

Facility Name: **Oil-Dri Corporation of Georgia Ochlocknee North and South**
 City: Ochlocknee
 County: Thomas
 AIRS #: 04-13-275-00004

Application #: TV-9649
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 Date of Draft Permit:
 Permit No: 3295-275-0004-V-01-1

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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 Oil-Dri Corporation of Georgia Ochlocknee North and South 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

The Facility Description may be presented in outline or narrative form. It must contain the information contained in each of the following subsections, preferably in a similar order.

A. Facility Identification**1. Facility Name:**

Oil-Dri Corporation of Georgia Ochlocknee North and South

2. Parent/Holding Company Name

Oil-Dri Corporation of America

3. Previous and/or Other Name(s)

This facility has not recently had any other name.

4. Facility Location

Georgia Highway 3
Ochlocknee, GA

5. Attainment or Non-attainment Area Location

The facility is located in an attainment area for all pollutants.

6. Class I Area Impacts

The facility is located within 100 km of two Class I areas. These are the St. Mark's and Bradwell Bay Class I areas.

B. Site Determination

This facility consists of two plants and a clay mine. The two plants are directly adjacent and the clay mine is directly across Georgia Highway 3. All three areas are represented in this permit. 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
3295-136-10550	07/17/90 (Permit)		✓
3295-136-10550	11/02/90 (Amendment)		✓
3295-136-10550	01/18/91 (Amendment)		✓
3295-136-10550	02/22/91 (Amendment)		✓
3295-136-10550	04/26/91 (Amendment)		✓
3295-136-10550	09/13/91 (Amendment)		✓
3295-136-10550	09/30/91 (Amendment)		✓
3295-136-10550	12/30/91 (Amendment)		✓
3295-136-10550	03/17/92 (Amendment)		✓
3295-136-10550	07/08/92 (Amendment)		✓
3295-136-10550	09/11/92 (Amendment)		✓
3295-136-10550	11/25/92 (Amendment)		✓
3295-136-10550	01/22/93 (Amendment)		✓
3295-136-10550	02/03/93 (Amendment)		✓
3295-136-10550	04/13/93 (Amendment)		✓
3295-136-10550	10/25/93 (Amendment)		✓
3295-136-10550	04/04/94 (Amendment)		✓
3295-136-10550	09/28/94 (Amendment)		✓
3295-136-10550	05/02/95 (Amendment)		✓
3295-136-10550	01/12/96 (Amendment)		✓
3295-136-10550	06/21/96 (Amendment)		✓

D. Process Description

1. SIC Codes(s)

1459 and 3295

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)

Oil-Dri manufactures a number of different products. While the use of the products varies widely, all of the products are based on dried and sized fuller's earth. Depending on the intended use of the product, additional materials and chemicals may be added to the final product.

3. Overall Facility Process Description

Oil-Dri Corporation of America (Oil-Dri) operates a fuller's earth processing facility located in Ochlocknee, Thomas County, Georgia. The Oil-Dri Ochlocknee facility consists of two adjacent process areas (north and south plants) that contain various fuller's earth processing operations, including primary crushing, regular volatile material (RVM) drying, low volatile material (LVM) calcining, milling screening, final product conveying and storage, bagging, and bulk product loading, and ancillary support activities.

4. Overall Process Flow Diagram (optional)

Process flow diagrams were included in both the original application and the updated application.

E. Regulatory Status

1. PSD/NSR

This facility is a major source under PSD because it has potential emissions of PM, NO_x, and SO₂ are greater than 250 tpy. Oil-Dri has performed modifications to the facility that would have been significant modifications, but Oil-Dri took operational limits to avoid PSD/NSR review.

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	n/a			
H ₂ S	n/a			
Individual HAP	n/a			
Total HAPs	n/a			

3. MACT Standards

This facility is not currently subject to any MACT standards.

4. Program Applicability

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

This facility does not have any facility-wide emissions or operating caps.

