Mr. Robert D. Beiter
U.S. Granules Corporation
P.O. Box 130
Plymouth, IN 46563

Re: SMF **099-9307**
Second Significant Modification to
FESOP 099-5463-00015

Dear Mr. Beiter:

U.S. Granules Corporation was issued a permit on December 11, 1996 for a secondary aluminum processing source. A letter requesting changes to this permit was received on December 16, 1997. Pursuant to the provisions of 326 IAC 2-8-11 a significant modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the following changes:

1. Description of Emissions Units and Insignificant Activities will be updated to include baghouses and emergency generator.

2. Section D.4 will be added for the emergency generator with the following conditions included:

   a) Condition D.4.1 - Gasoline usage limit of 1300 gallons per year which corresponds to 500 hours of operation per year, and

   b) Condition D.4.2 - Record keeping requirement for natural gas usage.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact, Bryan Sheets of my staff, at the above address; or by phone at 317-233-0431 or 1-800-451-6027 (ext 3-0431).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
bjs
cc: File - Marshall County
U.S. EPA, Region V
Marshall County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau
DECA, Inc. - Dave Whitmer

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR MANAGEMENT

U.S. Granules Corporation
1433 Western Avenue
Plymouth, Indiana 46563

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F099-5463-00015	
Original issued by Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996

Second Significant Permit Modification: SMF099-9307	Pages Affected: 3, 4, 5, 28a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a secondary aluminum processing source.

Responsible Official:	John C. Oliver, Jr.
Source Address:	1433 Western Avenue, Plymouth, Indiana 46563
Mailing Address:	P.O. Box 130, Plymouth, Indiana 46563
SIC Code:	3341
County Location:	Marshall
County Status:	Attainment for all criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

a) One (1) monoshear to IDEX rotary pyrolysis kiln, known as Process A, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 27,330 actual cubic feet per minute, capacity: 4.0 tons per hour. Fugitive particulate matter emissions escaping the end of the kiln will be captured and controlled by a baghouse system.

b) A/C Line hammermills, known as Process B, controlled by a baghouse with a flow rate of 4,300 actual cubic feet per minute, capacity: 1.7 tons per hour.

c) D Line hammermill, known as Process C, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.85 tons per hour.

d) One (1) shredder/baler, known as Process D, controlled by a baghouse with a flow rate of 7,000 actual cubic feet per minute, capacity: 3.75 tons per hour.

e) One (1) aluminum blending mixer and bagger, known as Process E, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 3.0 tons per hour.

f) One (1) aluminum blending and briquetting mixer, known as Process F, controlled by two (2) baghouses with flow rates of 4,600 actual cubic feet per minute and 1,880 actual cubic feet per minute, capacity: 5.0 tons per hour.

g) One (1) borings and turnings rotary kiln and H Line hammermill, known as Process G, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.5 tons per hour. Fugitive particulate matter emissions escaping the end of the kiln will be captured and controlled by a baghouse system.

h) Sixteen (16) charring ovens, known as Process H, controlled by one (1) venturi scrubber with a flow rate of 11,000 actual cubic feet per minute and two (2) wet packed towers with flow rates of 18,000 actual cubic feet per minute and 14,000 actual cubic feet per minute, capacity: 3.4 tons per hour for 2,675 hours. This item is the Alternate Operation Scenario.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

d) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

f) Cleaners and solvents characterized as follows: a) having a vapor pressure equal to or less than 2 kilopascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or; b) having a vapor pressure equal to or less than 0.7 kilopascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

h) A laboratory as defined in 326 IAC 2-7-1(20)(C).

i) An emergency gasoline generator not exceeding 110 horsepower.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.4 FACILITY OPERATION CONDITIONS

The following insignificant activity:

One (1) gasoline-fired emergency generator, known as EG-1, with a rated output of 35 brake horse power (BHP), and exhausting to the ambient air.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Usage Limit [326 IAC 2-1]
Pursuant to 326 IAC 2-1, the emergency generator shall use no more than 1300 gallons of gasoline per twelve (12) consecutive month period. This usage limit is required to limit the potential hours of operation to 500 hours per year. Compliance with this limit satisfies the permitting requirements of 326 IAC 2-1 (Construction and Operating Permit Requirements).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.4.2 Record Keeping Requirements
To document compliance with Condition D.4.1, the Permittee shall maintain records of gasoline fuel usage. Records shall be taken monthly and shall be complete and sufficient to establish compliance with the gasoline usage limit established in Condition D.4.1.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document for Second Significant Permit Modification of the Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	U.S. Granules Corporation	
Source Location:	1433 Western Avenue, Plymouth, Indiana 46563	
County:	Marshall	
Permit No.:	F099-5463-00015	Issued: December 11, 1996
Revision No.	SMF-099-9307	
SIC Code:	3341	
Permit Reviewer:	Bryan Sheets	

History

On December 16, 1997, U.S. Granules Corporation submitted a request to add an emergency generator and two (2) baghouses to their existing FESOP. The emergency generator was constructed in August of 1995; however, the generator was inadvertently excluded from the Title V application and permit. The generator has never been properly permitted and must be reviewed pursuant to 326 IAC 2-1 (State Construction and Operating Permits). The baghouses will be added to control PM from the fugitive exiting the end of the kilns. These baghouses are not required to comply with any existing rules. Therefore, the baghouses will not be reviewed pursuant to 326 IAC 2-1.

New Source Review

Emissions Calculations

The applicant's emission calculations were reviewed and found to be accurate. These were used for the permitting decisions.

Total Potential Emissions

Pollutant	Potential Emissions	
	(lb/day)	(ton/yr)
PM/PM-10	0.72	0.0
SO_2	0.48	0.0
VOC	18.5	0.2
CO	368.9	3.8
NOx	9.36	0.1
Single HAP	negligible	
Combination of HAPs	negligible	

(a) Since there are no State rules that apply to the generator, the potential emissions are the allowable emissions for the purposes of permit determination.

(b) The potential emissions from the generator are based on operating the unit 500 hours per year. This is consistent with guidance from the U.S. EPA, dated February 20, 1997, which states that if a generator is only used for emergency purposes and a permit would only be required due to the generator, then potential emissions can be calculated using a default "worst case" operating time of 500 hours per year.

(c) Allowable emissions (as defined in the Indiana Rule) of CO and VOC are less than 25 tons per year, but greater than 125 and 15 pounds per day, respectively. Therefore, pursuant to 326 IAC 2-1, a registration is required.

County Attainment Status

Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Marshall County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Enforcement Issue

IDEM is aware that the generator has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed modification to the FESOP is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 16, 1997.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 63 applicable to this facility.

State Rule Applicability

326 IAC 2-1 (State Construction and Operating Permits)

Pursuant to 326 IAC 2-1 (State Construction and Operating Permits), the generator shall not exceed 500 hours of operation per year. Records of fuel usage will be required to document compliance with this limitation.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)	Single HAP (ton/yr)	Combo HAPs (ton/yr)
Proposed Modification	negligible	negligible	0.2	3.8	0.1	negligible	negligible
Existing Processes A through H	97.9	6.48	39.78	15.4	40.3	negligible	negligible
Insignificant Activities	negligible	negligible	2.6	negligible	0.13	negligible	negligible
New Limited Emissions	97.9	6.48	42.6	19.2	53.4	--	--
Title V Significant Levels	99	99	99	99	99	9	24
Note: This source will be able to keep its FESOP status.							

Changes Proposed to FESOP

The Office of Air Management (OAM) has reviewed an application from U.S. Granules Corporation relating to the requested revisions of their FESOP and is proposing the following changes:

1. Description of Emissions Units and Insignificant Activities will be updated to include baghouses and emergency generator.

2. Section D.4 will be added for the emergency generator with the following conditions included:

    a) Condition D.4.1 - Gasoline usage limit of 1300 gallons per year which corresponds to 500 hours of operation per year, and

    b) Condition D.4.2 - Record keeping requirement for natural gas usage.

Recommendation

The staff recommends to the Commissioner that the modification be approved.

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

Conclusion

The modifications of this source will be subject to the conditions of the attached proposed **FESOP Significant Modification Permit No. SMF-099-9307-00015.**