blowing agent usage.

Periodic Monitoring

Opacity and PM

Due to the facility's low potential to emit PM, opacity monitoring is only required to be performed once daily when the fluff silo baghouses are in operation. Additionally, whenever greater than normal opacity is observed, corrective action must be taken within 24 hours, followed by additional observation to confirm that emissions are reduced to normal. The fluff silo baghouses must also be inspected for proper operation and cleaned whenever observed emissions are greater than normal and at least once annually.

Volatile Organic Compounds (VOC)

Genpak is required to track its blowing agent usage and blowing agent retention analysis as well as keep accurate and understandable records of its blowing agent usage, estimated emissions, and analysis of the blowing agent retention in the material. The facility must also perform a blowing agent retention test at least once a calendar quarter, which shows that 93% or more of the blowing agent used is being retained in the product.

Reporting Requirements

Emissions of VOCs and HAPs will be determined from material usage, assuming worst case scenario foam recycle ratio and blowing agent retention. A report summarizing this information, the blowing agent retention test data, and the blowing agent usage data will be submitted to the Department on a quarterly basis.

Genpak will be required to maintain a logbook of the daily visible emissions observations made during the fluff silo baghouse operations. This logbook will be retained for at least five years and be made available for inspection upon request. This logbook should also contain information on the nature and date of any maintenance actions taken when excess opacity is observed.

Genpak will also be required to submit an Annual Compliance Certification report detailing the compliance status of each permit proviso.

PERMITTING FEES

Major sources are subject to operating permit fees which charge the facility a yearly amount based on the actual emission rate of pollutants for the previous year.

FUGITIVE DUST

All plant roads are paved or graveled. There are no raw materials, storage piles, products, etc. capable of generating fugitive dust at this facility. Therefore, additional specific requirements for fugitive dust are not necessary.

RECOMMENDATION

Based on the above analysis, I recommend that this facility's MSOP be renewed pending the 30-day public notice and EPA's 45-day review.

Christopher Nuckels
Chemical Branch
Air Division

CTN/ctn

June 11, 2026
Date