

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0 INSIGNIFICANT ACTIVITIES	6
3.1 Identification of Insignificant Activities	
3.2 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	8
5.0 OVERALL SOURCE CONDITIONS	9
5.1 Source Description	
5.2 Applicable Regulations	
5.3 Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/Anticipated Operating Scenarios	
5.9 General Compliance Procedures	
6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)	14
6.1 Description of ERMS	
6.2 Applicability	
6.3 Recordkeeping and Reporting	
7.0 UNIT SPECIFIC CONDITIONS	16
7.1 Unit: Various Stages to Manufacture Bulk Molding Compounds Control: Baghouse	

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

1.0 SOURCE IDENTIFICATION

1.1 Source

Bulk Molding Compounds, Inc.
1600 Powis Court
West Chicago, Illinois 60185-1016
630/377-1065

I.D. No.: 043806AAO
Standard Industrial Classification: 3087, Custom Compounding of
Purchased Plastic Resins

1.2 Owner/Parent Company

Bulk Molding Compounds, Inc.
1600 Powis Court
West Chicago, Illinois 60185-1016
630/377-1065

1.3 Operator

Bulk Molding Compounds, Inc.
1600 Powis Court
West Chicago, Illinois 60185-1016

Robert Zurek
630/377-1065

1.4 General Source Description

Bulk Molding Compounds, Inc. is located at 1600 Powis Court in West Chicago. The source mixes the raw materials to be used in manufacturing polyester resin products.

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Units
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
ERMS	Emission Reduction Market System
ft ³	cubic feet
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
lb	pound
mmBtu	Million British thermal units
mo	month
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SO ₂	Sulfur Dioxide
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Portable Styrene Resin Storage Tanks (250 gallons each)
Molding Operation For Off-Spec Material Only
Central Heating Unit

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Addition of Insignificant Activities

- 3.2.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

- 3.2.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.2.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Resin Mix Tank (First Stage Mixing)	1996	Enclosed
02	L1-L11 Final Stage Compounding Lines including Mixers, Conveyors, Extruders, and Packaging	1996	Various Pickup Points Vented to Baghouse.
03	Cleanup Solvents		

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of HAP emissions.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with

the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3 Non-Applicability of Regulations of Concern

This permit is issued based on the source not being subject to 35 IAC Part 218.666, because the source primarily formulates polyester resin material and does not use the formulated material to mold a product. The formulated material is sold to other processors who manufacture molded products. A small amount of off-spec material is molded but due to the low emission rate the operation was classified as an insignificant activity.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	24.9
Sulfur Dioxide (SO ₂)	----
Particulate Matter (PM)	1.0
Nitrogen Oxides (NO _x)	----
HAP, not included in VOM or PM	----
TOTAL	25.9

Although for fee purposes the limitations above are not federally enforceable, the limit for VOM is federally enforceable to assure that this source is not a new major source of VOM constructed in a severe nonattainment area pursuant to 35 IAC 203 Subpart B. See Condition 5.5.3.

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs because one HAP material exceeds 10.0 tons/yr. The HAP material is also a VOM. As noted in Section 5.5.1, total VOM may not exceed 24.9 tons/yr.

5.5.3 Other Source-Wide Emission Limitations

- a. Since this source was constructed after November 15, 1992, VOM emissions may not exceed 24.9 tons/yr pursuant to 35 IAC Part 203. Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.
- b. Compliance with annual limits shall be determined from a running total of 12 months of data.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Operating Scenarios

N/A

5.6.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit as part of the annual report to the Illinois EPA, Compliance Section, the HAP emissions from the source.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating VOM and HAP Emissions

- a. Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.
- b. For the purpose of estimating HAP emissions from equipment at the source, the following procedures shall be used.
 - i. If the monomer is also styrene, the emission factor shall be 1% of total styrene, that is in the resin as delivered and added as monomer.
 - ii. If the monomer is a non-HAP, the emission factor shall be 1% of the non-HAP in the resin as delivered.

6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary source to contribute to further reasonable progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Under the ERMS, participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year, starting with the 1999 ozone season, participating sources are issued ATUs based on allotments set during initial issuance of the sources' CAAPP permit. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emission reduction from stationary sources required for further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its account to cover its actual VOM emissions during the preceding season. An account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the account database. The Illinois EPA will then retire ATUs in sources' accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emission reductions from an Emission Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the Alternative Compliance Market Account (35 IAC 205.710). A source may also transfer or sell the ATUs that it holds to other sources or participants (35 IAC 205.630).

This section becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

6.2 Applicability

- a. Emissions of VOM from the source for the seasonal allotment period of May 1 through September 30 of each year shall not exceed 15 tons, not including VOM from insignificant units and activities as identified in Section 3 of this permit. This limitation is established at the request of the source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS) pursuant to 35 IAC 205.205.

6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate to determine VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions in tons during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source in tons during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the annual emissions report by October 31 of each year, reporting emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC 205.200, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit Various Stages to Manufacture Bulk Molding Compounds
 Control Dust Collector

7.1.1 Description

The manufacture of bulk molding compounds involves the mixing of liquid and powdered or dry ingredients. In one stage polyester resin and a monomer and some of the powders are mixed in a closed container.

Finally, the preblended liquids and the remaining dry ingredients are put in compound mixers (called final mixers) and mixed again. The mixers are covered and also vented to a baghouse. There are eleven of these compound mixers and with the conveyor and/or extruder following the mixer these are called "lines" (Lines 1 to 11). The extruded product is shipped in plastic bags inside a box.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Resin Mix Tank (First Stage Mixing)	1996	Enclosed
02	L1-L11 Final Stage Compounding Lines including Mixers, Conveyors, Extruders, and Packaging	1996	Various Pickup Points Vented to Baghouse.
03	Cleanup Solvents		

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected resin mix tank or final stage mixer" for the purpose of these unit-specific conditions is a mix tank or mixer identified in Condition 7.1.2 and used to mix dry ingredients to a blend of liquids. The mixers are subject to 35 IAC 212.321(a) which states that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at

a source or premises, exceed the allowable emission rates specified by using the equation:

$$E = A(P)^B$$

Where:

P = Process weight rate (tons/hr);
E = Allowable emission rates (lbs/hr);
A = 2.54; and
B = 0.534

- b. An "affected" resin mixer tank or final stage mixer for the purpose of these unit-specific conditions is a resin mixer or final stage compounding line identified in Condition 7.1.2.
- c. No person shall cause or allow the discharge of more than 8 lb/hr of a photochemically reactive organic material into the atmosphere from any emission unit (35 IAC 218.301). The exception cited by the rule does not apply to the Permittee since they do not have VOM emission control equipment. Each mixing operation is a separate emission unit.
- d. All of the steps of this process meet the definition of a Miscellaneous Formulation Manufacturing Process in 35 IAC 211.3810. However, by accepting a source-wide emission limit (i.e. limiting the potential to emit) to less than 25 tons/year and the process has been operating at less than that rate since startup, the process is not subject to the control requirements of 35 IAC 218.946.

7.1.4 Non-Applicability of Regulations of Concern

Neither the polyester resin or the monomer mixed with the resin are manufactured on site and therefore any rules on polymer or hazardous organic material production are not applicable.

7.1.5 Control Requirements and Work Practices

- a. The dust collector shall be operated to reduce PM emissions by a minimum of 98%.
- b. The dust collector capture system shall be operated to capture at least 90% of the PM generated by the

first stage resin mix tank and 80% of the PM
 generated by Lines 1-11.

7.1.6 Production and Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected bulk molding compound processes are subject to the following:

- a. The Permittee has accepted a limit of 24.9 ton/yr as federally enforceable in Construction Permit 95110066 in order to limit the source PTE, so that the construction was not a major new source. The limits are as follows:

<u>Molding Compound Production Rate</u>		<u>VOM Emissions</u>	
<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
2,500	24,600	2.5	24.9

The molding compound production rate is defined as the amount of VOM in the resin as received plus any additional monomer (i.e., VOM) added on site. It does not include solids. VOM emissions are calculated as stated in Condition 7.1.12(a)(i) and (a)(ii). The 24.9 tons/year limit includes cleaning solvent emissions.

- b. Construction Permit 95110066 also includes the following limits for solids usage and PM emissions based on compliance with Conditions 7.1.3(a).

<u>Solids Usage</u>	<u>PM Emissions</u>	
<u>(Lb/Hr)</u>	<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
4,300	3.8	16.6

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.1.7 Testing Requirements

- a. Each lot of resin shall have an analysis of VOM content from the supplier or an analysis conducted on site. The monomer content shall be determined by the method described in Condition 7.1.7(b)(ii).

- b. Within 90 days of a request from the Illinois EPA, the Permittee shall conduct any of the following tests. (35 IAC 218.668)
 - i. The VOM content of fresh cleaning materials shall be determined from supplier data or by sampling and analysis using EPA Reference Method 24, incorporated by reference in 35 IAC 218.112.
 - ii. The monomer content of polyester resin materials shall be determined by sampling and analysis by the methods set forth in SCAQMD Method 312-91, incorporated by reference in 35 IAC 218.112.
 - iii. Any other tests or measurements necessary to demonstrate compliance with Condition 7.1.3 and 7.1.6 such as a retest to determine that the emission factor used in condition 7.1.12(a)(i) remains correct.

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected bulk molding compound process to demonstrate compliance with Conditions 5.5.1 and 7.1.3 through 7.1.7, pursuant to Section 39.5(7)(b) of the Act:

- a. Resin, styrene, solids, and cleaning solvent usage rates (tons/mo).
- b. VOM and HAP content of resin. Styrene and virgin cleaning solvent are assumed to be 100% VOM. Solids are assumed to contain no VOM.
- c. If credit is claimed for used cleaning solvents returned for recycling or disposal, the cleaning solvent records shall be kept of the analysis for VOM content and amount shipped.
- d. VOM, HAP and PM emissions as calculated by Condition 7.1.12 (tons/mo and tons/yr).

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected bulk molding compound process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Any violation of Conditions 7.1.3 through 7.1.8.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to substitute monomers without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The maximum emission rate for currently used monomers is with the use of styrene, which is also a HAP. The Permittee may use other non-HAP monomers in any quantity, provided that the limit in Condition 5.5.1 is met.

7.1.12 Compliance Procedures

a. VOM emission factor for monomer is 1% of usage, including the VOM in the resin as received and amount added on site.

i.

$$\text{Compoundin g VOM Emissions} = \left(\begin{array}{l} \text{Re sin} \\ \text{Usage} \\ \text{as Del ivered} \end{array} \times \frac{\text{VOM}}{\text{Content}} + \begin{array}{l} \text{VOM Monomer} \\ \text{Added} \end{array} \times \frac{\text{VOM}}{\text{Content}} \right) \times 0.010125^a$$

^a Determined by previous testing

ii.

$$\text{Cleaning Solvent VOM Emissions} = \begin{array}{l} \text{Cleaning} \\ \text{Solvent} \\ \text{Usage} \end{array} \times \frac{\text{VOM}}{\text{Content}} - \text{Credit for VOM Recycled}$$

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

iii.

$$\text{HAP Emissions} = \left(\begin{array}{l} \text{Resin} \\ \text{Usages as x HAP} \\ \text{Delivered} \quad \text{Content} \end{array} + \begin{array}{l} \text{Monomer} \\ \text{Added x HAP} \\ \text{Content} \end{array} \right) \times 0.01$$

b. i. PM emission rate from dust collector: 0.02 grains/ft³ of air times air flow rate^a.

ii. PM emission rate for uncaptured PM not vented through the dust collector is probably less than 0.1 lb/hr and is assumed to fall out inside the building.

^a Design efficiency of the equipment.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____{insert public notice start date} (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

When requested by the Illinois EPA, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency (MC 40)
Bureau of Air
Compliance Section
P.O. Box 19276
Springfield, Illinois 62794-9276

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

- ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153
 - iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506
 - iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604
- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

PROPOSED CAAPP PERMIT
Bulk Molding Compounds, Inc.
I.D. No.: 043806AAO
Application No.: 97100001
October 26, 1999

10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

DGP:psj

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

Bulk Molding Compounds, Inc. is located at 1600 Powis Court in West Chicago. The source mixes the raw materials to be used in manufacturing polyester resin products.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Resin Mix Tank (First Stage Mixing)	1996	Enclosed
02	L1-L11 Final Stage Compounding Lines including Mixers, Conveyors, Extruders, and Packaging	1996	Various Pickup Points Vented to Baghouse.
03	Cleanup Solvents		

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	24.9
Sulfur Dioxide (SO ₂)	----
Particulate Matter (PM)	1.0
Nitrogen Oxides (NO _x)	----
HAP, not included in VOM or PM	----
TOTAL	25.9

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

1.1. CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

1.2. Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

Because this source is located in the Chicago ozone non-attainment area and emits volatile organic material (VOM), the permit includes conditions to implement the Emissions Reduction Market System (ERMS). The ERMS is a market-based program designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as further described in Section 6.0 of the permit. The permit contains the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS, and identifies units not subject to further reductions. The permit also provides that the source must begin to operate under the ERMS following the initial issuance of allotment trading units to the source. This will occur for the 2000 seasonal allotment period (rather than the 1999 season as originally intended by the ERMS) due in part to delays in the initial issuance of CAAPP Permits. These delays, which have occurred nationally, are attributable to a variety of causes including the unforeseen complexity of processing these permits and gaps in national guidance. Even though operation under the ERMS will not officially start until the 2000 seasonal allotment period, detailed recordkeeping and reporting of seasonal emissions was

required beginning in 1998, which will document emissions reductions achieved by sources in 1999 in preparation for the ERMS.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 164.

DGP:jar