

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 072009-002 Project Number: 2008-08-020

Parent Company: Polymeric Imaging, Incorporated

Parent Company Address: 117 East 14th Street, North Kansas City, MO 64116

Installation Name: Polymeric Imaging, Incorporated

Installation Address: 117 East 14th Street, North Kansas City, MO 64116

Location Information: Clay County, S23, T50, R33

Application for Authority to Construct was made for:
 The construction of a new printing ink manufacturing facility. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
 - Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JUL - 1 2009

EFFECTIVE DATE


 DIRECTOR OR DESIGNEE
 DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2008-08-020

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Polymeric Imaging, Incorporated
Clay County, S23, T50, R33

1. Emission Limitation

- A. Polymeric Imaging, Incorporated shall emit less than 40.0 tons of Volatile Organic Compounds (VOCs) from the emission units listed in Table 1: Emission Unit Summary in any consecutive 12-month period.
- B. Polymeric Imaging, Incorporated shall emit less than ten (10.0) tons individually or twenty-five (25.0) tons combined of Hazardous Air Pollutants (HAPs) from the emission units listed in Table 1: Emission Unit Summary in any consecutive 12-month period.
- C. Polymeric Imaging, Incorporated shall emit less than five (5.0) tons of glycol ether HAPs from the emission units listed in Table 1: Emission Unit Summary in any consecutive 12-month period.
- D. Attachment A, Attachment B and Attachment C or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A), 1(B), and 1(C). Polymeric Imaging, Incorporated shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used in this equipment.
- E. Polymeric Imaging, Incorporated shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(D) indicate that the source exceeds the limitation of Special Conditions Number 1(A), 1(B) & 1(C).

Page No.	4
Permit No.	
Project No.	2008-08-020

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

2. Sealed Containers

- A. Polymeric Imaging, Incorporated shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Polymeric Imaging, Incorporated shall provide and maintain suitable, easily read, permanent markings on all inks, solvents and cleaning solution containers used with this equipment.

3. Use of Alternative Materials

- A. When considering using a material that is different than the materials listed in the Application for Authority to Construct, Polymeric Imaging, Incorporated must calculate the potential emissions for each individual HAP in the alternative material.
- B. Polymeric Imaging, Incorporated must seek approval from the Air Pollution Control Program before use of the alternative material if the potential individual or aggregate group HAP emissions are equal to or greater than the Screening Model Action Levels (SMAL) for any compound listed in Attachment E.
- C. Attachment D or an equivalent form shall be used to show compliance with Special Condition 3(A) and 3(B). Polymeric Imaging, Incorporated shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2008-08-020
Installation ID Number: 047-0183
Permit Number:

Polymeric Imaging, Incorporated
117 East 14th Street
North Kansas City, MO 64116

Complete: August 20, 2008

Parent Company:
Polymeric Imaging, Incorporated
117 East 14th Street
North Kansas City, MO 64116

Clay County, S23, T50, R33

REVIEW SUMMARY

- Polymeric Imaging, Incorporated has applied for authority to construct a new graphics ink manufacturing facility.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are 2-Phenoxyethyl Acrylate Ester (CAS# 48145-04-6) which is part of the Glycol Ether group and Xylene (all isomers). Ethyl benzene and toluene are also emitted from the ink mixing process but in insignificant quantities.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs and HAPs are limited to below de minimis levels.
- This installation is located in Clay County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since potential emissions of the application are limited to below de minimis levels for criteria pollutants and Screening Model Action Levels (SMALs) for HAPs.
- Emissions testing is not required for the source.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION/ PROJECT DESCRIPTION

This project is for the installation of a printing ink manufacturing facility. The facility is located at 117 East 14th Street in North Kansas City, Missouri. Polymeric Imaging, Incorporated (hereafter Polymeric Imaging) constructed the facility in 1997 without obtaining a permit. No prior construction permits have been issued to Polymeric Imaging, and obtaining this construction permit is part of remedial action required by the Air Pollution Control Program.

Polymeric Imaging manufactures printable inks for the printing and graphics industry. The inks are composed of low molecular weight monomers, pigments, and photoinitiators that polymerize when exposed to ultraviolet (UV) light. The manufacturing processes include vehicle mixing, pigment paste grinding, roll mill mixing, small batch mixing, and finished goods packaging.

The first step in the process involves mixing the raw materials (EU 1) to form the vehicle known as varnish. The varnish is composed of low molecular weight monomers that are fluid at room temperature. The varnish has a very high solids content such that it is printable at room temperature without containing thinning solvents and can be completely cured with exposure to UV light without the need for thermal drying. The main component of the varnish is 2-Phenoxyethyl Acrylate Ester (CAS# 48145-05-6) which is one of the glycol ether HAPs. The facility has three 200 gallon mixing stations for making varnish.

The next step in the ink manufacturing process is the pigment grinding activity (EU 2). This process grinds the dry powder pigments, waxes, and fillers into a small quantity of varnish to form a paste. The facility has six small grinders for making paste. The premixed paste is then added to a larger quantity of varnish in the 3 roll mills where the pigment, varnish, and milling solvent are mixed and the pigments are crushed to the desired particle size. The facility has five 3 roll mills (EU 3, 4, 5, 6, and 7). Three of the 3 roll mills are 16" (diameter) by 40" (length), one is 16" by 30", and one is 16" by 32". The milling solvent is used sparingly but contains the HAPs Xylene (all isomers), Ethylbenzene (CAS# 100-41-4) and Toluene (CAS# 108-88-3).

After the varnish and pigments are mixed, photo-initiators are added and the finished ink is gravity dispensed to small 1 gallon containers for final packaging (EU 8). After the inks have been packaged, some of the inks may be reused in a small batch production

(EU 9) area where small quantities of finished ink are mixed to form custom colors on a made to order basis. The facility has five 90 gallon mixing stations for making custom inks.

The maximum hourly design rate (MHDR) for the 3 roll mill mixing process (EU 3-7) was determined to be 30.1 lbs manufactured product per hour per mill. The MHDR for the pigment grinding activity (EU 2) was determined to be 20.2 lbs pigment per hour per mill. These determinations were based on 2007 actual working hours and 2007 actual material usage plus a 20% safety factor.

The 3 roll milling process (EU 3-7) is considered the bottleneck operation for the project because this one step limits the production capacity of the entire facility. Therefore, the maximum production capacity for the facility equipped with five (5) 3 roll mills is 150.5 lbs manufactured product per hour. As the potential emissions of PM₁₀ and VOCs are estimated using the maximum production capacity for the facility, an MHDR for the other emission units was not determined.

Cleanup (EU 10) activities at the various process steps are a potential source of significant emissions. The cleanup solvents include acetone and a wash-up. The wash up solvent is considered 100% VOC and contains 25% Xylene (all isomers). Approximately 30% of the cleaning solvents used are recovered and shipped off site to a hazardous waste processing facility. The MHDR for cleanup activities (EU10) was also determined based on the 2007 actual hours and actual usage plus a 20% safety factor. The maximum design rate used in the potential emissions calculations was 2.7 lb wash-up per hour per mill. The following table provides a summary of the emission units and equipment:

Table 1: Emission Unit Summary

Emission Unit ID	Description of Unit	Number of Units
EU 1	200 gallon mixer	3
EU 2	grinders (small batch)	6
EU 3, 4, 5	16" by 40" 3 roll mill	3
EU 6	16" by 30" 3 roll mill	1
EU 7	16" by 32" 3 roll mill	1
EU 8	dispensing station	2
EU 9	90 gallon mixer/grinder	5
EU 10	cleaning activity	N/A

N/A=Not Applicable

EMISSIONS/CONTROLS EVALUATION

The emission factors used for the ink manufacturing processes (EU 1-9) were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 6.4 *Paint & Varnish* (May 1983). As all of the mixing, milling, and grinding processes are completed at low temperature (less than 140 °F), the emission factor that is the most appropriate for these activities is from AP-42 for paint mixing which recommends an emission factor of 1.5% of manufactured

product for VOC emissions and 1.0% of pigment handled for particulate matter less than 10 microns in diameter (PM₁₀). Potential emissions of VOCs and PM₁₀ were calculated based on the maximum potential throughput for the facility and the total number of mills (EU 3-7). Therefore, potential emissions were not calculated for each individual emission unit.

Potential emissions from the clean up activity (EU 10) were estimated assuming that all solvents not shipped to the hazardous waste processing facility are emitted to the ambient air. Since acetone has a high vapor pressure, most of the acetone would not be recovered for shipment to the hazardous waste facility. Therefore, all of the hazardous waste shipped was assumed to be the wash up solvent. The potential emissions from the clean up activity (EU 10) were estimated based on 2007 actual usage of clean up solvents less the 2007 actual hazardous waste shipment plus a 20% safety factor. According to Missouri's Code of State Regulations (CSR), 10 CSR 6.020 (2) *Definitions* (V) 9. A., acetone does not participate in atmospheric reactions to produce ozone and does not meet the definition of VOC, therefore acetone was not included in the potential emissions of VOCs. Although the facility practices cleanup activities with solvents containing VOCs, 10 CSR 2.215 *Control of Emissions from Solvent Cleanup Activities* does not apply because the maximum potential emission of VOCs from the cleanup activity (EU10) is less than 500 lbs per day. No other pollution control devices or activities are used at this facility.

The potential emissions of the application represent the potential of the equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project. Since the HAPs, glycol ether and Xylene, are also considered VOCs, all emissions of the HAPs were also considered VOC emissions. Although potential emissions of combined HAPs are less than the major threshold level of 25 tons per year, the facility has been limited to less than 25 tons per year, so they will have the flexibility to change raw materials without having to obtain a new construction permit. A special condition of this permit is to evaluate all potential new raw materials to determine construction permit applicability.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels ¹	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	N/A	N/A	4.426	N/A
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	68.999	<40.0
CO	100.0	N/A	N/A	N/A	N/A
HAP (Glycol Ethers)	5	N/A	N/A	9.466	<5.0
HAP(Xylene)	10	N/A	N/A	14.777	<10.0
HAPs Combined	25.0	N/A	N/A	24.243	<25.0

N/A = Not Applicable; N/D = Not Determined

¹For individual HAPs, the value denotes the SMAL.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs, individual HAPs, and combined HAPs are limited to below de minimis levels.

APPLICABLE REQUIREMENTS

Polymeric Imaging shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110*
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170*
- *Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220*
- *Restriction of Emission of Odors, 10 CSR 10-2.070*

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400*

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Kathi Jantz
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 4, 2008, received August 7, 2008, designating Polymeric Imaging, Incorporated as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey, dated August 27, 2008.

Attachment B: Monthly Combined HAPs Tracking Record

Polymeric Imaging, Incorporated
 Clay County, S23, T50, R33
 Project Number: 2008-08-020
 Installation ID Number: 047-0183
 Permit Number: _____

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Copy this sheet as needed.

C1	C2	C3	C4	C5	C6	C7
Material Used (Name)	Amount of Material Used (Include Units)	Density (Pounds per Gallon)	HAP Name/ CAS #	HAP Content (Weight %)	Emission Factor	HAP Emissions (Tons)
(a) Total shipment of hazardous waste materials this month in tons:						
(b) Percent HAPs in hazardous waste materials this month:						
(c) Total HAPs in hazardous waste materials this month in tons: [(a) × (b)]						
(d) Total HAP Emissions Calculated for this Month in Tons: [Sum of [C7] – (c)]						
(e) 12-Month HAP Emissions Total (g) from Previous Month's Attachment B in Tons:						
(f) Monthly HAP Emissions Total (d) from Previous Year's Attachment B in Tons:						
(g) Current 12-month Total of HAP Emissions in Tons: [(d) + (e) - (f)]						

- C1: Write the name of the material as indicated on the Material Safety Data Sheet (MSDS)
- C2: Write the amount of material used and the units (lbs or gallons)
- C3: If usage is in gallons, write the density of the material in lbs per gallon.
- C4: Identify the HAP ingredient by name and CAS #. Use separate lines for multiple HAPs.
- C5: Write the HAP percent by weight (if the percent is a range, write the maximum)
- C6: Write the emission factor for the process where the material will be used.
 For Ink Manufacturing (EP1-EP9) [C6] = 1.5%
 For Clean up Activities (EP-10) [C6] = 100%
- C7: If usage [C2] is in tons - [C7] = [C2] × [C5] × [C6]
 If usage [C2] is in pounds - [C7] = [C2] × [C5] × [C6] × [0.0005]
 If usage [C2] is in gallons - [C7] = [C2] × [C3] × [C6] × [0.0005]
- (a) Amount of material shipped to the hazardous waste processing facility in tons
- (b) Percent of HAPs containing materials in Hazardous Waste shipment (if a range, use the minimum)
- (c) The total HAPs recovered in Hazardous Waste Shipment [(a) × (b)]
- (d) Summation of [C7] minus (c) in Tons per month [Sum of [C7] – (c)]
- (e) 12-Month HAP emissions (g) from last month's Attachment B in Tons
- (f) Monthly HAP emissions total (d) from the previous year's Attachment B in Tons
- (g) Calculate the new 12-month combined HAPs emissions total [(d) + (e) - (f)]. **A 12-Month HAP emissions total of less than 25.0 tons for the installation indicates compliance.**

Attachment C: Monthly Individual HAPs Tracking Record

Polymeric Imaging, Incorporated
 Clay County, S23, T50, R33
 Project Number: 2008-08-020
 Installation ID Number: 047-0183
 Permit Number: _____

This sheet covers the period _____
 (month, year)

HAP Name: _____ and CAS #: _____
 (a) (b)

Copy this sheet as needed.

C1	C2
List materials from Attachment B [C1] which contain this HAP	HAP emissions from Attachment B [C6] (Tons)
(c) Total shipment of hazardous waste materials this month in tons:	
(d) Percent of the individual HAP in the Hazardous Waste this month:	
(e) Individual HAP in hazardous waste materials this month in tons: [(c) × (d)]	
(f) Total HAP Emissions Calculated for this Month, in Tons: [Sum of [C2] – (e)]	
(g) 12-Month HAP Emissions Total (i) from Previous Month's Attachment C, in Tons:	
(h) Monthly HAP Emissions Total (f) from Previous Year's Attachment C, in Tons:	
(i) Current 12-month Total of HAP Emissions in Tons: [(f) + (g) - (h)]:	

- (a) Write the HAP name, if the HAP is a member of an aggregate group of HAPs, such as glycol ethers or polycyclic organic matter, write the group name here and the specific name in [C1] below.
- (b) Write the CAS number for the HAP. If the HAP is an aggregate group, leave blank and indicate the specific CAS number in [C1] below.
- C1 Write the name of the material as indicated on the MSDS
- C2 Record the amount of HAP emissions already calculated for Attachment B in [C7] in Tons
- (c) Amount of material shipped to the hazardous waste processing facility in tons
- (d) Percent of the individual (or aggregate group) HAP in the Hazardous Waste shipment (if a range, use the minimum)
- (e) The individual HAPs recovered in Hazardous Waste Shipment [(c) × (d)]
- (f) Summation of [C2] in Tons per month: [Sum of [C2] – (e)]
- (g) Record the previous 12-Month individual HAP emission total (i) from last month's Attachment C, in Tons;
- (h) Record the monthly individual HAP emission total (f) from previous year's Attachment C, in Tons;
- (i) Calculate the new 12-month individual HAP emissions total. **A 12-Month individual HAP emissions total (except glycol ethers) of less than ten (10.0) tons indicates compliance. A 12-Month individual HAP emissions total for glycol ethers of less than five (5.0) tons indicates compliance.**

Attachment D – Hazardous Air Pollutants (HAP) Calculation Sheet

Polymeric Imaging, Incorporated
 Clay County, S23, T50, R33
 Project Number: 2008-08-020
 Installation ID Number: 047-0183
 Permit Number: _____

Copy this sheet as needed.

C1	C2	C3	C4	C5	C6	C7	C8
Material Name	HAP Name and CAS #	HAP Aggregate Group ID	HAP Content (Weight %)	MHDR	Emission Factor	HAP Emissions (Tons per Year)	SMAL (Tons)
<i>Example: ABC</i>	<i>Hexamethylene Diisocyanate 822-06-0</i>	<i>N/A</i>	<i>1%</i>	<i>150.5 lb/hr</i>	<i>1.5%</i>	<i>0.099</i>	<i>0.02</i>
<i>Example: ABC</i>	<i>Napthalene 91-20-3</i>	<i>V</i>	<i>30%</i>	<i>150.5 lb/hr</i>	<i>1.5%</i>	<i>2.97</i>	<i>10</i>
<i>Example: ABC</i>	<i>Polycyclic Organic Matter</i>	<i>V</i>				<i>2.97</i>	<i>0.01</i>

Instructions: Calculate the potential emissions of each individual HAP (or aggregate group HAP) contained in the material.

- [C1] Write the name of the potential new material(s) as it appears on the MSDS
- [C2] Write the chemical name and CAS number (if part of an aggregate group HAP, add another line for the Group ID name found at the end of attachment E)
- [C3] Write the aggregate HAP group code found on attachment E, if none write N/A
- [C4] Write the HAP weight % found on the MSDS (If the percent is a range, write the maximum)
- [C5] Write the Maximum Hourly Design Rate (MHDR) for the process where the material will be used.
 For Ink Manufacturing (EP1-EP9) [C5] = 150.5 lbs per hour
 For Clean up Activities (EP-10) [C5] = 21.1 lbs per hour
- [C6] Write the emission factor for the process where the material will be used.
 For Ink Manufacturing (EP1-EP9) [C6] = 1.5%
 For Clean up Activities (EP-10) [C6] = 100%
- [C7] Calculate the HAP emissions total
 For individual HAP emissions $[C7] = [C4] \times [C5] \times [C6] \times 4.38$
 For aggregate group HAP emissions [C7] = the total of [C7] with the same Aggregate Group ID
- [C8] Write the Screening Model Action Level (SMAL) found in attachment E. If [C7] is larger than [C8], consult the Air Pollution Control Program prior to using this chemistry. (In the example above this raw material would need to be reviewed by the Air Pollution Control Program because the potential emissions exceed the SMAL for hexamethylene diisocyanate and for polycyclic organic matter.)

Ms. Amy Hohenadel
Lab Technician
Polymeric Imaging, Incorporated
117 East 14th Street
North Kansas City, MO 64116

RE: New Source Review Permit - Project Number: 2008-08-020

Dear Ms. Hohenadel:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Kathi Jantz, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:kjl

Enclosures

c: Kansas City Regional Office
PAMS File: 2008-08-020

Permit Number: