

## **ENVIRONMENTAL PROTECTION DIVISION**

**Air Protection Branch** 4244 International Parkway Suite 120 Atlanta, Georgia 30354 404-363-7000

# NARRATIVE

| TO:   | Jeng-Hon Su |
|-------|-------------|
| FROM: | Nada Osman  |

DATE: April 19, 2023

| Facility Name:       | Savannah Pellet Port, LLC     |
|----------------------|-------------------------------|
| AIRS No.:            | 051-00287                     |
| Location:            | Savannah, GA (Chatham County) |
| Application #:       | 28677                         |
| Date of Application: | December 14, 2022             |

## **Background Information**

Savannah Pellet Port, LLC (hereinafter "facility") is a planned pellet storage facility located at 136 Marine Terminal Drive in Savannah, GA. The facility is located in Chatham County, which is an attainment county for all criteria air pollutants. The facility will receive and store wood pellets from pellet manufacturing facilities before shipping them overseas.

Savannah Pellet Port, LLC (AIRS No. 05100287) is under the same site with SAV Facility (AIRS No. 05100260, with a current permit No. 4491-051-0260-S-02-0) and East Coast Terminal Company (AIR No. 05100208, with a current permit No. 4491-051-0208-S-05-0 and permit amendment No. 4491-051-0208-S-05-1). The three facilities are considered as one site under Title V because they are owned by Peeples Industries and under common control, are within 1 mile from each other, and have the same first two digit SIC code.

## **Purpose of Application**

On December 14, 2022, the facility submitted Application No. 28677 for the construction and operation of a wood pellet storage dome (ID No. PD1-SPP) and an associated 12,000 acfm baghouse (ID No. BH-SPP). Uncontrolled particulate matter (PM) emissions from the facility alone are expected to exceed the 100 ton-per-year (tpy) Title V major source threshold. With the proposed Baghouse BH-SPP), the after-control PM potential-to-emit (PTE) is calculated as 4.51 tpy.

Upon a request by the Division, the facility submitted a spreadsheet on March 20, 2023, showing the combined after-control PM PTE for the entire site. Since the combined after-control PM PTE, 60.6 tpy, is lower than 100 tpy, the combined site is a synthetic minor (SM) source under Title V of 1990 CAAA. Use of the control devices while the associated emission units are in operation is the SM limit for all three facilities.

A Public Advisory was issued for this application on January 11, 2023.

## **Updated Equipment List**

#### Table 1: Equipment List

| Emission Units |                          | Associated Control Devices |                |             |
|----------------|--------------------------|----------------------------|----------------|-------------|
| Source<br>Code | Description              | Installation<br>Date       | Source<br>Code | Description |
| PD1-SPP        | Wood Pellet Storage Dome | 2021                       | BH-SPP         | Baghouse    |

## **Emissions Summary**

The facility provided emission data for all three facilities. The combined after-control PM potential-toemit (PTE) for all three facilities is below 100 tpy, and therefore, the facility can be permitted as a synthetic minor source.

PM emissions are the only emissions expected from the proposed storage dome (ID No. PD1-SPP). Uncontrolled PM emissions from the stored wood pellets are greater than 100 tpy; however, in order to be considered a minor source, the facility will be required to operate its proposed control device (ID No. BH-SPP) at all times while the storage dome is in use.

PM Emissions were calculated based on 8,760 hours per year of operation, the vendor guaranteed grain loading of 0.01 gr/dscf, and the design exhaust flow rate of 12,000 acfm.

| Pollutant                              | Potential Emissions | Actual Emissions |
|--|---------------------|------------------|
| PM/PM <sub>10</sub> /PM <sub>2.5</sub> | 4.5                 | 3.8              |
| NOx                                    | 0                   | 0                |
| SO <sub>2</sub>                        | 0                   | 0                |
| СО                                     | 0                   | 0                |
| VOC                                    | 0                   | 0                |
| Max. Individual HAP                    | 0                   | 0                |
| Total HAP                              | 0                   | 0                |
| Total GHG (if applicable)              | 0                   | 0                |

 Table 2: Facility-Wide Emissions for Savannah Pellet Port (tpy)

#### Table 3: Site-Wide Emissions for Savannah Pellet Port, LLC, SAV Facility, and East Coast Terminal Co. (tpy)

| Pollutant                                | After-Control Potential Emissions |
|--|-----------------------------------|
| PM/ PM <sub>10</sub> / PM <sub>2.5</sub> | 60.6                              |

## **Regulatory Applicability**

## GRAQC 391-3-1-.02(2)(b), Visible Emissions

GA Rule (b) limits the opacity of visible emissions from processes to no more than 40%. PM emissions from the storage dome (ID No. PD1-SPP) will be controlled by the baghouse (ID No. BH-SPP), and therefore, the storage dome is expected to comply with the GA Rule (b) opacity limit.

## GRAQC 391-3-1-.02(2)(e), Particulate Matter Emissions from Manufacturing Equipment

GA Rule (e) limits PM emissions from each process based on process input weight rate. Emissions from the storage dome (ID No. PD1-SPP) will be controlled by the baghouse (ID No. BH-SPP) and is therefore expected to comply with GA Rule (e) limits.

## Permit Conditions

Condition 2.1 requires the facility to operate its control devices at all times while their associated emission units are operating.

Condition 2.2 limits facility-wide visible emissions to no more than 40% opacity, per GA Rule (b).

Condition 2.3 limits PM emissions from manufacturing equipment based on process input weight rate, per GA Rule (e).

Condition 4.1 requires the facility to perform regular maintenance on all pollution control equipment.

Condition 4.2 requires the facility to keep an inventory of baghouse filters to replace any defective ones.

Condition 5.1 requires the facility to perform daily visible emissions (VE) checks on the baghouse (ID No. BH-SPP).

Condition 5.2 requires the facility to develop and implement a Preventative Maintenance Program for the baghouse (ID No. BH-SPP).

Condition 7.1 requires the facility to submit notification of startup to the Division within 15 days of such date.

## Toxic Impact Assessment

No HAP emissions are expected from the facility, and therefore, a toxic impact assessment (TIA) was not required to be performed.

## Summary & Recommendations

Savannah Pellet Port, LLC is a planned pellet storage facility located in Savannah, GA. The site that includes the facility is a synthetic minor source because the entire site relies on air pollution controls devices to limit emissions of PM below 100 tpy; as a result, the facility will be required to operate its control device (Baghouse BH-SPP) at all times while the associated emission units (Pellet Dome PD1-

SPP) are operating. The Stationary Source Compliance Program (SSCP) will be responsible for inspection and compliance of this facility.

The Public Advisory for this application expired on February 10, 2023. No comments were received.