B. Applicable Rules and Regulations

- Rules and Regulations Assessment - The Oil-Dri facility processes fuller's earth. Oil-Dri has constructed, reconstructed, or modified mineral processing equipment at the facility after August 31, 1983. Oil-Dri is therefore subject to the NSPS standard in 40 CFR Part 60 Subpart OOO, Standards for Performance for Nonmetallic Mineral Processing Plants. Because Oil-Dri has equipment that is subject to the specific Subpart OOO standard, the facility must also comply with the general provisions of the NSPS (40 CFR Part 60 Subpart A).
- Emission and Operating Standards - There are no specific facility-wide emissions or operating standards for this facility.

C. Compliance Status

The Oil-Dri facility is currently in compliance.

D. Operational Flexibility

The Oil-Dri facility has not requested any alternate operating scenarios or operational flexibility for their operating permit at this time.

E. Permit Conditions

Because Oil-Dri has equipment that is subject to the specific Subpart OOO standard, the facility must also comply with the general provisions of the NSPS (40 CFR Part 60 Subpart A). Condition 2.2.1 represents this requirement to comply with the NSPS general provision.

III. Regulated Equipment Requirements

A. Brief Process Description

Oil-Dri Corporation of America (Oil-Dri) operates a fuller's earth processing facility located in Ochlocknee, Thomas County, Georgia. The Oil-Dri Ochlocknee facility consists of two adjacent process areas (north and south plants) that contain various fuller's earth processing operations, including primary crushing, regular volatile material (RVM) drying, low volatile material (LVM) calcining, milling screening, final product conveying and storage, bagging, and bulk product loading, and ancillary support activities.

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
North Plant					
MN1	Roller Mill 707-1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	E5	Baghouse
MN2	Roller Mill 707-2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	H11	Baghouse
MN3	Roller Mill 707-3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	H11	Baghouse
MN4	Roller Mill 707-4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	H11	Baghouse
MN5	Roller Mill 707-5	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	H11	Baghouse
MN6	Roller Mill 707-6	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3	H11	Baghouse
MN7	Raymond Mill 707-7	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O2	Baghouse
MN8	Williams Hammermill 707-8	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(g) 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.4.3, 3.5.1, 3.2.1, 5.2.2, 5.2.3, 5.2.4, 6.2.1, 6.2.2	O4	Baghouse
DN1	RVM Dryer (Dryer "A") D-3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 5.2.1	D2 and D1	Cyclone and Venturi Scrubber
DN2	LVM Rotary Calciner (Dryer "B") E-4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 5.2.1	E2 and E1N	Cyclone and Venturi Scrubber
DN3	LVM Rotary Cooler E-3B	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2, 5.2.1	E3 and E3A	Cyclone and Venturi Scrubber
EN	LVM Calciner/Cooler Transport Complex	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	E5	Baghouse
HN	RVM Milling and Screening	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	H11	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
IN	LVM Milling and Screening	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	HI1	Baghouse
KN	Packaging Line No. 1 and Powders Operation	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	K1A, K3, K4, K3A, K5A, K6	Baghouses
LN	Packaging Line No. 2 and Clorox Operation	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	L1, L2, L3, L4	Baghouses
ON	Fine Grinding (Powders) System	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O1, O2, O3	Baghouses
O6	Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
O7	Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
O9	Sweko Screen	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O4	Baghouse
O10	Sweko Screen	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O4	Baghouse
O11	Bucket Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O4	Baghouse
PN	Gel Clay Operation	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
TN21	Waste Fines Storage Tank	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	MN1	Baghouse
EN1	Dryer B Reclaim Bucket Elevator 605-2	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	E5	Baghouse
CN25	Dryer B Reclaim Hi-Roller Belt Conveyor 450-18	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	E5	Baghouse
TN23	Flo-Free Product Storage Silo 870-11	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	MN2	Baghouse
LN21	Flo-Free Bulk Loading Station 885-2	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	MN3	Baghouse
TN14	South Product Storage Silo 870-20	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	K5A	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
LN13	South Product Bulk Loading Station 885-6	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	K6	Baghouse
LN9	Bulk Loading Station - Model C, Size 80	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	K1A	Baghouse
HN32	Bag Dump Station Hopper	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	O5	Baghouse
TN26	Reclaim Bin	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	O6	Bin Filter
South Plant					
MS1	Roller Mill 707-101	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 5.2.1, 6.2.1, 6.2.2	F1	Venturi Scrubber
MS2	Roller Mill 707-102	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
MS3	Roller Mill 707-103	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
MS4	Roller Mill 707-104	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
MS5	South Grinding Mill (Ag Mill) 810-105	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F4	Baghouse
DS1	Rotary Dryer C-1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 3.2.2, 5.2.1	C2	Venturi Scrubber
DS2	Rotary Calciner D-1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 3.2.3, 5.2.1	D2	Venturi Scrubber
KS1	J. C. Steele Primary Crusher	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
HS	Packaging and Bagging Operations	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	H1	Baghouse
FS	RVM and LVM Milling and Screening Operations	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 5.2.1, 6.2.1, 6.2.2	F1	Venturi Scrubber
ES	Bulk Loading System	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	E1S	Baghouse
IS	Scoopable Cat Litter Packaging Operations	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	I1	Baghouse
CS54	Hi-Roller Feed Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F3	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
ES19	Processing Bucket Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F3	Baghouse
CS55	Hi-Roller Feed Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	I1	Baghouse
ES20	Packaging Bucket Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	I1	Baghouse
E13B	Bucket Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	H1	Baghouse
HS19	Bulk Bagger Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F4	Baghouse
LS9	Bulk Bagger	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F4	Baghouse
CS56	Hi-Roller Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	H1	Baghouse
LS10	Hopper, Form/Fill/Seal Bagging Unit	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	H1	Baghouse
ES14	New Product Bucket Elevator	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	F3	Baghouse
CS40	Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.5.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2	I1	Baghouse
CS19	South Grinding Mill Feed Belt Conveyor	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
SS20	Kason Screen	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-
SS21	Kason Screen	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	none	-
SS2	6-200 Derrick Screen	40 CFR Part 60 Subpart OOO 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 6.2.1, 6.2.2	None	-

C. Equipment & Rule Applicability

- Emission and Operating Caps -

Avoidance of PSD Analysis - One piece of equipment, the North Plant Williams Hammermill (MN8), has a particulate emission limit to avoid applicability to PSD regulations. The condition limits the emission rate of particulate matter to 3.41 lb./hr. This limit keeps the

emission source from emitting more than the amount of particulate matter that would have made the modification significant under PSD regulations.

NSPS Subpart OOO - The facility is subject to 40 CFR Part 60 Subpart OOO, Standards for Performance for Nonmetallic Mineral Processing Plants. Because they have pieces of equipment which are subject to this standard, the equipment which is subject is limited to 0.05 g/dscm (0.02 grains/dscf) of particulate matter. The equipment that is subject to this performance standard is denoted in the table above.

Toxic Guideline - One process at the Oil-Dri facility utilizes a sulfuric acid mist. This mist is injected into the process at the Williams Hammermill (Source Code MN8). Emissions from this unit are controlled by a baghouse (Control Device O4). When the equipment was installed a toxic impact screening was done using the sulfuric acid mist emission rate (0.1355 pounds per hour) as determined through engineering calculations. When the toxic modeling was done, an overly conservative emission rate of 2.3 lb/hr was used for modeling. Even using the overly conservative value, the projected ambient air concentration was an insignificant portion of the acceptable ambient air concentration. Since the projected ambient air concentration is insignificant compared to the acceptable ambient air concentration, it is not necessary to include emissions limits based on the toxic guideline for this operation.

- Applicable Rules and Regulations -

40 CFR, Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" is listed in the permit as Condition 3.3.1. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.3.1 in the column, "Corresponding Permit Condition". This requirement applies to any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station constructed, reconstructed, or modified after August 31, 1983. Emission requirements associated with this rule include no visible fugitive emissions greater than 10 percent opacity. Stack emissions will not contain particulate matter in excess of 0.05 g/dscm (0.02 grains/dscf) and exhibit greater than 7 percent opacity.

Georgia Rule 391-3-1-.02(2)(p), "Particulate Emissions from Kaolin and Fuller's Earth Processes," is listed in the permit as Condition 3.4.1. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.4.1 in the column, "Corresponding Permit Condition". The following equations are used to calculate the allowable rates of emission from kaolin and fuller's earth process equipment constructed or put in operation. Particulate matter emissions can not equal to or exceed the allowable rates specified in the below equations.

- a. For equipment constructed or extensively modified after January 1, 1972, the following equations is used to determine allowable emission rates:
 - i. $E = 3.59 P^{0.62}$, for process input weight rate up to and including 30 tons per hour;
 - ii. $E = 17.31 P^{0.16}$, for process input weight rates in excess of 30 tons per hour.
- b. For equipment constructed or put in operation on or before January 1, 1972, the following equations is used to determine allowable emission rates:
 - i. $E = 4.1 P^{0.67}$, for process input weight rate up to and including 30 tons per hour;
 - ii. $E = 55 P^{0.11} - 40$, for process input weight rates in excess of 30 tons per hour.

In the above equations: E = allowable emission rate in pounds per hour; and

P = process input weight rate in tons per hour.

Georgia Rule 391-3-1-.02(2)(b) 1 "Visible Emissions" is a general permitting requirement, which applies to all facilities and is listed in the permit as Condition 3.4.2. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.4.2 in the column, "Corresponding Permit Condition". Visible emissions will not equal or exceed forty (40) percent.

Georgia Rule 391-3-1-.02(2)(g) Sulfur Dioxide This regulation is listed in the permit as Condition 3.4.3. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.4.3 in the column, "Corresponding Permit Condition". This regulation includes all fuel burning sources below 100 million BTU's of heat input per hour will not burn fuel containing more than 2.5 percent sulfur, by weight. All fuel sources having a heat input of 100 million BTU's per hour or greater will not burn a fuel containing more than 3 percent sulfur, by weight.

D. Compliance Status

The Oil-Dri facility is currently in compliance.

E. Operational Flexibility

The Oil-Dri facility has not requested any alternate operating scenarios or operational flexibility for their operating permit at this time.

F. Permit Conditions

Condition 3.2.1: This condition limits the emissions of the emissions of the Williams Hammermill (MN8). This limit was put in place to avoid PSD applicability.

Condition 3.2.2 This condition has been carried forward from the facility's current SIP operating permit.

Condition 3.2.3 This condition has been carried forward from the facility's current SIP operating permit.

Condition 3.3.1: This facility is subject to 40 CFR Part 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants." It is a fuller's earth facility which has constructed, reconstructed, or modified a crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station constructed, reconstructed, or modified after August 31, 1983. This condition outlines the requirements of Subpart OOO.

Condition 3.4.1: Because the facility is specifically a fuller's earth facility, it is subject to the state's particulate matter standard which is in 391-3-1-.02(2)(p).

Condition 3.4.2: This condition represents the state's general visible emissions standard. This condition will apply to all emission units in table 3.1 which are not subject to 40 CFR Part 60 Subpart OOO which has an opacity standard.

Condition 3.4.3: This condition was included because the dryers and calciners at the facility all burn fuel oil as a back-up fuel. This condition limits the sulfur in the fuel oil that is burned in these units.

Condition 3.5.1: This condition is included to insure good operating practices and maintain low particulate emissions rates.

Condition 3.5.2: This condition is included to insure good operating practices and maintain low particulate emissions rates.

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

This permit specifies that a performance test may be required to determine compliance with the emission limits in Part 3.0, and the test methods to be used to determine compliance are listed. A general condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

This permit specifies that a performance test may be required to determine compliance with the emission limits in Part 3.0, and the test methods to be used to determine compliance are listed. A general condition to require notification of any test and for the submission of a test plan is included.

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

This permit specifies that any monitoring systems installed should be in continuous operation and that downtime due to maintenance should be minimized.

B. Specific Monitoring Requirements

Most sources at the facility have baghouses for control of Particulate Matter (PM) emissions and are subject to the PM and Visible emissions (opacity) limitations of Georgia Rules (p), (b), and/or 40 CFR Part 60, Subpart OOO. The processes that are substantial sources of PM emissions are controlled by the larger baghouses installed at the facility and are subject to the monitoring requirements of Condition 5.2.2 to reasonably assure compliance with applicable emissions limitations. To reasonably assure compliance with applicable PM limitations, including the limits in Condition 3.2.1, a Visible Emissions (VE) check is required each day of operation of the emissions units controlled by the baghouses. Corrective actions are required for visible emissions or for visible emissions which exceed a specified opacity action level. In addition, a Preventive Maintenance Program is required on these baghouses. The program requires weekly monitoring of baghouse pressure drop and the performance of operation and maintenance checks on the baghouses. All VE and Preventative Maintenance Program information is retained by Oil-Dri and submitted to the Division upon request. Excursions, to be reported semiannually, are specified.

Additionally, the Williams Hammermill (MN8) has an emissions limitation for PM for purposes of Prevention of Significant Deterioration (PSD) avoidance. The monitoring described previously is adequate for assuring compliance with this PM limitation.

Dust collectors, bin vents and filter receivers controlling emissions from individual bins, wet screening operations, bucket elevators, belt and pneumatic conveyances, and bagging operations are exempted from detailed monitoring provisions due to little likelihood of significant Particulate Matter emissions.

The facility's current permit requires them to keep records of hourly production rates as well as maintenance and inspection records. Recording and maintain inspection and maintenance activities has already been addressed in the permit. Since there is no limit that specifically limits the production rates at the facility, this additional monitoring requirement has not been included in the Title V permit.

The facility's current permit limits the particulate emissions from the South Plant Rotary Dryer (DS1) to 14.4 pounds per hour and the South Plant Rotary Calciner (DS2) to 13.4 pounds per hour. Both of these units are controlled with venturi scrubbers. Condition 5.2.1 has been included to monitor the operation of these venturi scrubbers and insure compliance with the particulate emission limit.

The facility's current permit requires them to keep records of hours of operation while using fuel oil in the dryers and calciners. It also requires the recording of volumes of fuel consumed in the dryers and calciners. Since there is no limit on these values and sufficient monitoring has been put in place to insure compliance with the regulations that pertain to fuel oil use, these additional monitoring conditions have not been included in the Title V permit.

The facility's current permit requires them to monitor the pH of the scrubbant for all scrubbers at the facility. The clay that is mined and processed by this facility contains varying amounts of sulfur compounds. There are no regulatory limits or requirements for the pH of the scrubbant at this facility. The pH will continue to be monitored to insure proper operation and maintenance of the scrubbers.

The RVM Dryer - Dryer "A" (DN1), LVM Rotary Calciner (DN2), Rotary Dryer (DS1), and Rotary Calciner (DS2) are subject to Georgia Rules (p) and (b) and are controlled by four separate venturi scrubbers, (D1, E1N, C2, and D2). Additionally, RVM Dryer - Dryer "A" (DN1) and LVM Rotary Calciner (DN2) are subject to rules (p) and (b) and have cyclones controlling emissions before venturi scrubbers. Since the cyclones do not vent to the atmosphere before entering the venturi scrubber, the operating parameters of this scrubber will be used to monitor the output of these control devices.

The South Plant Nutcracker Roller Mill (MS1) and RVM and LVM milling and screening operations (FS) are subject to NSPS OOO and state rule 391-3-1-.02(2)(p) and are controlled by a single venturi scrubber. The monitoring strategy requires Oil-Dri to continuously monitor and record pressure loss of the gas stream through the scrubbers. Oil-Dri is also required to continuously monitor and record the scrubbing flow rate to the scrubbers.

Baghouse O4, which receives gases from the Williams Hammermill, is required to monitor (not record) temperature continuously and to record all incidents when the temperature exceeds a temperature based on the maximum temperature that the bags can withstand. The temperature may be monitored at the baghouse inlet or may be monitored at some other location provided an equivalent maximum temperature is determined.

The permit requires all uncontrolled sources, except those that specify no monitoring by this narrative, be checked daily for obvious mechanical failure and all uncontrolled sources be checked the presence of Visible Emissions. The permit includes a requirement to take corrective action and keep records. If problems are revealed during the daily check, they must be reported in the semiannual report if not corrected within 24 hours.

Condition 7.1.2 includes a deferral on minor modifications to the plant and not an exemption from permitting. With the daily checks required in condition 5.2.2 and only minor modifications allowed to the facility, confidence is high the PSD PM increment will not be compromised. Any cumulative modification above state deferral levels will require modeling data to be submitted demonstrating compliance.

VI. Other 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 related information to deviations from applicable requirements.

