

## **Operational Flexibility Notification (*For Non-Title V Sources*)**

January 23, 2014

RE: Permit # 0457440P  
Reference # Mc Minn – Denso Manufacturing Athens Tennessee, Inc.  
Source 54-0158-38

TO: The Technical Secretary  
Tennessee Air Pollution Control Division  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Ave., 15<sup>th</sup> Fl  
Nashville, TN 37243

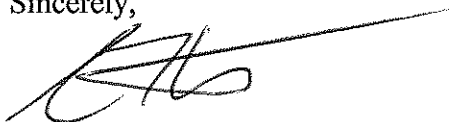
The facility plans to make the following changes pursuant to TAPCR 1200-3-2-.01(1) (aa) 4 (State regulation governing operational flexibility changes):

- 1) **Description of Changes: Addition of one Powder Waste Recycling Machine to DMAT's Monolithic Carrier Production.**
- 2) **This system will be equipped with an air pollution control device that will ensure no emissions are generated from this process.**
- 3) **There will be no change in the permitted VOC, PM, SO<sub>2</sub> and HAP emissions as this is an enclosed system. MSDSs for all chemicals and/or products involved in this process are included with this submittal.**
- 4) **Installation of new machinery will not begin before March 1, 2014.**
- 5) **All permit terms and conditions are still applicable.**

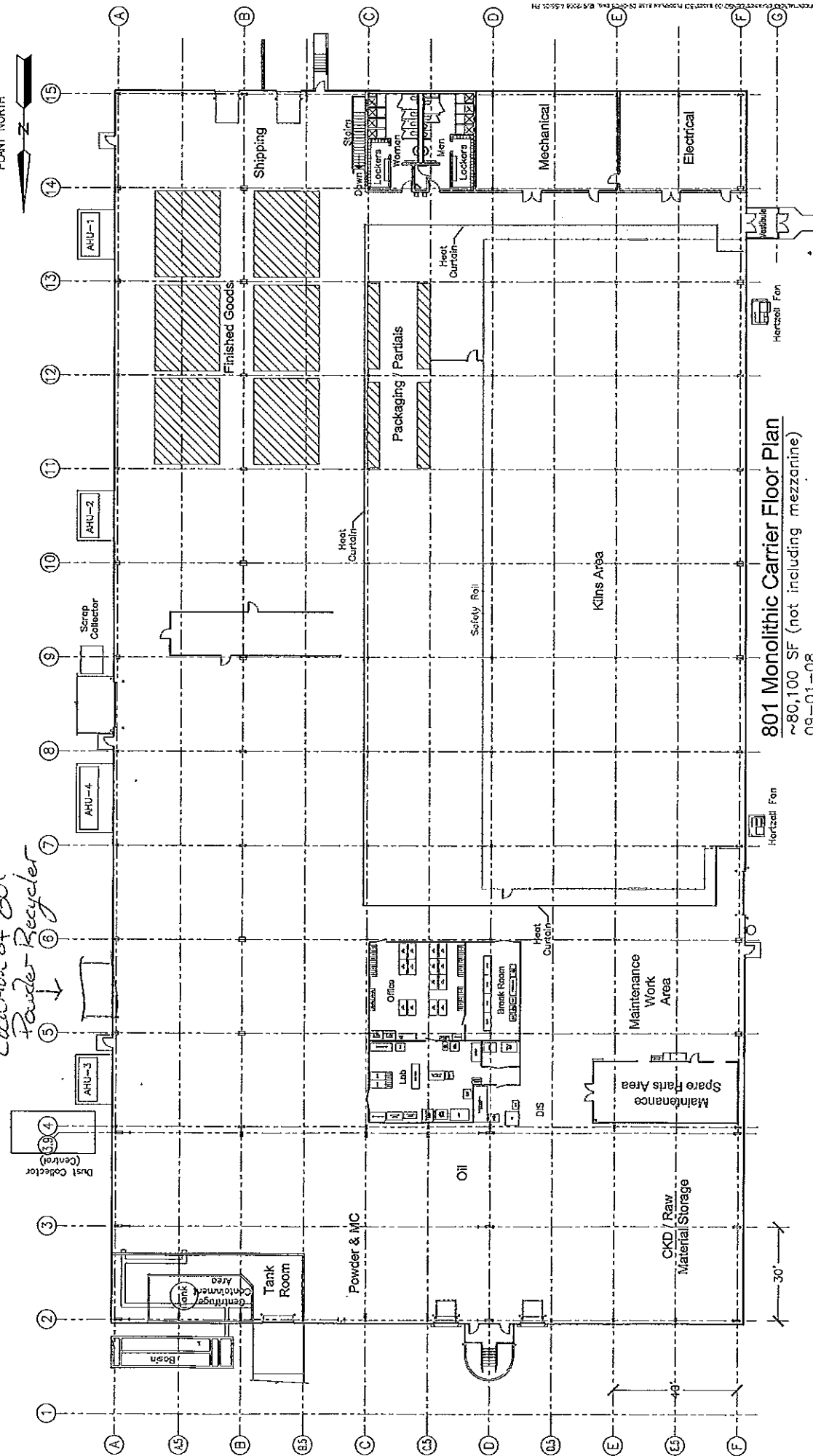
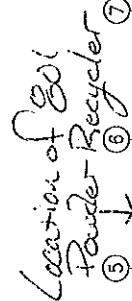
This source is not subject to requirements of paragraphs 1200-3-9-.02(11), 1200-3-9-.01(4), and 1200-3-9-.01(5). These changes do not result in emissions exceeding the emissions allowable under the existing operating permit. These changes do not result in the emission of any air contaminant (to which an emission standard applies) not previously emitted. If you have any questions or require further information, please contact Joseph Luncford at (423) 746-0000 ext. 7521.

