

Facility Name: **New WinCup Holdings, Inc. Stone Mountain**
City: Stone Mountain
County: DeKalb
AIRS #: 04-13-089-00097

Application #: TV-221421
Date Application Received: February 28, 2018
Permit No: 3086-089-0097-V-05-0

| Program | Review Engineers | Review Managers |
|-----------------------------------|------------------|-----------------|
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| Permitting Program Manager | | Eric Cornwell |

Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name: New WinCup Holdings, Inc. Stone Mountain

2. Parent/Holding Company Name

WinCup, Inc.

3. Previous and/or Other Name(s)

pka New WinCup Stone Mountain

WinCup, Parent Company: WinCup Holdings Incorporated

WinCup-Stone Mountain, Parent Company: Benchmark Corporation of Delaware

Scott Container Products Group, Inc., Parent Company: Scott Paper Company

WMF Container Corporation, Parent Company: Texstyrene Corporation

Thompson Industries Company

4. Facility Location

4640 Lewis Road

Stone Mountain, Georgia, 30083

DeKalb County

5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in DeKalb County which was designated as one of the seven counties in metro Atlanta that is non-attainment for the 2015 ozone standard (70ppb) as determined in April 2018.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

| Permit Number and/or Off-Permit Change | Date of Issuance/ Effectiveness | Purpose of Issuance |
|--|---------------------------------|--|
| Permit No. 3086-089-0097-V-04-0 | February 27, 2012 | Title V Renewal |
| Off Permit Change | May 18, 2015 | Removal of old molding machines and installation of new molding machines |

D. Process Description

1. SIC Codes(s)

3086 – Plastics Foam Products

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

This facility manufactures cups and food containers from expanded polystyrene.

3. Overall Facility Process Description

Expanded polystyrene (EPS) cups and food containers are manufactured from expandable polystyrene beads. The EPS beads are received at the facility in plastic lined corrugated boxes (i.e., gaylords) from an outside supplier. These beads have been impregnated with approximately 6% pentane, by weight. In the first processing step, the beads are introduced to steam heat in the pre-expanders where the pentane acts as a blowing agent to cause the beads to expand approximately tenfold. The material next passes through a screening process to remove non-uniform size beads. After a very brief storage period, the beads are introduced to the steam chest molding machines where heat and steam pressure are used to produce the finished product. The containers are discharged from the molding machines, moved by conveyor to the stackers, and tested under vacuum for product integrity. Finally, the finished product is packaged in polyethylene sleeves, placed in corrugated boxes and shipped offsite for distribution. Three natural gas-fired industrial boilers supply steam for pre-expansion and molding processes. The boilers also serve as abatement devices for emissions from the pre-expanders and bead mixers by manifolding their captured streams into the 3 boilers.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is a major source under non-attainment NSR regulations. Potential emissions of VOC and NO_x are greater than 25 tons per year (tpy). To avoid NSR review, VOC emissions from Pre-Expanders E001 – E008 have been limited to less than 118 tpy. The potential NO_x emissions for Boiler B001 (previously named B009) are 10.4 tpy, which is less than the significant NO_x emissions increase of 25 tpy for the Atlanta severe non-attainment area, so the boiler emissions are not significant and therefore not subject to major NSR review.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

| Pollutant | Is the Pollutant Emitted? | If emitted, what is the facility's Title V status for the pollutant? | | |
|-------------------|---------------------------|--|-----------------------------------|-------------------------|
| | | Major Source Status | Major Source Requesting SM Status | Non-Major Source Status |
| PM | Yes | | | ✓ |
| PM ₁₀ | Yes | | | ✓ |
| PM _{2.5} | Yes | | | ✓ |
| SO ₂ | Yes | | | ✓ |
| VOC | Yes | ✓ | | |
| NO _x | Yes | ✓ | | |
| CO | Yes | | | ✓ |
| TRS | N/A | | | ✓ |
| H ₂ S | N/A | | | ✓ |
| Individual HAP | N/A | | | ✓ |
| Total HAPs | N/A | | | ✓ |

3. MACT Standards

Boilers B002 and B003 would be subject to 40 CFR Part 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, but the facility only uses fuel oil in the boilers for periods of gas curtailment or gas supply emergencies. This limitation on the use of fuel oil, along with the additional limitation requiring periods of testing on fuel oil not to exceed 48 hours per calendar year, qualify the boilers as gas-fired boilers, which are exempt from Subpart JJJJJ according to 40 CFR 63.11195. Without the fuel oil usage limitations on the boilers, the boilers would be subject to this area source NESHAP standard because the facility is an area source (minor source) of HAP that owns and operates four industrial boilers that burn distillate fuel oil as a backup fuel. Boiler B001 is not subject to Subpart JJJJJ because it burns only natural gas.

Emergency Generator G01 is subject to 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because it is a stationary reciprocating internal combustion engine (RICE) at an area source of HAP emissions. Since it is also subject to 40 CFR 60 Subpart JJJJ, the only requirement of 40 CFR 63 Subpart ZZZZ is to comply with 40 CFR 60 Subpart JJJJ, as stated in 40 CFR 63.6590(c)(1).

4. Program Applicability (AIRS Program Codes)

| Program Code | Applicable (y/n) |
|---------------------------------|---------------------|
| Program Code 6 - PSD | N |
| Program Code 8 – Part 61 NESHAP | N |
| Program Code 9 - NSPS | Y |
| Program Code M – Part 63 NESHAP | Y |
| Program Code V – Title V | Y |

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

There is a existing facility-wide volatile organic compound (VOC) emission limit of 317 tons per year (tpy). This limit incorporates the warehouse VOC emissions from final product storage along with the NSR-avoidance VOC emission limit of 118 tpy for Pre-Expanders E001-E008. Previously, the warehouse emissions were incorrectly considered fugitive and were not accounted for in previous permits, but are now added to the facility-wide total so that all emissions are represented. The warehouse emissions were estimated to be 199 tpy, so this amount was added to the 118 tpy VOC emission limit for the pre-expanders to create the new facility-wide VOC emission limit of 317 tpy.

In the past, the facility tested the pentane content immediately after cup molding and determined it to be 3.0 lbs pentane/100 lbs EPS beads (3% wt), with the initial pentane content of the raw EPS bead being 6.0 lbs pentane/100 lbs EPS beads (6% wt). For the continuous Rodman process (Pre-Expanders E001 – E008), 50% of the emitted pentane is captured, so 1.5 lbs pentane/100 lbs EPS beads (1.5% wt) is transferred to the boilers for destruction. The minimum destruction efficiency required for the boilers by Georgia Rule (eee) is 90%, but performance testing has shown higher destruction efficiencies of 98-99%. Boiler B001 is the main boiler used as an emission control device, so the destruction efficiency of that boiler was used to determine the new emission limit. Boiler B001 produces 70% of the facility's steam needs and Boilers B002 and B003 operate along with Boiler B001 as needed, depending on product demand.

The following equations were used to determine the maximum amount of EPS beads that can be processed in the pre-expanders without exceeding the VOC emission limits for the pre-expanders:

Pre-Expanders E001 – E008:

$$118 \text{ tpy VOC} = (X \text{ tpy EPS beads}) * (0.03 - (0.015 * 0.98)) = (X \text{ tpy EPS beads}) * (0.0153)$$

$$X = 7,712.4 \text{ tpy EPS beads allowed to be processed in Pre-Expanders E001 – E008}$$

In the equation above, 118 tpy is the VOC emission limit for Pre-Expanders E001 – E008, and X is the maximum amount of EPS beads that can be processed in E001 - E008 while complying with the emission limit. The amount of pentane (VOC) in the beads is reduced by 50% after pre-expansion and molding, from 6% wt down to 3% wt, so 0.03 in the equation is the 3% wt VOC that is lost from the EPS beads during those processes. Of the 3% wt VOC that is lost during pre-expansion and molding, 50% is captured by the pre-expanders' capture systems, so 0.015 (1.5% wt) in the equation is the half of the 3% wt VOC that is captured, and 0.98 (98%) is the destruction efficiency of Boiler B001. The controlled VOC emissions (0.015*0.98) are subtracted from the total VOC loss from the EPS beads (0.03) to determine the total VOC emitted from Pre-Expanders E001 – E008 and the associated molding processes.