B. Specific Record Keeping and Reporting Requirements

Oil-Dri can burn natural gas, propane, or residual oil at the facility. The Williams Hammermill (MN8), RVM Dryer - Dryer "A" (DN1), LVM Rotary Calciner - Dryer "B", Rotary Dryer (DS1), and Rotary Calciner (DS2) burn natural gas as the primary fuel. RVM Dryer - Dryer "A" (DN1), LVM Rotary Calciner (DN2), Rotary Dryer (DS1), and Rotary Calciner (DS2) use residual (#5) oil as backup. This permit will allow The Williams Hammermill (MN8) to burn Natural gas as the primary fuel and propane as a backup fuel. Natural gas and propane have negligible amounts of sulfur; therefore no monitoring is required. All fuel-burning sources (dryers and calciners) are subject to Georgia Rule (g) for sulfur dioxide emissions. The monitoring strategy certifying compliance with Georgia Rule (g) and residual (#5) oil requires Oil-Dri to obtain certification from the fuel oil suppliers for each shipment. Permit condition 6.2.3 requires this certification.

Record keeping and Reporting Requirements:

Records, including identification of exceedances and excursions, the cause of such occurrence, the corrective action taken, fuel usage, and fuel supplier certifications are required to be kept by Oil-Dri. Reporting is required on a semiannual basis.

VII. Specific Requirements

- A. Operational Flexibility
None Applicable
- B. Alternative Requirements
None Applicable
- C. Insignificant Activities
refer to §4.10 of the Title V permit application
- D. Temporary Sources
None Applicable
- E. Short-Term Activities
None Applicable
- F. Compliance Schedule/Progress Reports
None Applicable
- G. Emissions Trading
None Applicable
- H. Acid Rain Requirements
None Applicable
- I. Prevention of Accidental Releases
None Applicable
- J. Stratospheric Ozone Protection Requirements
None Applicable
- K. Pollution Prevention
None 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 30-day public comment period for the draft Title V permit for Oil-Dri Corporation of Georgia Ochlocknee North and South ended April 14, 2002. Comments were received from Oil-Dri, which are addressed below.

Table 3.1

Comment: The Roll Compaction Process equipment at the South Plant (ID Nos. ES25, HS30, KS4, ES26, SS15, and LS3) is out of service. These pieces of processing equipment had fugitive emissions controlled by Baghouse R1, which is also no longer in service. The processing equipment is detailed in Part 3.0, Table 3.1 and should be removed as active equipment. This will also change the total number of Emission Units described in Attachment B for Generic Emission Groups.

Response: The equipment specifically listed in the comment has been removed from Table 3.1. After discussing the last sentence of the comment about Attachment B with Oil-Dri, they agreed that the numbers in the Generic Emissions Groups in Attachment B would not change. Therefore, no changes were made in Attachment B.

Sections 3.4.3 and 6.2.3

Comment: The permit describes the fuels used in the Rotary Dryers and Calciner as natural gas or #5 fuel oil. We use a recycled fuel oil that meets the standards for on-specification recycled oil (40CFR Ch. 1 Part 279) that has the physical characteristics of #5 fuel oil. We follow the regulations for the use of this fuel as part of our operating procedures. We request that the language describing the fuels used include on-specification recycled oil as a permitted fuel. Our supplier certifies compliance with the oil specifications shown in Table 1 of the above reference.

Response: The Division does not feel any language in the permit precludes Oil-Dri from continuing to legally burn used oil that meets the specifications of 40 CFR Part 279.11. To clarify Oil-Dri's record keeping requirement and to assure used oil received by Oil-Dri meets the specifications of 40 CFR Part 279.11, Condition 6.2.3 was changed as follows:

Condition 6.2.3.b was added requiring the recording of the date the used oil was received.

Condition 6.2.3.g was added to require a certification that the oil meets the specifications listed in 40 CFR Part 279.11.

Additional Changes

In addition to the changes listed above, the following changes to template conditions have been made.

1. The first sentence of condition 6.1.6 has been change from "all measurements" to "all required measurements" to be consistent with the underlying standard.
2. The word "will" in the first sentence of conditon 7.10.1 has been changed to "with" to correct a typographical error.
3. Condition 8.5.3 has been changed to require a "timely" application in order to be consistent with the underlying standard.
4. Condition 8.23.1 relating to the use of any credible evidence or information has been added in accordance with an agreement with U.S. EPA.