Based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Sincerely,



Shawn Bryant  
Manager, Safety Health and Environment



**801 Monolithic Carrier Floor Plan**  
~80,100 SF (not including mezzanine)  
09-01-08



# MATERIAL SAFETY DATA SHEET

<b>Cordierite</b>					
		Date of Issue:		04-Jun-07	
		Update day			
<b>1. Product &amp; Company Identification</b>					
• Product Name			:	Cordierite	
• Company Name			:	Junmel Ceramics(Dandong) Co., Ltd	
• Address			:	No.165 Donggang South Road Donggang Economic Development Zone Liaoning Province P.R. China	
• Section			:	Quality Assurance Dept.	
• Person in Charge			:	Cai Xinjun	
• Telephone No.			:	+86-415-7144-688	
• Fax No.			:	+86-415-7144-241	
<b>2. Composition /Information on Ingredients</b>					
• Substance or Preparation			:	Substance	
• Chemical name			:	Cordierite	
• Ingredients			:	mixed by Aluminum Hydroxide, Alumina, Kaolin	
			:	Silica and Talc	
• Content			:	Item	CAS #
			:	Aluminum Hydroxide	21645-51-2
			:	Alumina	1344-28-1
			:	Silica	60676-86-0
			:	Kaolin	1332-58-7
			:	Talc	014807-96-6
• Ingredients of Hazardous Harmfulness			:	Not applicable	
<b>3. Hazards Identification (Most Important Hazard)</b>					
• Toxicity			:	Not applicable	
• Specific Hazardousness			:	Not applicable	
• Danger			:	No inflammability and explosiveness	
<b>4. First-Aid Measures</b>					
• Inhalation			:	Move to inhale fresh air immediately	
• Skin Contact			:	Clean Skin with soap and water	
• Eye Contact			:	Clean Eyes immediately with plenty of water get immediate medical attention.	
• Ingestion			:	Rinse your mouth and when vomit, get immediate medical attention.	
• Information about the most important Symptom and Washing			:	There isn't any special symptom, but ventilate the room and if there is skin contact, clean skin with clean water.	
<b>5. Fire-Fighting Measures</b>					
• Fire-extinguishing Media			:	Not applicable for non-inflammables	

<u>11. Toxicological Information</u>			
• Acute toxicity		:	Inhalation may cause irritation in a respiratory organ.
• Cancer-causing		:	Not applicable
• Accident abrogenesis		:	Not applicable
• The oral toxicity		:	Not applicable
• Teratogenicity		:	Not applicable
• The habits toxicity		:	Not applicable
<u>12. Ecological Information</u>			
• Decomposition		:	Not applicable
• Accumulation		:	Not applicable
• Fish poison		:	Not applicable
<u>13. Disposal Consideration</u>		:	Disposal must be made in accordance with applicable governmental regulations.
			Bury in the earth deeply
<u>14. Transport Information</u>		:	Not applicable
<u>15. Regulation Information</u>		:	Environmental Protection Law
<u>16. Other Information</u>			
<p>• MSDS information herein is drafted according to our knowledge, experience and understanding. So, it is not necessarily covering all fields of information for sure. The information herein is given in good faith, but no warranty is expressed or implied.</p>			
<p>• Since this MSDS is applied to a certain product (raw material), once the product is processed, treated or blended with other material, it will deviate from a scope of this MSDS. In that case, each user should take a responsibility in utilizing processed, treated or blended materials with investigations and experiments prior to actual usage (application) with regard to safety and hazardous information.</p>			
<p>• This MSDS's content is renewed upon obtaining new information. Since it is very difficult to cover all hazards about our products (Product, raw material) sufficient precaution, investigation and experiment for hazards shall be implemented prior to actual usage and each user should take responsibility in utilizing our products.</p>			
<p><u>This MSDS information neither specifies purchase specifications, nor warrant clauses herein.</u></p>			

<b>6. Accidental Release Measures</b>			
• Precautions for Human Body and Environment	:	Wear dust-proof mask and gloves	
• Precautions for Environment	:	Do not waste in sewage or drainage.	
• Methods of Cleaning	:	Eliminated by dust collector and wasted	
		In the same way as earth and rocks.	
<b>7. Handling &amp; Storage</b>			
Handling		Handling in well ventilated place.	
• Technical Measures	:	Wear dust-proof mask and gloves	
	:	Wash hand and face after handling	
• Storage	:	Shelter from direct light, high temperature and high humidity	
	:	Packing materials do not torn and the contents do not appear.	
• Suitable Storage Conditions	:	Not exposed to the weather and keep indoors	
• Containers of Saffy Packing Material	:	Recommend airtight container	
<b>8. Exposure Control / Personal Protection</b>			
Measures for Facilities		Local exhaust/Clean the dust/Ventilator all over	
Protective Tools			
Breathing Protection Machine	:	Dust-proof mask	
• Hand Protection	:	Working gloves	
• Eye Protection	:	Safety glasses	
• Skin and Body Protection	:	Working cloth	
<b>9. Physical &amp; Chemical properties</b>			
Physical condition	:	Powder	
• Color	:	White	
• Odor	:	Odorless	
• Boiling Point	:	Not applicable	
• Melting Point	:	Not applicable	
• Flash Point	:	Not applicable	
• Explosion property	:	Not applicable	
• Density	:	0.7g/cc	
• Solubility	:	No soluble in water	
<b>10. Stability &amp; Reactivity</b>			
• Stability	:	Stable under a room temperature and normal pressure	
• Reactivity	:	Not applicable	
Condition to Avoid	:	Do not leave in high temperature and high humidity	
Hazardous Decomposition Products	:	Not applicable	

MATERIAL SAFETY DATA SHEET

D03985

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-Hour Emergency Phone Number: 989-636-4400

Product: METHOCBL\* F4M Hydroxypropyl Methylcellulose

Product Code: 53938

Effective Date: 12/18/03 Date Printed: 06/16/04 MSD: 000055

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hydroxypropyl methylcellulose	CAS# 009004-65-3	85-99%
Water	CAS# 007732-18-5	1-10%
Sodium chloride	CAS# 007647-14-5	0.5-5%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

\*\*\*\*\*  
\* White to off-white powder or granules. Odorless. May form \*  
\* explosive dust-air mixture. Slipping hazard. \*  
\*\*\*\*\*

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Essentially nonirritating to eyes. Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN: Essentially nonirritating to skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Single exposure to dust is not likely to be hazardous.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Repeated ingestion of

(Continued on page 2 , over)

\* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

Product: METHOCEL\* F4M Hydroxypropyl Methylcellulose  
Product Code: 53938

Effective Date: 12/18/03      Date Printed: 06/16/04      MSD: 000055

-----

spontaneous combustion or other ignition sources. When suspended in air dust can pose an explosion hazard.

EXTINGUISHING MEDIA: Water, carbon dioxide and dry chemical.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held carbon dioxide or dry chemical extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection.

PROTECT THE ENVIRONMENT: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

CLEANUP: Spills should be cleaned up immediately using care to minimize generation of airborne dust. See Section 13, Disposal Considerations for additional information.

7. HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling of dusts are necessary for safe handling of product. No smoking, open flames or sources of ignition in handling and storage area.

STORAGE: Store in a dry place. Store below 90 F (32 C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure

(Continued on page 4 , over)

\* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY



Product: METHOCEL\* F4M Hydroxypropyl Methylcellulose  
Product Code: 53938

Effective Date: 12/18/03      Date Printed: 06/16/04      MSD: 000055

-----

INGESTION: The oral LD50 for rats is >10,000 mg/kg.

MUTAGENICITY: For methylcellulose, a similar cellulosic: in vitro mutagenicity studies were negative; animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

DEGRADATION & PERSISTENCE: Based largely or completely on information for methylcellulose: biodegradation may occur under aerobic conditions (in the presence of oxygen). The half-life in activated sludge is less than 20 days.

ECOTOXICITY: Based largely or completely on information for similar material(s): material is practically non-toxic to fish on an acute basis (LC50 >100 mg/L).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator, or landfill.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or

(Continued on page 6 , over)

\* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

M A T E R I A L   S A F E T Y   D A T A   S H E E T

PAGE: 7

Product: METHOCEL\* F4M Hydroxypropyl Methylcellulose  
Product Code: 53938

Effective Date: 12/18/03      Date Printed: 06/16/04      MSD: 000055

-----

REGULATORY INFORMATION (CONTINUED)

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

-----

-----

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

Pennsylvania

-----

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

=====

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Sections 3,4,6,8,9,12,15.

\* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY  
The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.