The warehouse VOC loss from EPS products in storage for 21 days at the WinCup Tolleson, AZ facility was 86.6% in 2009, 86.0% in 2010, and 70% in 2011, where the percent loss is calculated as the pentane content of the beads on day 1 of storage minus the pentane content of the beads on day 21 of storage, divided by the pentane content of the beads on day 1 of storage. To be conservative in estimating the facility's potential warehouse VOC emissions, an 86% loss will be used until New WinCup Holdings, Inc. Stone Mountain conducts its own testing of warehouse VOC emissions, which will be required for a 21-day storage period based on the facility's records showing the average storage period for one year is 21 days. As another option, the facility may choose to assume that all the pentane in the EPS beads is emitted to avoid the testing requirements. After pre-expansion and molding, 3% wt VOC is retained in the EPS beads, and 86% of that 3% wt (3 lbs pentane/100 lbs EPS beads) is estimated to be emitted during warehouse storage, so the storage VOC loss is calculated as:

$$(0.03) \times (0.86) = 0.0258 = 2.58\% \text{ wt or } 2.58 \text{ lbs pentane/100 lbs EPS beads}$$

To determine the warehouse VOC emissions from EPS beads processed in Pre-Expanders E001 – E008, the maximum allowable amount of EPS beads (7,712.4 tpy) is multiplied by the 2.58% VOC loss estimated for the 21-day warehouse storage period.

Pre-Expanders E001 – E008:

$$(7,712.4 \text{ tpy}) \times (0.0258) = 198.98 \text{ tpy VOC emitted during warehouse storage (E001 – E008)}$$

The total warehouse VOC emissions are 198.98 tpy VOC \cong 199 tpy VOC.

These warehouse VOC emissions are combined with the VOC emission limit for Pre-Expanders E001 – E008 to determine the new facility-wide VOC emission limit:

$$118 \text{ tpy VOC} + 199 \text{ tpy VOC} = 317 \text{ tpy VOC}$$

In order to verify VOC emissions loss during storage, the facility was required to test a product sample to determine the residual VOC content in the product after it has been in warehouse storage for 30 days so that the VOC loss from the product in storage can be determined. The tests were required to be conducted during July or August to provide a maximum estimate for VOC loss due to the higher temperatures. Tests were completed during 2014, 2015 and 2017. Results from 2016 were not included since the test was conducted in September. Because the test data from 2017 deviated significantly from the other data, the results from 2014 and 2015 were averaged for a 2.43 lb VOC per 100 lbs EPS emission factor for the VOC loss from final product storage. Since this was approved by the Division, the testing was determined to be complete and no further testing is required. This emission factor will now be used and results in approximately 81% of warehouse loss.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

There are no compliance issues noted with this application.

D. Permit Conditions

Condition 2.1.1 limits facility-wide VOC emissions to 317 tpy and accounts for VOC emissions from final product storage, in addition to the existing VOC emission limit on the pre-expanders.

III. Regulated Equipment Requirements

A. Equipment List for the Process

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|----------------|--|---|---|-------------------------------|-------------|
| ID No. | Description | Applicable Requirements/Standards | Corresponding Permit Conditions | ID No. | Description |
| B001 | Boiler #1 (Cleaver Brooks, 2000, natural gas fired) | 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(lll) 40 CFR 60 Subpart Dc | 2.1.1, 3.2.2, 3.3.1, 3.4.3, 3.4.6, 4.2.1, 5.2.1, 5.2.2, 5.2.4, 5.2.5, 5.2.6, 6.1.7, 6.2.4, 6.2.5, 6.2.6 | None | None |
| B002 | Boiler #2 (Superior, 1985, natural gas fired) | 391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) | 2.1.1, 3.2.2, 3.4.2, 3.4.4, 4.2.1, 5.2.1, 5.2.2, 5.2.4, 5.2.6, 6.1.7, 6.2.4, 6.2.6 | None | None |
| B003 | Boiler #3 (Superior, 1985, natural gas fired) | 391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) | 2.1.1, 3.2.2, 3.4.2, 3.4.4, 4.2.1, 5.2.1, 5.2.2, 5.2.4, 5.2.6, 6.1.7, 6.2.4, 6.2.6 | None | None |
| E001-E008 | Pre-Expanders #1-8 | 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee) | 2.1.1, 3.2.1, 3.4.1, 3.4.2, 3.4.5, 4.2.1, 5.2.2, 5.2.3, 5.2.4, 6.1.7, 6.2.1 through 6.2.6 | B002, B003, B001 | Boilers |

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

Emission and Operating Caps:

To avoid non-attainment NSR review, VOC emissions from Pre-Expanders E001 – E008 have been limited to less than 118 tpy.

