

Facility Name: **ALCAN Aluminum Corporation**
 City: Greensboro, Georgia
 County: Greene
 AIRS #: 04-13-133-00001

Application #: TV-9308
 Date Application Received: January 27, 1997
 Date Application Deemed Administratively Complete: April 11, 1997
 Date of Draft Permit: July 31, 2002
 Permit No: 3341-133-0001-V-01-0

| Program | Review Engineers | Review Managers |
|----------------|-------------------------|------------------------|
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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 Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I 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 **ALCAN Aluminum Corporation** 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

ALCAN Aluminum Corporation

2. Parent/Holding Company Name:

Alcan Aluminum Corporation

3. Previous and/or Other Name(s):

Keystone Resources- Aluminum Division
 ALCAN Ingot & Recycling
 ALCAN Rolled Products Company- Recycling.

4. Facility Location:

1261 Willow Run Road, Greensboro, Greene County, Georgia

5. Attainment or Non-attainment Area Location:

This facility is located in Greene County, is in an attainment area for all criteria pollutants.

6. Class I Area Impacts:

This facility is not located within 100 km of a Class I area.

B. Site Determination

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

C. Existing Permits**Table 1: List of Current Permits as Amended**

| Permit Number and/or Purpose of Issuance | Date of Issuance and Date of Amendments (if any) | Comments | |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
| | | Yes | No |
| 3321-066-9088 | Original issue 6/04/1985, amended on 10/15/1985, 10/6/1989, 2/23/1990, 9/24/1990, 6/7/1991, 5/11/1994, 5/22/1996, 3/6/1997, 10/23/1998, 11/9/1999 and 4/12/2002 | | x |

Table 2: Comments on Specific Permits

| Permit Number | Comments |
|---------------|----------|
| N/A | N/A |

D. Process Description

1. SIC Codes(s)

3341.

2. Description of Product(s)

Aluminum scrap is shredded, decoated (hot air removal of coating), melted, and then cast into an ingot.

3. Overall Facility Process Description

Alcan Aluminum recycles used beverage cans and scrap aluminum into large stock ingots that are shipped to rolling mills where they are processed into new beverage cans. Used beverage cans are transported to the facility by rail car and truck and are held in storage until needed or fed directly to the shredding process. Baled aluminum cans are broken up and fed into a shredder (source code SHRD¹) reducing the aluminum to one-half to one inch sized pieces. Iron and steel are removed with a magnetic separator and dirt is separated out using screens. Shredded aluminum is fed into a decoater (source code DCTR), which uses hot air to remove paint and lacquer. The decoater exhaust is routed to an incinerator (source code INR1) for destruction. The hot incinerator exhaust is vented back to the decoater for heat recovery. The aluminum is then fed into one of three reverberatory furnaces (source codes FCE1, FCE2 and FCE3) for melting. The furnaces burn natural gas, or propane. Alcan also utilizes two electric induction furnaces (source codes INF1 and INF2) to melt Class 1 scrap materials. Class I scrap is the part of the aluminum sheet used to make beverage cans that does not end up as part of a can. Dross removal occurs at the furnaces. Molten metal is gravity fed to a natural gas or propane fired holding "Holder²" furnace (source code HOLD) for metal cleaning and transfer to the casting unit. A mixture of chlorine and argon gases are injected to remove impurities from the molten aluminum. A direct chill caster is used to form aluminum ingots weighing 50,000 to 60,000 pounds each. The function of the Alpur process is to remove alkali metals and hydrogen gas from the molten aluminum prior to casting. In the Alpur unit, a chlorine/argon mixture is injected into the stream of metal as it flows to the caster. Impurities float to the top and are manually removed by skimming.

4. Overall Process Flow Diagram (optional)

See application.

¹This none fuel burning equipment is used for preheating shredded aluminum from used beverage containers prior to entering the decoater.

²The function of the holder is to clean the molten aluminum for casting and to transfer the metal to the casting unit.

E. Regulatory Status

1. PSD/NSR

This facility is a major source under PSD because it has potential to emit (PTE) of PSD regulated pollutants over 100 tpy.

2. Title V Major Source Status by Pollutant

Table 3: 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 | ✓ | ✓ | | |
| PM ₁₀ | ✓ | ✓ | | |
| SO ₂ | ✓ | | | ✓ |
| VOC | ✓ | | | ✓ |
| NO _x | ✓ | | | ✓ |
| CO | ✓ | | | ✓ |
| TRS | ✓ | | | ✓ |
| H ₂ S | ✓ | | | ✓ |
| Individual HAP | ✓ | ✓ | | |
| Total HAPs | ✓ | ✓ | | |

3. MACT Standards

The facility is subject to federal rule 40 CFR 63 Subpart RRR "National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production".

4. Program Applicability

| 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 | Y |
| Program Code V – Title V | Y |

Regulatory Analysis**II. Facility Wide Requirements**

A. Emission and Operating Caps:

None

B. Applicable Rules and Regulations

Rules and Regulations Assessment –

None Applicable.

Emission and Operating Standards –

None Applicable.

C. Compliance Status

No non-compliance issue exists at this time.

D. Operational Flexibility

No alternative operating scenarios have been requested for any equipment in use at the facility.

E. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Brief Process Description

Aluminum scrap is shredded, decoated (hot air removal of coating), melted, and then cast into an ingot.

B. Equipment List for the Process

| | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|--------|----------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------|
| ID No. | Description | Applicable Requirements / Standards* | Corresponding Permit Conditions | ID No. | Description |
| SHRD | Shredders | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.1, 3.2.7, 3.3.1, 3.3.2, 3.3.6, 3.3.8, 3.3.9, 3.3.10, 3.4.1, 3.4.2 | BAG3 | Baghouse |
| PRDRY | Shred pre-dryer | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.7, 3.4.1, 3.4.2 | CY1 | Cyclone |
| DCTR | Decoater | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.2, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.3.1, 3.3.2, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.11, 3.4.1, 3.4.2, 3.4.3 | INR1 | Decoater Incinerator |
| FCE1 | Furnace #1 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.3, 3.2.4, 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.12, 3.4.1, 3.4.2, 3.4.3 | BAG1 & BAG2 | Baghouse |
| FCE2 | Furnace #2 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | See FCE1 | BAG1 & BAG2 | Baghouse |
| FCE3 | Furnace #3 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | See FCE1 | BAG5 | Baghouse |
| INF1 | Induction Furnace #1 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.12, 3.4.1, 3.4.2 | BAG5 | Baghouse |
| INF2 | Induction Furnace #2 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | See INF1 | BAG5 | Baghouse |
| HOLD | Holder | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.4, 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.9, 3.3.13, 3.4.1, 3.4.2, 3.4.3 | None | None |
| ALPR | Alpur | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.9, 3.4.1, 3.4.2 | None | None |

C. Equipment & Rule Applicability

Emission and Operating Caps –

The facility is limited to 18,166 tons per month of aluminum scrap through the decoater (source code DCTR) to ensure the facility avoids PSD thresholds.

The facility is limited to 1,000 tons per month of aluminum coils in the melting furnaces (FCE1, FCE2, and FCE3) for PSD avoidance purposes. [Note: The SIP amendment dated April 12, 2002 indicated that coils would only be melted in FCE3. This was an oversight and is being corrected in the Title V permit.]

The decoater is required to maintain a temperature of at least 1300°F in the decoater incinerator (source code INR1). This requirement comes from the old SIP permit and is not to be confused with the new (effective March 24, 2003) MACT standard requirement of 1400°F.

Applicable Rules and Regulations –

Rules and Regulations Assessment

40 CFR 63 Subpart RRR, “National Emissions Standards for Hazardous Air Pollutants from Secondary Aluminum Production”, applies to any facility participating in the processing and manufacture of parts from secondary aluminum. Alcan is subject to this standard as a major source of HCl.

The compliance date for this new MACT standard is March 24, 2003. However, Alcan has been granted a one-year compliance extension for the decoater (Source Code DCTR) for the emission limits for HCl and dioxin/furan, the initial compliance testing for these pollutants, and the submittal of the operating, monitoring, and maintenance (OM&M) plan for the decoater. This compliance extension was granted in a letter dated May 14, 2002. The reason was that the beverage can industry is in the process of eliminating chlorine in manufacturing of beverage cans. A sufficient amount of the cans should be in the marketplace by March 24, 2004 such that Alcan can comply with the HCl and dioxin/furan emission standards without having to install a lime-injection baghouse on the decoater.

Georgia Rule 391-3-1-.02(2)(b), “Visible Emissions”, applies to any emission unit subject to any other emission rule as listed in Georgia Rules 391-3-1-.02(2). Therefore, all the equipment listed in the table in III.B. are subject to Rule (b).

Georgia Rule 391-3-1-.02(2)(e), “Particulate Emission from Manufacturing Processes”, applies to any equipment involved in any sort of manufacturing process. All of the equipment listed in the table in III.B. operate as one process. Because the equipment was constructed after July 2, 1968, the “new equipment” standard in paragraph 1.(i) applies.

Georgia Rule 391-3-1-.02(2)(g), “Sulfur Dioxide”, applies to any equipment that burns fuel. The three melting furnaces (source codes FCE1, FCE2, FCE3), the holding furnace (source code HOLD), and the decoater (source code DCTR) all burn fuel and are therefore subject to Rule (g).

Because all of these sources have a heat input of less than 100 mmBtu/hr, they are subject to the 2.5% fuel sulfur content limit in Rule (g)2.

Emission and Operating Standards

40 CFR 63, Subpart RRR establishes emission standards for particulate matter (PM), hydrochloric acid (HCl), and dioxins and furans (D/F). The emission standards for the shredder (source code SHRD), decoater (source code DCTR), melting furnaces, induction furnaces, and holding furnace (source codes FCE1, FCE2, FCE3, INF1, INF2), and the alpur unit (source code ALPR) are found in 40 CFR 63.1505 and are listed in the permit as Conditions 3.3.2 through 3.3.5.

40 CFR 63, Subpart RRR establishes operating requirements for the affected sources as well. The operating requirements are found in 40 CFR 63.1506 and are listed in the permit as Conditions 3.3.6 through 3.3.14.

Georgia Rule (e) establishes emission limits for particulate emissions from the production of aluminum at Alcan. As discussed above, all of the equipment listed in the table in III.B. operates as one process. The allowable PM emission rate is determined using the following equation:

$E = 4.1 \times P^{0.67}$, where E is the emission rate in pounds per hour and P is the process input weight rate in tons per hour.

Alcan can process approximately 25 tons of aluminum per hour at their facility. This results in an allowable emission rate of 35.4 lb/hr.

Georgia Rule (b) limits visible emissions from all the emission units at Alcan listed in the table in III.B. to 40% opacity.

Georgia Rule (g) limits the sulfur content of the fuel burned in all the fuel burning sources at Alcan to 2.5%. The fuel burning sources are the three melting furnaces (source codes FCE1, FCE2, FCE3), the holding furnace (source code HOLD), and the decoater (source code DCTR). These sources burn only natural gas and propane, which contain much less than 2.5% sulfur.

Multiunit shredding system

Multiunit shredding system (source code SHRD) was constructed prior to 1978 and is used for shredding aluminum scrap. SHRD is equipped with a baghouse (source code BAG3) to control particulate matter.

The shredder is subject to a PSD avoidance limit for PM of 0.0425 lb/ton of aluminum.

[Note: Alcan has conducted PM stack testing on the shredder as well as on all the emission units listed below with PSD avoidance limits for PM. All tests showed PM emissions below the applicable PSD avoidance limits.]

Predryer

The predryer is actually part of the decoater. The aluminum scrap is heated in the predryer to save energy in the decoater. The exhaust gases from the decoater incinerator go to the predryer and are combined with any emissions from the predryer before going to the cyclone. The emissions from this unit are routed to a cyclone (source code CY1) for controlling PM emissions.

Decoater

Decoater (source code DCTR) has a heat input capacity of 15 MMBtu/hr, was constructed in 1983, and is used for generating hot air to drive off coatings on aluminum scrap (used beverage containers or UBC). DCTR is capable of firing on natural gas and propane. It is equipped with an incinerator to control VOC and visible emissions. The decoater incinerator operates at a temperature of about 1400 degrees Fahrenheit.

The decoater is subject to a PSD avoidance limit for PM of 0.17 lb/ton of aluminum.

Furnace #1

Furnace #1 (source code FCE1) has a heat input capacity of 26 MMBtu/hr, was constructed in 1996, and is used for melting aluminum and aluminum solids. FCE1 is capable of firing on natural gas and propane. The FCE1 and FCE2 exhausts are combined and controlled by two baghouses (source codes BAG1 & BAG2) to control particulate matter.

Furnace #1 and Furnace #2, combined, are subject to a PSD avoidance limit for PM of 6 lb/hr.

Furnace #2

Furnace #2 (source code FCE2), has a heat input capacity of 20 MMBtu/hr, was constructed in 1997, and is used for melting aluminum and aluminum solids. FCE2 is capable of firing on natural gas and propane. The FCE1 and FCE2 exhausts are combined and controlled by two baghouses (source codes BAG1 & BAG2) to control particulate matter.

Furnace #1 and Furnace #2, combined, are subject to a PSD avoidance limit for PM of 6 lb/hr.

Furnace #3

Furnace #3 (source code FCE3) has a heat input capacity of 25 MMBtu/hr, was constructed in 1991, and is used for melting aluminum scrap and aluminum solids. FCE3 is capable of firing on natural gas and propane. The FCE3 is equipped with a baghouse (source code BAG5) to control particulate matter from the charging well. The main hearth for Furnace #3 is uncontrolled.

Furnace #3 is subject to a PSD avoidance limit for PM of 4 lb/hr from the main hearth stack and 0.048 lb/ton from the charging well (which is controlled by BAG5).

Induction Furnace #1 and Induction Furnace #2

Induction Furnaces #1 and #2 (source codes INF1 and INF2) were each constructed in 1991 and are used for melting aluminum scrap. INF1 and INF2 are electric furnaces and do not burn fuel. Both INF1 and INF2 are equipped with a baghouse (source code BAG5) to control particulate matter.

Holder

Holder (source code HOLD) has a heat input capacity of 17 MMBtu/hr, was constructed in 1992, and is used for processing molten metal prior to casting, maintain temperature of metal, and capable of melting aluminum solids. HOLD is capable of firing on natural gas and propane.

The holder is subject to a PSD avoidance limit for PM of 0.044 lb/ton.

Alpur Degasser

Alpur Degasser (source code ALPR) was constructed in 1988 and is an inline gas diffusion metal treatment system. ALPR is not a fuel burning source.

D. Compliance Status

No non-compliance issues exist at this time.

E. Operational Flexibility

The facility did not indicate any alternative operating scenarios for any equipment in use at the facility.

F. Permit Conditions

Condition 3.3.1 contains the compliance date (March 24, 2003 except for decoater) for the Secondary Aluminum MACT Standard.

Conditions 3.3.2 through 3.3.5 contain the emission limits for the Secondary Aluminum MACT Standard.

Conditions 3.3.6 through 3.3.14 contain the operating requirements for the Secondary Aluminum MACT Standard.

Condition 3.4.1 contains the visible emission limit for Georgia Rule (b).

Condition 3.4.2 contains the PM limit for Georgia Rule (e).

Condition 3.4.3 contains the fuel sulfur limit for Georgia Rule (g).

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

The standard general requirements are included which specify that a performance test may be required to determine compliance with the emission limits in Part 3.0 and that list the test methods to be used to determine compliance. A condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

Condition Nos. 4.2.1 – 4.2.15 are included in the permit according to the Subpart RRR MACT standard. The conditions require the development of a site-specific test plan, specify the production status while the performance tests are administered, performance test report contents, and the equations used to determine compliance with the emission limits specified in Section 3.3 of the Permit.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)

A. General Monitoring Requirements

The Permit contains general requirements for the operations of required monitoring equipment. Any repairs or maintenance should be completed in an expeditious manner so down time is minimized. All data should also be recorded during any calibrations activity to help verify that the calibrations was performed and completed properly.

B. Specific Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division and installed by the Permittee shall be in continuous operation. All data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.

Condition Nos. 5.2.3, 5.3.1 – 5.3.11 are included in the permit according to the RRR MACT standard. The conditions outline the preparation and implementation of an OM&M plan, label inspections for the group 1 furnaces (melting and holding furnaces), the use of a monitoring device to record the feed/charge weight rate to or production weight from the melting and holding furnaces, monitoring requirements for reactive flux injection rates, lists the requirements for the section of the OM&M plan dealing with the furnaces, a scrap quality inspection plan, the equations used to determine compliance with emission limits specified in Section 3.3 of the Permit, and alternative compliance options.

SHRD is subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions, and a PSD avoidance limit for PM. The unit is routed to baghouse BAG3 for controlling PM emissions. Proper operation and maintenance of the PM control equipment will ensure that emissions are low and within allowable limits. To ensure that the baghouses are operating properly, weekly inspections of the baghouses are required to be conducted.

PRDRY is subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions. The emissions from this unit are routed to a cyclone (source code CY1) for controlling PM emissions; however, PM emissions from this unit are very low and it is very unlikely that Particulate Matter and opacity limitations will be exceeded. Proper operation and maintenance of the PM control equipment will ensure that emissions are low and within allowable limits. To ensure that the cyclone is operating properly, weekly inspections are required to be conducted. [Note: The exhaust gases from the decoater incinerator go to the predryer and are combined with any emissions from the predryer before going to the cyclone.]

DCTR is subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions, and a PSD avoidance limit for PM. The unit is equipped with an incinerator (source code INR1) for destruction of VOC emissions as well as PM and visible emissions. It is also subject to an operational requirement to maintain a certain minimum temperature (1300 degrees Fahrenheit until the MACT Standard becomes applicable on March 24, 2003 and 1400 degrees after) in the incinerator. For each day or portion of a day of operation of Decoater's incinerator, the facility

shall read and record the temperature of the INR1 to ensure compliance with the minimum temperature requirement as well as the PM and visible emissions limits. DCTR is capable of firing on natural gas and/or propane. DCTR is subject to Georgia Rule (g) for Sulfur Dioxide. It is very unlikely that Rule (g) will be exceeded due to low sulfur content of natural gas, and/or propane. Therefore, no monitoring is required for Rule (g). The facility must also record the amount of UBC processed through the unit.

FCE1, FCE2 and FCE3 are subject to Georgia Rules (b) for opacity, (e) for Particulate Matter (PM) from manufacturing process, (g) for Sulfur Dioxide, and a PSD avoidance limit for PM. FCE1 and FCE2 are controlled for PM emissions by using two baghouses (source code BAG1 & BAG2). FCE3 is controlled for PM emissions by using a baghouse (source code BAG5). Proper operation and maintenance of the PM control equipment will ensure that emissions are low and within allowable limits. To ensure that the baghouse is operating properly, weekly inspections of the baghouse are required to be conducted. These units are capable of firing on natural gas and or propane. Rule (g) limits the sulfur content of each fuel to 2.5 percent sulfur, by weight. It is very unlikely that Rule (g) will be exceeded due to low sulfur content of natural gas, and/or propane. Therefore, no monitoring is required.

INF1 and INF2 are subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions. These units are routed to a baghouse (source code BAG5) for controlling PM emissions. Proper operation and maintenance of the PM control equipment will ensure that emissions are low and within allowable limits. To ensure that the baghouse is operating properly, weekly inspections of the baghouse are required to be conducted.

HOLD is subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions, and a PSD avoidance limit for PM. No control equipment is present on this emission unit; however, PM emissions from this unit are very low and it is very unlikely that Particulate Matter and opacity limitations will be exceeded. Therefore, no monitoring is required. HOLD is subject to Georgia Rule (g) for Sulfur Dioxide. HOLD is capable of firing on natural gas and or propane. It is very unlikely that Rule (g) will be exceeded due to low sulfur content of natural gas, and/or propane. Therefore, no monitoring is required.

ALPR is subject to Georgia Rules (b) for opacity and (e) for Particulate Matter (PM) emissions. No control equipment is present on the unit; however, PM emissions from these units are very low and it is very unlikely that Particulate Matter and opacity limitations will be exceeded. Therefore, no monitoring is required.

Condition 5.3.1 requires the Permittee to maintain records of all data and information required by Conditions Nos. 5.2.1, 5.2.2 and 5.2.3 and to submit a semiannual report in accordance with Condition No. 6.1.4.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The standard requirements for the maintenance of all records for a period of five years and for the prompt reporting of excess emissions from process malfunctions or improper maintenance or operation are included as Conditions 6.1.1, 6.1.2, and 6.1.3.

The Permittee is required by Condition 6.1.4 to submit a semiannual report. This report should contain information on deviations which occurred during the reporting period. The required information is enumerated in the Condition itself. Condition 6.1.5 requires any analysis or sampling records to be maintained. All such records should be retained for a period of at least five years, pursuant to Condition 6.1.6.

Condition 6.1.7 details deviations that are to be included in the semiannual report required by Condition 6.1.4.

B. Specific Record Keeping and Reporting Requirements

Conditions 6.2.1 through 6.2.6 are added in accordance with 40 CFR 63, Subpart RRR. These conditions outline the procedures for the submittal of compliance reports, the drafting of a written operation plan in times of startup, shutdown, or malfunction, the submittal of semiannual reports, and record keeping.

Conditions 6.2.7 and 6.2.8 contain record keeping and reporting requirements that come from the old SIP permit. Records for the amount of aluminum scrap processed through DCTR and the amount of aluminum coils processed in the melting furnaces are required. These records are required to be submitted with the semiannual reports.

VII. Specific Requirements

A. Operational Flexibility

No alternative operating scenarios have been requested by the facility for any equipment in use.

B. Alternative Requirements

None Applicable.

C. Insignificant Activities

None Applicable.

D. Temporary Sources

None Applicable.

E. Short-Term Activities

None Applicable.

F. Compliance Schedule/Progress Reports

Facility is operating in compliance at this time.

G. Emissions Trading

Not Applicable.

H. Acid Rain Requirements

None Applicable.

I. Prevention of Accidental Releases

Not Applicable.

J. Stratospheric Ozone Protection Requirements

Not Applicable.

K. Pollution Prevention

Not Applicable.

L. Specific Conditions

None 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 Division issued Draft Part 70 Permit No. 3341-133-0001-V-01-0 on July 19, 2002 to Alcan Aluminum. Alcan published the Part 70 Public Notice in The Herald-Journal on Thursday August 15, 2002. The thirty day public comment period ended on September 14, 2002 (weekend). Comments were received from Alcan on August 12, 2002 and September 13, 2002.

A discussion of draft permit comments and the Division's response follows.

Comment: Shred Pre -Dryer (Source Code PRDRY)

Alcan requests that the reference to the shred pre-dryer (source code PRDRY) be removed as the unit is not nor will not be operated.

Response: The Division agrees to the request and draft Section 3.1 and draft Condition Nos. 3.2.7, 3.4.1, and 3.4.2 have been revised; and draft Condition No. 5.2.1 is deleted.

Draft Section 1.3

Alcan requests that the last six sentences be changed to read: *"Molten metal is gravity fed to a natural gas or propane fired holding "Holder²" furnace (source code HOLD). After final alloy adjustments are complete, molten metal is transferred through an Alcan compact degasser (source code ACD) to the direct chill casters. In the ACD, a mixture of chlorine and argon gases is injected into the molten aluminum to remove alkali metals and hydrogen gas. Impurities float to the top and are removed by skimming. Direct chill casters are used to form aluminum ingots weighing 50,000 to 60,000 pounds each."*

Response: The Division agrees to the requested changes and Section 1.3 is revised accordingly.

Comment:

a) Alcan has revised nomenclature for ID No. ALPR. Alcan now references this emission unit as ID No. ACD and has changed the source name from "Alpur" to "Alcan compact degasser."

b) In the preliminary permit application submissions, BAG3 was incorrectly identified as the baghouse controlling emissions from the shredder. In fact, BAG6 control emissions from the shredder while BAG3 controls emissions from other non-MACT sources in the preliminary UBC handling process. Alcan believes that all references to BAG3 should be revised to BAG6.

Response:

a) The Division agrees to the request and Section 3.1 and draft Condition Nos. 3.3.4, 3.4.1, and 3.4.2 are changed accordingly.

b) The Division agrees to the request and Section 3.1 and draft Condition Nos. 3.2.7, 3.3.10, and 5.2.2 are changed accordingly.

Comment: Draft Condition Nos. 3.2.3 and 6.2.7

Alcan requests that the phrase "aluminum coils" be changed to "coated aluminum." While Alcan has always referred to the coated aluminum that is added directly to the furnaces as "aluminum coils", the type of aluminum that is intended to be regulated by this VOC PSD Avoidance condition is "coated aluminum" (since it is the coating that causes the VOC emissions). This change will clarify that coiled uncoated aluminum does not need to be counted under this condition, but that uncoiled coated aluminum must be counted.

Response: The Division agrees to the requested change and has revised the conditions accordingly.

Comment: Draft Condition 3.3.1a

Draft Condition 3.3.1 defines the compliance date for various applicable sections in 40 CFR 63 Subpart RRR. Draft Condition 3.3.1.a provides for a one-year extension to the compliance deadline on the emission limits for HCl and Dioxin/Furan from the Decoater (Source Code DCTR). Alcan requests that the words "for HCl and Dioxin/Furan" be removed in order for this condition to be consistent with draft Condition 3.3.1.b and the May 14, 2002 letter from EPD.

Response: Subpart RRR specifies an emission limit for the decoater (source code DCTR) for THC, particulate matter, D/F TEQ, and HCl emissions. The Division's letter of May 14, 2002 only grants a one-year extension to the compliance

deadline for D/F and HCl. This extension is not granted for THC and particulate matter. Thus, Draft Condition 3.3.1.a is not changed based on this comment.

Comment: Draft Condition 3.3.2.b

Alcan requests that the phrase “afterburner have” be changed to “afterburner with.”

Response: The Division agrees to the requested change.

Comment: Draft Condition Nos. 3.3.3.b, 3.3.13.c, 6.2.3.b.ii, and 6.2.6.h

These draft conditions refer to “*group 1 melting/holding furnaces*”. Alcan notes that there are no such furnaces at the subject facility. The Applicant requests the deletion of Draft Condition Nos. 3.3.3.b, 3.3.13.c, and 6.2.3.b.ii. Lastly, Alcan stated that Draft Condition 6.2.6.h should reference “*group 1 furnaces*” rather than “*group 1 melting/holding furnaces*.”

Response: The reference to group 1 furnace HOLD is moved to Condition 3.3.1.a. The Division concurs with Alcan’s request for the deletion of Draft Condition Nos. 3.3.3.b, 3.3.13.c and 6.2.3.b.ii. The Division does not agree that Draft Condition 6.2.6.h should refer to “*group 1 furnaces*”. Draft Condition 6.2.6.h is taken verbatim from 40 CFR 63.1516(b)(2)(iv). Since Draft Condition 6.2.6.h refers to “*group 1 melting/holding furnaces*”, and Alcan does not have such furnaces, the Division has deleted Draft Condition 6.2.6.h.

Comment: Draft Condition 3.3.6

The language in draft Condition 3.3.6 reflects the language in the Secondary Aluminum MACT rule that was current at the draft permit issuance date. However, the rule was revised by a direct final rule that became effective on August 13, 2002 (See *67FR41118*). The purpose of the direct final rule was to clarify the various compliance dates and defer certain early compliance obligations. Alcan requests that the last sentence of said condition be removed to reflect the compliance dates specified in the direct final rule.

Response: Alcan is correct that the first sentence of this condition was changed by the referenced rule (§1506(a)(1)). And that change was already incorporated into Draft Condition 3.3.6. However §1506(a)(2), which is where the second sentence comes from, was not changed. With this in mind, Draft Condition 3.3.6 correctly states the applicable compliance date. Thus, this condition is not changed based on this comment.

Comment: Draft Condition 3.3.9.a

Please change the phrase “except a” to “except as.”

Response: The Division has revised the condition accordingly.

Comment: Draft Condition 4.1.3.g

Alcan requests that the term “debenzo” be corrected to read “dibenzo.”

Response: The Division has revised the condition accordingly.

Comment: Draft Condition 6.1.7.c.i

Draft Condition 6.1.7.c.i defines an excursion as “Any adverse condition revealed by the inspection required by Conditions 5.2.2, 5.2.4, or 5.2.5.” Alcan notes several problems with the condition numbers referenced in this permit. First, Draft Condition 5.2.2 does not require an inspection but requires temperature monitoring of the incinerator. Second, the draft permit does not contain condition 5.2.5. Alcan requests that Draft Condition 6.1.7.c.i only reference Draft Condition 5.2.4.

Response: The Division agrees to the requested change and has revised the condition accordingly.

Comment: Draft Condition 6.2.1.h

Draft Condition 6.2.1 requires the submittal of a compliance status report within 60 days after the compliance date established by 40 CFR 63.1501(a). Draft Condition 6.2.1 includes a list of items which must be included in the notification of compliance status for the notification to be complete. Draft Condition 6.2.1.h requires the inclusion of an approved OM&M plan. Alcan notes of the possibility that their OM&M plan might not be approved by the Division by the required notification of compliance status report submittal date, making it impossible to submit an “approved” OM&M plan. Therefore, Alcan requests that the word “Approved” be removed from Draft Condition 6.2.1.h.

Response: Draft Condition 6.2.1.h is taken verbatim from 40 CFR 63.1515(b)(0) and that paragraph is applicable as written. The condition is not changed based on this comment.

Comment: Draft Condition Nos. 6.2.7.a and 6.2.7.b

Alcan purports that these record keeping requirements are redundant since more detailed records are required under Draft Condition Nos. 3.3.9 and 6.2.6.f.

Response: The Division is unable to delete these conditions, as requested, because these conditions are taken verbatim from Condition 25 from Amendment to Permit No. 3321-066-9088 issued May 22, 1996. The permit is not changed based on this comment.

Comment: Draft Condition Nos. 6.2.8.c and 6.2.8.d

Alcan requests that these reporting requirements be deleted from the permit.

Response: The reporting requirements of Draft Condition Nos. 6.2.8.c and 6.2.8.d are taken, in part, from Amendment to Permit No. 3321-066-9088 dated April 12, 2002 Condition 35. As such, these reporting requirements cannot be deleted as requested. The Division does agree that Draft Condition 6.2.8 can be rewritten for clarity purposes. Draft Condition 6.2.8 is updated to clarify the reporting requirements.

Comment: Attachment B – List of Insignificant Activities

Alcan requests that Attachment B be updated based on the revised Section 4.10 Application received September 13, 2002.

Response: The Division has revised the permit accordingly.

MODIFIED PERMIT CONDITIONS
3341-133-0001-V-01-0**1.3 Overall Facility Process Description**

ALCAN Aluminum recycles used beverage cans and scrap aluminum into large stock ingots that are shipped to rolling mills where they are processed into new beverage cans. Used beverage cans are transported to the facility by rail car and truck and are held in storage until needed or fed directly to the shredding process. Baled aluminum cans are broken up and fed into a shredder (~~source code SHRD³~~) **(source code SHRD)** reducing the aluminum to one-half to one inch sized pieces. Iron and steel are removed with a magnetic separator and dirt is separated out using screens. Shredded aluminum is fed into a decoater (source code DCTR), which uses hot air to remove paint and lacquer. The decoater exhaust is routed to an incinerator (source code INR1) for destruction. ~~The hot incinerator exhaust is vented back to the decoater for heat recovery.~~ The aluminum is then fed into one of three reverberatory furnaces (source codes FCE1, FCE2 and FCE3) for melting. The furnaces burn natural gas, or propane. Alcan also utilizes two electric induction furnaces (source codes INF1 and INF2) to melt Class 1 scrap materials. Class I scrap is the part of the aluminum sheet used to make beverage cans that does not end up as part of a can. Dross removal occurs at the furnaces. ~~Molten metal is gravity fed to a natural gas or propane fired holding "Holder"⁴ furnace (source code HOLD) for metal cleaning and transfer to the casting unit. A mixture of chlorine and argon gases is injected to remove impurities from the molten aluminum. A direct chill caster is used to form aluminum ingots weighing 50,000 to 60,000 pounds each. The function of the Alpur process is to remove alkali metals and hydrogen gas from the molten aluminum prior to casting. In the Alpur unit, a chlorine/argon mixture is injected into the stream of metal as it flows to the caster. Impurities float to the top and are manually removed by skimming. Molten metal is gravity fed to a natural gas or propane fired holding "Holder"¹ furnace (source code HOLD). After final alloy adjustments are complete, molten metal is transferred through an~~

³~~The function of the shred dryer is to preheat shredded aluminum used beverage containers prior to entering the decoater. The dryer utilizes exhaust air from the decoater, thereby transferring some of the exhaust gas energy to the shreds while also lowering the decoater exhaust temperature. The shred dryer itself is not an emissions source as any VOCs, NO_x, CO or HCl in the dryer exhaust originate in the decoater.~~

⁴~~The function of the holder is to clean the molten aluminum for casting and to transfer the metal to the casting unit. During the cleaning process, a rotary flux injector injects and mixes salt flux into the body of molten aluminum. The reaction causes dirt and contaminants (dross) to separate and float to the top or sink to the bottom of the furnace. Floating dross is removed by skimming with a forklift equipped with a ram. Samples of the metal are collected for analyses, and final adjustments to alloy contents of the molten aluminum can also be made in the holder prior to transfer to casting.~~

¹The function of the holder is to clean the molten aluminum for casting and to transfer the metal to the casting unit. During the cleaning process, a rotary flux injector injects and mixes salt flux into the body of molten aluminum. The reaction causes dirt and contaminants (dross) to separate and float to the top of since to the bottom of the furnace. Floating dross is removed by skimming with a forklift equipped with a ram. Samples of the metal are collected for analyses, and final adjustments to allow contents of the molten aluminum can also be made in the holder prior to transfer to casting.

Alcan compact degasser (source code ACD) to the direct chill casters. In the ACD, a mixture of chlorine and argon gases is injected into the molten aluminum to remove alkali metals and hydrogen gas. Impurities float to the top and are removed by skimming. Direct chill casters are used to form aluminum ingots weighing 50,000 to 60,000 pounds each.

3.1 Emission Units

| | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|------------------|-------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------|
| ID No. | Description | Applicable Requirements / Standards* | Corresponding Permit Conditions | ID No. | Description |
| SHRD | Shredders | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.1, 3.2.7, 3.3.1, 3.3.2, 3.3.6, 3.3.8, 3.3.9, 3.3.10, 3.4.1, 3.4.2 | BAG3 BAG6 | Baghouse |
| PRDRY | Shred-pre-dryer | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.7, 3.4.1, 3.4.2 | CY1 | Cyclone |
| DCTR | Decoater | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.2, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.3.1, 3.3.2, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.11, 3.4.1, 3.4.2, 3.4.3 | INR1 | Decoater Incinerator |
| FCE1 | Furnace #1 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.3, 3.2.4, 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.12, 3.4.1, 3.4.2, 3.4.3 | BAG1 & BAG2 | Baghouse |
| FCE2 | Furnace #2 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | See FCE1 | BAG1 & BAG2 | Baghouse |
| FCE3 | Furnace #3 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | See FCE1 | BAG5 | Baghouse |
| INF1 | Induction Furnace #1 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.12, 3.4.1, 3.4.2 | BAG5 | Baghouse |
| INF2 | Induction Furnace #2 | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | See INF1 | BAG5 | Baghouse |
| HOLD | Holder | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) Rule 391-3-1-.02(2)(g)2 | 3.2.1, 3.2.4, 3.2.7, 3.3.1, 3.3.3, 3.3.5, 3.3.6, 3.3.7, 3.3.9, 3.3.13, 3.4.1, 3.4.2, 3.4.3 | None | None |
| ALPR | Alpur | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.9, 3.4.1, 3.4.2 | None | None |
| ACD | Alcan Compact Degasser | 40 CFR 63 Subpart RRR Rule 391-3-1-.02(2)(b)1 Rule 391-3-1-.02(2)(e)1(ii) | 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.9, 3.4.1, 3.4.2 | None | None |

3.2.3 The input of ~~aluminum coils~~ **coated aluminum** in all three Melting Furnaces combined (source codes FCE1, FCE2, and FCE3) shall not exceed 1,000 tons per month. [PSD Avoidance]

3.2.7 The Permittee shall operate the following emission units with listed air pollution control device to control particulate matter emissions at all times that the emission units are operating. [391-3-1-.03(2)(c)]

| Emission Units | | Air Pollution Control Device | | Stack |
|------------------|-------------------------------|--------------------------------|--------------------|---------------|
| Source Code | Description | ID No. | Description | ID No. |
| SHRD | UBC Shredder | BAG3 BAG6 | Baghouse | 1D |
| PRDRY | Shred pre-dryer | CY1 | Cyclone | 2A |
| DCTR | Decoater | INR1 | Incinerator | 2A |
| FCE1 | Furnace #1- charging well | BAG1 & BAG2 | Baghouse | 3C/4C |
| FCE1 | Furnace #1- main hearth | BAG1 & BAG2 | Baghouse | 3C/4C |
| FCE2 | Furnace #2- charging well | BAG1 & BAG2 | Baghouse | 3C/4C |
| FCE2 | Furnace #2- main hearth | BAG1 & BAG2 | Baghouse | 3C/4C |
| FCE3 | Furnace #3- charging well | BAG5 | Baghouse | 11C |
| FCE3 | Furnace #3- main hearth | None | None | 7A |
| INF1 | Induction Furnace #1 | BAG5 | Baghouse | 11C |
| INF2 | Induction Furnace #2 | BAG5 | Baghouse | 11C |
| HOLD | Holding furnace | None | None | 8A |
| ALPR | Alpur Unit | None | None | 9A |
| ACD | Alcan Compact Degasser | None | None | 9A |

- 3.3.2.b From a scrap dryer/delacquering kiln/decoating kiln (source Code DCTR), provided that the source is equipped with an afterburner ~~have~~ **with** a design residence time of at least 1 second and the afterburner is operated at a temperature of at least 1400⁰F at all times, emissions in excess of:
[40 CFR 63.1505(e)]
- 3.3.3 The Permittee, for all group 1 furnaces (source codes FCE1, FCE2, FCE3, INF1, INF2, HOLD), must the limits in this condition to determine the emission standards for a SAPU: [40 CFR 63.1505(i)]
- a. 0.2 kg of PM per Mg (0.4 lb of PM per ton) of feed/charge from a group 1 furnace (source codes FCE1, FCE2, FCE3, INF1, INF2, **and HOLD**), that is not a melting/holding furnace processing only clean charge.
 - ~~b. 0.4 kg of PM per Mg (0.8 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge (source code HOLD).~~
 - ~~c. 15 ug of D/F TEQ per Mg (2.1 x 10⁻⁴ gr of D/F TEQ per ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge.~~
 - ~~d. 0.2 kg of HCl per Mg (0.4 lb of HCl per ton) of feed/charge from a group 1 furnace.~~
 - ~~e. The Permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.~~
 - b. 15 ug of D/F TEQ per Mg (2.1 x 10⁻⁴ gr of D/F TEQ per ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge.**
 - c. 0.2 kg of HCl per Mg (0.4 lb of HCl per ton) of feed/charge from a group 1 furnace.**

- d. The Permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.**

- 3.3.4 The Permittee, for the in-line fluxer (source code ~~ALPRACD~~), must use the limits in this condition to determine the emission standards for a SAPU: [40 CFR 63.1505(j)]
- 3.3.9.a Except ~~a~~ as provided in paragraph (c) of this condition, install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- 3.3.10 The Permittee must operate a bag leak detection system on the baghouse (source code ~~BAG3~~ **BAG6**) for the aluminum scrap shredder (source code SHRD). The Permittee must:
[40 CFR 63.1506(e)]
- ~~3.3.13.c Operate such group 1 melting/holding furnace subject to the emission standards in 40 CFR 63.1505(i)(2) using only clean charge as the feedstock.~~
- 3.4.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the following processes: FCE1, FCE2, FCE3, HOLD, DCTR, ~~ALPRACD~~, INF1, INF2, ~~PRDRY~~ and SHRD any gases which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent opacity. [391-3-1-.02(2)(b)1]
- 3.4.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the following equipment: FCE1, FCE2, FCE3, HOLD, DCTR, ~~ALPRACD~~, INF1, INF2, ~~PRDRY~~ and SHRD particulate emissions in excess of the rate derived from the expression $E=4.1 \times P^{0.67}$, where E is the emission rate in pounds per hour and P is the process input weight rate in tons per hour.
[391-3-1-.02(2)(e)1(ii)]
- 4.1.3.g Method 23 for the determination of Polychlorinated ~~Debenzo~~ **Dibenzo**- p- Dioxins and Polychlorinated Dibenzofurans from Stationary Sources,
- ~~5.2.1 The Permittee shall perform the following applicable operation and maintenance checks and retain a record suitable for inspection or submittal for each week or portion of each week of operation of the PRDRY is controlled by cyclone CY1. A checklist or other similar log may be used for this purpose:
[391 3 1 .02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]~~
- ~~a. Check exterior of unit for holes in the body or evidence of malfunction in interior of the cyclone.~~
- ~~b. Check hopper for bridging and plugging.~~
- ~~c. Check screw conveyor (or other particulate transfer device) for proper operation to ensure dust removal.~~
- ~~5.2.2 During the operation of the decoater incinerator (source code INR1), the Permittee shall continuously monitor and record the temperature of the INR1.
[391 3 1 .02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]~~
- ~~5.2.3 The Permittee must install, calibrate, maintain, operate, and continuously monitor a bag leak detection system as required in CFR 63.1510(f) on baghouses BAG1, BAG2, BAG3, and BAG5.
[40 CFR 63.1510(f)]~~

~~5.2.4 Within 60 days of the issuance of this Permit, the Permittee shall develop and implement a Preventive Maintenance Program for the baghouses specified in the table in Section 3.1 to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and modification by the Division and shall include the differential pressure ranges that indicate proper operation for each baghouse. At a minimum, the following maintenance checks shall be made on at least a weekly basis, and a record of findings and corrective actions taken shall be kept in a maintenance log:~~

~~[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]~~

- ~~a. Record the pressure drop across each baghouse and ensure that it is within the appropriate range.~~
- ~~b. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.~~
- ~~c. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.~~
- ~~d. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mounting; proper operation of outlet/isolation valves; proper lubrication.~~
- ~~e. Check dust collector hoppers and conveying systems for proper operation.~~

5.2.1 During the operation of the decoater incinerator (source code INR1), the Permittee shall continuously monitor and record the temperature of the INR1.

[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

5.2.2 The Permittee must install, calibrate, maintain, operate, and continuously monitor a bag leak detection system as required in CFR 63.1510(f) on baghouses BAG1, BAG2, BAG5, and BAG6.

[40 CFR 63.1510(f)]

5.2.3 Within 60 days of the issuance of this Permit, the Permittee shall develop and implement a Preventive Maintenance Program for the baghouses specified in the table in Section 3.1 to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and modification by the Division and shall include the differential pressure ranges that indicate proper operation for each baghouse. At a minimum, the following maintenance checks shall be made on at least a weekly basis, and a record of findings and corrective actions taken shall be kept in a maintenance log:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Record the pressure drop across each baghouse and ensure that it is within the appropriate range.**
- b. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.**
- c. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.**

- d. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mounting; proper operation of outlet/isolation valves; proper lubrication.**
- e. Check dust collector hoppers and conveying systems for proper operation.**

6.1.7.c.i Any adverse condition revealed by the inspection required by ~~Conditions 5.2.2, 5.2.4, or 5.2.5~~ **Condition 5.2.3.**

~~6.2.3.b.ii For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: "Each group 1 furnace without add-on air pollution control devices subject to emission limits in 40 CFR 63.1505(i)(2) (Condition 3.3.3(b)) processed only clean charge during this reporting period."~~

6.2.6 In addition to the general records required by 40 CFR 63.10(b), the Permittee must maintain records of:
[40 CFR 63.1517(b)]

~~h. Records of all charge materials for each group 1 melting/holding furnace without air pollution control devices processing only clean charge.
[40 CFR 63.1517(b)(9)]~~

~~i. Operating logs for each group 1 sidewall furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.
[40 CFR 63.1517(b)(10)]~~

~~j. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
[40 CFR 63.1517(b)(13)]~~

~~k. Records of annual inspections of emission capture/collection and closed vent systems.
[40 CFR 63.1517(b)(14)]~~

~~l. Records of any alternative monitoring or test procedure.
[40 CFR 63.1517(b)(15)]~~

~~m. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including;
[40 CFR 63.1517(b)(16)]~~

~~i. Startup, shutdown, and malfunction plan;~~

~~ii. An OM&M plan; and~~

~~iii. Site specific secondary aluminum processing unit emission plan~~

**h. Operating logs for each group 1 sidewall furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.
[40 CFR 63.1517(b)(10)]**

- i. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.**
[40 CFR 63.1517(b)(13)]
 - j. Records of annual inspections of emission capture/collection and closed vent systems.**
[40 CFR 63.1517(b)(14)]
 - k. Records of any alternative monitoring or test procedure.**
[40 CFR 63.1517(b)(15)]
 - l. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including;**
[40 CFR 63.1517(b)(16)]
 - i. Startup, shutdown, and malfunction plan;**
 - ii. An OM&M plan; and**
 - iii. Site-specific secondary aluminum processing unit emission plan**
 - m. For each secondary aluminum processing unit, records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.**
[40 CFR 63.1517(b)(17)]
- 6.2.7.d Quantity of ~~aluminum coils~~ **coated aluminum** charged into the melting furnaces (source codes FCE1, FCE2, and FCE3).
- ~~6.2.8~~ The Permittee shall submit with the semiannual reports required by Condition 6.1.4, a report prepared from records retained in Condition 6.2.7 containing the 12 consecutive month totals listed below in paragraphs (a) and (b) for each calendar month in the reporting period. A 12 consecutive month total shall be defined as the sum of a reporting month's total plus the totals for the previous eleven consecutive months. No 12 consecutive month totals are needed for paragraphs (c) and (d).
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- ~~a.~~ Amount (tons) of UBC, Class I Scrap, Aluminum Coils, Alloy Elements, and Pure Aluminum charged into the melting furnaces (source codes FCE1, FCE2, and FCE3).
 - ~~b.~~ Amount (tons) of Class I Scrap, Alloy Elements, and Pure Aluminum charged into the induction furnaces.
 - ~~c.~~ Amount (tons) of aluminum scrap charged into the decoater (source code DCTR).
 - ~~d.~~ Amount (tons) of aluminum coils charged into the melting furnaces (source codes FCE1, FCE2, and FCE3).
- 6.2.8 The Permittee shall submit the following records with the reports required by Condition 6.1.4:**
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. The twelve consecutive month total quantity (tons) of used beverage cans (UBC), Class I Scrap, Aluminum Coils, Alloy Elements, and Pure Aluminum charged into the melting furnaces (source codes FCE1, FCE2, and FCE3).**

- b. The twelve consecutive month total quantity (tons) of Class I Scrap, Alloy Elements, and Pure Aluminum charged into the induction furnaces (source codes INF1 and INF2).**
- c. The monthly quantity (tons) of aluminum scrap charged into the decoater (source code DCTR).**
- d. The monthly amount (tons) of coated aluminum charged into the melting furnaces (source codes FCE1, FCE2, and FCE3).**

INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Mobile Sources | 1. Cleaning and sweeping of streets and paved surfaces | 1 |
| Combustion Equipment | 1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel. | |
| | 2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows: | |
| | i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste. | 0 |
| | ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste. | 0 |
| | iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types) | 0 |
| | 3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5). | 0 |
| | 4. Stationary engines burning: | |
| | i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators; | 0 |
| | ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year. | 0 |
| | iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year. | 0 |
| iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year. | 0 | |
| Trade Operations | 1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year. | 1 |
| Maintenance, Cleaning, and Housekeeping | 1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively. | 0 |
| | 2. Portable blast-cleaning equipment. | 1 |
| | 3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes. | 0 |
| | 4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent. | 1 |
| | 5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning. | 1 |
| | 6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners. | 0 |
| | 7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners. | 1 |

INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Laboratories and Testing | 1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis. | 0 |
| | 2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility. | 0 |
| Pollution Control | 1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| | 2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| | 3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| | 4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| Industrial Operations | 1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year. | 0 |
| | 2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour: | |
| | i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts. | 4 |
| | ii) Porcelain enameling furnaces or porcelain enameling drying ovens. | 0 |
| | iii) Kilns for firing ceramic ware. | 0 |
| | iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds. | 0 |
| | v) Bakery ovens and confection cookers. | 0 |
| | 3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that: | |
| | i) Activity is performed indoors; & | |
| | ii) No significant fugitive particulate emissions enter the environment; & | |
| | iii) No visible emissions enter the outdoor atmosphere. | 1 |
| | 4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche). | 0 |
| | 5. Grain, food, or mineral extrusion processes | 0 |
| 6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds. | 0 | |
| 7. Equipment for the mining and screening of uncrushed native sand and gravel. | 0 | |
| 8. Ozonization process or process equipment. | 0 | |
| 9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system. | 0 | |
| 10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | 0 | |
| 11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures. | 0 | |
| 12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | 0 | |
| 13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year. | 0 | |

INSIGNIFICANT ACTIVITIES CHECKLIST

| Category | Description of Insignificant Activity/Unit | Quantity |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Storage Tanks and Equipment | 1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored. | 0 |
| | 2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| | 3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid. | 2 |
| | 4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 0 |
| | 5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act. | 1 |
| | 6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons. | <20 |
| | 7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia). | 0 |