

Facility Name: **Wincup**
 City: Stone Mountain
 County: DeKalb
 AIRS #: 04-13-089-00097

Application #: TV-17105
 Date Application Received: November 29, 2006
 Permit No: 3086-089-0097-V-02-0

Program	Review Engineers	Review Managers
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Toxics	N/A	N/A

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This 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 primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Wincup** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This 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:

Wincup

2. Parent/Holding Company Name

Wincup Holdings Incorporated

3. Previous and/or Other Name(s)

pka – Wincup – Stone Mountain with Parent Company as Benchmark Corporation of Delaware

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 the 13 county non-attainment area for ozone and PM2.5.

B. Site Determination

There are no site determination issues for this facility at this time.

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
3086-089-0097-V-01-0	May 22, 2002	The operation of a facility to manufacture expandable polystyrene cups and food containers.

D. Process Description

1. SIC Codes(s)

3086

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

The expandable polystyrene (EPS) beads are received into the Stone Mountain plant 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 mixed with zinc stearate to enhance the flow characteristics of the material in subsequent manufacturing steps. The beads are then 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. Five 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 3 of the 5 boilers.

A second process is the production of High-impact Polystyrene (HIPS) lids. The raw material is received into the plant in the form of HIPS pellets. Initially, the pellets are introduced into an extruder and formed into a uniform thickness sheet. The sheet is then fed into a thermo former and the material is heated and formed into the desired lid shapes. As with the containers, the lids are packaged into polyethylene sleeves, placed in corrugated boxes and shipped off-site for distribution to customers. Excess HIPS trimmed from the sheet is ground into flakes and recycled with virgin material into the production process.

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 in regard to PSD/NSR. Potential emissions of VOC is greater than 25 tons per year.

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	y			x
PM ₁₀	y			x
SO ₂	y			x
VOC	y	x		
NO _x	y			x
CO	y			x
TRS	n			
H ₂ S	n			
Individual HAP	n			
Total HAPs	n			

3. MACT Standards

The facility is not a major source of HAP emissions.

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	n
Program Code M – Part 63 NESHAP	n
Program Code V – Title V	y

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None Applicable

B. Applicable Rules and Regulations

None Applicable

C. Compliance Status

The facility did not indicate any compliance issues at this time.

D. Operational Flexibility

None applicable.

E. Permit Conditions

No conditions were modified, added, or deleted in this section of the permit.

III. Regulated Equipment Requirements

A. Brief Process Description

A brief process description is specified in the narrative for Title V Permit No. 3086-089-0097-V-02-0. Please refer to this narrative.

B. 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	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.4.2, 3.4.5, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.3, 6.2.4, 6.2.7, 6.2.8	None	None
B002	Boiler	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.4.2, 3.4.5, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.3, 6.2.4, 6.2.7, 6.2.8	None	None
B003	Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.4.2, 3.4.5, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.3, 6.2.4, 6.2.7, 6.2.8	None	None
B004	Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.4.2, 3.4.5, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.3, 6.2.4, 6.2.7, 6.2.8	None	None
B005	Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.4.2, 3.4.5, 3.4.6, 5.2.1, 6.1.7, 6.2.2, 6.2.3, 6.2.4, 6.2.7, 6.2.8	None	None
T001	Bead Mixer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.2.3, 3.4.1, 3.4.2, 3.4.7, 3.4.8, 5.2.2, 6.1.7	B001- B003	Boilers
T002	Bead Mixer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.2.3, 3.4.1, 3.4.2, 3.4.7, 3.4.8, 5.2.2, 6.1.7	B001- B003	Boilers
E001- E008	Pre-Expanders	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.2.3, 3.4.1, 3.4.2, 3.4.7, 3.5.1, 4.2.1, 4.2.2, 4.2.3, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 6.1.7, 6.2.1, 6.2.5	B001- B003	Boilers
E009	Pre-Expander	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.2.2, 3.4.1, 3.4.2, 3.4.7, 3.5.1, 5.2.2, 5.2.3, 5.2.4, 4.2.1, 4.2.2, 4.2.3, 5.2.1, 6.1.7, 6.2.1, 6.2.6	B001- B003	Boilers
M001- M092	Molding Machines	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.4.1, 3.4.2, 3.4.7, 6.1.7	None	None
M093- M146	Molding Machines	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(eee)	3.2.1, 3.2.3, 3.4.1, 3.4.2, 3.4.7, 6.1.7	None	None

C. Equipment & Rule Applicability

Equipment and Rule Applicability specified in Permit No. 3086-089-0097-V-02-0 is discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

D. Compliance Status

The facility did not indicate any compliance issues at this time.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Permit Conditions specified in Permit No. 3086-089-0097-V-02-0 are discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

No conditions were modified, added or deleted in this section of the permit, other than minor wording changes to improve clarity.

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 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**1. Individual Equipment**

Not applicable.

The testing conditions from Title V Permit No. 3086-089-0097-V-01-0 were one time testing conditions and were not transferred into the renewal permit.

2. Equipment Groups (all subject to the same test requirements):

Not applicable.

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**1. Individual Equipment:**

Monitoring requirements specified in Permit No. 3086-089-0097-V-02-0 are discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

2. Equipment Groups (all subject to the same monitoring requirements):

Monitoring requirements specified in Permit No. 3086-089-0097-V-02-0 are discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

No changes were made to the conditions in this section of the permit.

C. Compliance Assurance Monitoring (CAM)

The emission units E001 – E008 and E009, which are pre-expanders are subject to CAM for VOC emissions. The facility submitted a CAM Plan on May 1, 2007. VOCs from the pre-expanders are controlled by Boilers B001 – B003 and are subject to the emission limits of Georgia Rule 391-3-1-.02(2)(eee). There is also a VOC emission limit of 118 tons per year for E001 – E008 and a VOC emission limit of 25 tons per year for E009.

These units are not classified as a large PSEU since emissions from the pre-expanders are not over the 25-ton major source threshold, post-controlled. A small PSEU does not require continuous monitoring, but the boilers have continuous combustion temperature monitoring.

The facility submitted previous performance test summary pages, which demonstrate approximately 99% destruction at temperatures above 1300°F. The test was performed on one boiler, however all three boilers are identical.

All CAM requirements are stated in Conditions 5.2.7 and 5.2.8.

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

Record keeping and reporting requirements specified in Permit No. 3086-089-0097-V-02-0 are discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

Minor wording changes were made to Condition 6.1.7 for clarity.

Condition 6.2.5 was deleted since there are no reporting requirement for 40 CFR 60 Subpart Dc for this facility's boilers.

Condition 6.2.10 is now template Condition 6.1.8.

VII. Specific Requirements

- A. Operational Flexibility
Not Applicable.
- B. Alternative Requirements
Not Applicable
- C. Insignificant Activities
Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.
- D. Temporary Sources
Not Applicable.
- E. Short-Term Activities
Not Applicable.
- F. Compliance Schedule/Progress Reports
Not Applicable.
- G. Emissions Trading
Not Applicable
- H. Acid Rain Requirements
Not Applicable
- I. Stratospheric Ozone Protection Requirements
Not Applicable.
- J. Pollution Prevention
Not Applicable
- K. Specific Conditions
Not Applicable

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.

Addendum to Narrative

The public comment period began on July 23, 2007 and ended on August 27, 2007. There were no comments received by the Division.