All of the boilers will be limited to natural gas as requested by the facility. This will avoid the requirements of 40CFR 63 Subpart JJJJJ (Boiler GACT). Because the boilers will not be using fuel oil, this also reduces the potential NO_x emissions to less than the major source threshold of 25 tpy. Therefore, all NO_x emission limits were not necessary for this permit renewal.

Since the potential NO_x emissions for Boilers B002 and B003 are less than the major source threshold, they are not subject to Georgia Rule (yy) - *Emission of Nitrogen Oxides from Major Sources* and Georgia Rule (rrr) - *NO_x Emissions from Small Fuel-Burning Equipment*. Boiler B001 is not subject to Rules (yy) or (rrr) since it is subject to GA Rule (lll) – *NO_x Emissions from Fuel-Burning Equipment*, and its NO_x emissions do not count toward the 25-tpy thresholds for Rule (yy) and Rule (rrr) applicability in the Atlanta non-attainment area.

Rules and Regulations Assessment:

Boiler B001 is subject to 40 CFR 60 Subpart Dc - *NSPS for Small Industrial-Commercial-Institutional Steam Generating Units* because it is a steam generating unit for which construction, modification, or reconstruction began after June 9, 1989, and it has a maximum design heat input capacity equal to or greater than 10 MMBtu/hr and less than or equal to 100 MMBtu/hr. 40 CFR 60 Subpart Dc does not have any emission or operating standards that apply to Boiler B001 since the boiler will only burn natural gas. The facility is only required to

monitor the amount of natural gas fired in Boiler B001 in order to comply with the record keeping provisions of Subpart Dc.

The EPS container manufacturing process, including 8 pre-expanders and 146 molding machines, is subject to Georgia Rule (eee) - *VOC Emissions from Expanded Polystyrene Products Manufacturing*, because the facility manufactures expandable polystyrene cups, the facility existed before November 1, 1987, the facility is located in DeKalb County, and the facility has potential VOC emissions that exceed 25 tpy. VOC emissions from the pre-expanders must be controlled by reduction equipment with at least 90.0 percent destruction efficiency and a capture system approved by the Director. New WinCup Holdings, Inc. Stone Mountain is routing VOC emissions from the pre-expanders to Boilers B001, B002, and B003 in order to comply with this requirement.

All of the process emission units listed in Table 3.1, except Boiler B001, are subject to Georgia Rule (b) because it applies to all sources that are subject to at least one other emission limitation and not subject to any other, more stringent, opacity standard. Georgia Rule 391-3-1-.02(2)(b)1 - *Visible Emissions*, prohibits emissions from any air contaminant source the opacity of which is equal to or greater than 40 percent. Boiler B001 is subject to the more stringent opacity standard of 20 percent in Georgia Rule 391-3-1-.02(2)(d)3.

Boiler B001 is subject to Georgia Rule 391-3-1-.02(2)(d)3 – *Fuel Burning Equipment*, which limits visible emissions (opacity) from fuel-burning equipment, because they are boilers that were constructed after January 1, 1972.

Boilers B002 and B003 are subject to Georgia Rule 391-3-1-.02(2)(d)1(ii) – *Fuel Burning Equipment* which limits the emission rate of particulate matter from fuel-burning equipment, because they are boilers that were constructed before January 1, 1972, and have a heat input equal to or greater than 10 MMBtu/hr and less than or equal to 250 MMBtu/hr. Based on the boilers' heat inputs of 12.5 MMBtu/hr and the equation $P = 0.7(10/R)^{.202}$, the allowable PM emission rate for each boiler is 0.6691 lb/MMBtu.

Boiler B001 is subject to Georgia Rule 391-3-1-.02(2)(d)2(ii) – *Fuel Burning Equipment*, which limits the emission rate of particulate matter from fuel-burning equipment, because it is a boiler that was constructed after January 1, 1972, and has a heat input equal to or greater than 10 MMBtu/hr and less than or equal to 250 MMBtu/hr. Based on Boiler B001's heat input of 32.7 MMBtu/hr and the equation $P = 0.5(10/R)^{.05}$, its allowable PM emission rate is 0.2765 lb/MMBtu.

By limiting the fuel combusted in the boilers to natural gas, Georgia Rule (g) – Sulfur Dioxide is satisfied for all of the boilers.

All of the process equipment units listed in Table 3.1, with the exception of the boilers, are subject to Georgia (e) - *Particulate Emission from Manufacturing Processes*.

Boiler B001 is subject to Georgia Rule (III) – *NOx Emissions from Fuel-Burning Equipment*, which limits nitrogen oxide emissions during the period from May 1 through September 30 each year. Boiler B001 is subject to this rule because the facility is located in DeKalb County, the boiler was installed after May 1, 1999 and has a heat input capacity equal to or greater than 10

MMBtu/hr and less than or equal to 250 MMBtu/hr. Boiler B001 is a refurbished boiler that was originally built in 2000, but was rebuilt with a low NO_x optimizer. Boiler B001 has a heat input capacity of 32.7 MMBtu/hr and was installed in March 2010.

The boilers avoid the requirements of 40 CFR Part 63 Subpart JJJJJ - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* because the fuel is limited to natural gas.

C. Permit Conditions

- Previous Condition 3.2.1 concerned fuel oil usage; however, this condition was deleted since all the boilers are natural gas fired only.
- Previous Condition 3.2.2 concerned the NO_x emission limit; however, this condition was deleted because the potential NO_x emissions from the natural gas-fired boilers are 24 tpy which is less than the major source threshold.
- Condition 3.2.1 limits the VOC emissions from Pre-Expanders E001 – E008 to less than 118 tpy for NSR avoidance.
- Condition 3.2.2 is a new condition which limits the fuel fired in the boilers to natural gas in order to avoid the Boiler GACT. This condition also satisfies Georgia Rule (g).
- Condition 3.3.1 subjects Boiler B001 to 40 CFR 60 Subpart Dc.
- Condition 3.4.1 is unchanged from the version in Permit No. 3086-089-0097-V-03-0, and requires emission controls providing at least 90.0% VOC reduction efficiency and an approved capture system for Pre-Expanders E001 through E008 in order to comply with Georgia Rule (eee).
- Condition 3.4.2 subjects the equipment in Table 3.1 to Rule (b).
- Condition 3.4.3 subjects Boiler B001 to Georgia Rule (d) for boilers manufactured after January 1, 1972 and limits the particulate matter and opacity from the boiler.
- Condition 3.4.4 subjects Boilers B002 and B003 to Georgia Rule (d) for boilers manufactured before January 1, 1972 and limit the particulate matter. The opacity from these two boilers are limited with Georgia Rule (b).
- Condition 3.4.5 subjects the Pre-Expanders to Georgia Rule (e).
- Condition 3.4.6 subjects Boiler B001 to Georgia Rule (III) from May 1 through September 30 each year.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

The facility had previously been required to conduct annual testing during the months of July or August to determine the amount of residual VOC in the final product. The testing could be completed after three years of consistent test results. The Division has confirmed that the facility has completed the requested testing with an approved emission factor of 2.43 lbs VOC/100 lbs EPS for the VOC loss from final product storage. Since further testing is not required, the condition was not included in the renewed permit. This emission factor was included for reference in the emission calculations.

- Condition 4.2.1 requires the facility to conduct a performance test of the boilers used as control devices (Boilers B001, B002, and B003) and the capture systems of the Rodman pre-expanders (E001 – E008) once every 5 years to determine the pentane capture efficiency and destruction efficiency. The performance tests will demonstrate compliance with the 90% reduction efficiency required by Georgia Rule (eee) and will determine the destruction efficiency to be used in calculating the facility's pentane emission factors. During the performance tests, the velocity pressure or static pressure must be monitored and recorded so that an operating parameter or range can be established to indicate that the pentane emissions from the pre-expanders are flowing properly in the mainline to the boilers. This condition was modified to include the most recent performance test dates for Boilers B002 and B003 which was January 2014.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

- Condition 5.2.1 requires continuous monitoring of the combustion zone temperature of the boilers used as control devices for pentane (Boilers B001, B002, and B003) to demonstrate compliance with the 90.0% reduction efficiency required by Georgia Rule (eee).
- Condition 5.2.2a requires measuring and recording the velocity pressure or static pressure in the mainline leading to the boilers used as control devices once per day. The pressure must comply with the operating parameter (range) established during the most recent performance tests of the boilers used as control devices (Boilers B001, B002, and B003) to show that the pentane emissions are flowing properly from the pre-expanders to the boilers for destruction. The facility only needs to determine that pentane is flowing from the pre-expanders to the boilers, not the amount of pentane flowing to the boilers.
- Condition 5.2.2b requires monitoring of the quantity of natural gas fired in Boiler B001 (to comply with NSPS Subpart Dc).
- Condition 5.2.5 describes the monitoring requirements for Boiler B001 as required by Georgia Rule (III). The facility must perform annual tune-ups and keep the records required by this condition.
- Condition 5.2.6 requires annual inspections of Boilers B001, B002, and B003 to check for leakage and also requires monthly visual inspections of the capture stream ductwork to check for leakage. This condition is required to ensure proper operation of the VOC emission reduction equipment on the Pre-Expanders E001 through E008 to comply with the Georgia Rule (eee) reduction efficiency.

C. Compliance Assurance Monitoring (CAM)

Pre-Expanders E001 – E008 are subject to CAM for VOC emissions. VOCs from the pre-expanders are controlled by Boilers B001, B002, and B003. The potential precontrolled VOC emissions from each Pre-Expander exceed the major source threshold.

Condition 5.2.3 indicates that Pre-Expanders E001 – E008 are subject to the Compliance Assurance Modeling (CAM) rules for VOC emissions.

Condition 5.2.4 details the performance criteria for indicator no. 1 which is the combustion zone temperature in the boilers and indicator no. 2 which is work practices. Work practices include inspecting the boilers and capture system for leakage.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

All previous conditions concerning fuel oil records were omitted because the boilers are now limited to natural gas only. All previous conditions concerning NO_x emission calculations were omitted because the potential NO_x emissions from the facility do not exceed major source thresholds.

- Condition 6.2.1 requires the maintenance of monthly usage records of materials containing VOC.
- Condition 6.2.2 requires the calculation of the monthly and consecutive 12-month total VOC emissions from the EPS beads processed through the Pre-Expanders for compliance with the emission limit in Condition 3.2.1. The condition provides guidance for the calculations. A notification must be submitted if any one month of VOC emissions exceeds 9.8 tons, or if the VOC emissions for any consecutive 12-month period exceed 118 tons. The previously referenced emission factor was removed from this condition since testing has been conducted.
- Condition 6.2.3 requires the calculation of the monthly and consecutive 12-month total VOC emissions from the entire facility including the VOC emissions from the EPS beads processed through the Pre-Expanders as calculated in Condition 6.2.2. This condition is for compliance with the facility wide emission limit in Condition 2.1.1. The condition provides guidance for the calculations. A notification must be submitted if any one month of VOC emissions exceeds 26.42 tons, or if the VOC emissions for any consecutive 12-month period exceed 317 tons. The previously referenced emission factor was removed from this condition since testing has been conducted.
- Condition 6.2.4 requires the facility to submit a report any time the 3-hour rolling average temperature of a boiler falls 50°F or more below the temperature established during the most recent Division-approved performance test.
- Condition 6.2.5 requires records of the amount of natural gas fired in Boiler B001 in order to comply with NSPS Subpart Dc.
- Condition 6.2.6 requires that records of the daily pressure readings be maintained, and pressure readings that do not comply with the established operating parameter must be reported.

VII. Specific Requirements**A. Operational Flexibility**

- None applicable.

B. Alternative Requirements

- None applicable.

C. Insignificant Activities

- See Permit Application on GEOS website.
- See Attachment B of the permit.

D. Temporary Sources

- None applicable.

E. Short-Term Activities

- None applicable.

F. Compliance Schedule/Progress Reports

- Not applicable.

G. Emissions Trading

- Not applicable.

H. Acid Rain Requirements

- Not applicable.

I. Stratospheric Ozone Protection Requirements

- Facility has indicated that they are subject to Title VI due to having air conditioners/refrigeration equipment that uses CFC's, HFC's or other stratospheric ozone-depleting substances listed in 40 CFR Part 82, Subpart A, Appendices A and B. The facility also has air conditioner/any piece of refrigeration equipment contain a refrigerant charge of greater than 50 lbs.

J. Pollution Prevention

- Not applicable.

K. Specific Conditions

- There are no additional facility-specific conditions that are not covered elsewhere.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative