

Synthetic Minor Determination and/or  Netting Determination

Permit To Install 14-05811

**A. Source Description**

Degussa Corporation is a pigment mixing facility located in Cincinnati, Ohio. The facility mixes paints to the customer demand for color and pigment size. Once the paint is mixed to the proper specifications, the material is then pumped into holding tanks before shipment to the customer.

**B. Facility Emissions and Attainment Status**

The annual allowable OC emissions for the facility will be 45.4 TPY. The facility is located in Hamilton County which is non attainment for ozone.

**C. Source Emissions**

Most of the emissions from the facility come from the solvent-based mixers (P007-P009). Emissions units P010-P017 and P019-P021 only mix aqueous-based products. The solvent and aqueous-based mixers were originally permitted as a synthetic minor PTI 14-04380. A chapter 31 modification was initiated by the facility to separate the aqueous and solvent-based mixers. The aqueous-based mixers are permitted under PTI 14-05550. The facility now wants to add four additional dump stations to emissions unit P018 that will service P007-P017. Since the production limitations for P007-P017 will not change, the actual emissions for source P018 will remain the same. The potential to emit for emissions units P007 - P021 is 261 TPY OC, before permit limitations. The annual allowable OC emissions for the facility will be 45.4 TPY. The uncontrolled potential to emit for emissions unit P018 is 24 TPY PE. PE will be controlled with a fabric filter so the permitted limit is 0.24 TPY PE and PM-10.

**D. Conclusion**

The facility wants to add four additional dump stations to emissions unit P018 that will service P007-P017 which are permitted under a two separate synthetic minor group permits (14-04380 and 14-05550). The permittee will maintain the original material usage records to demonstrate compliance with the permit limits. The facility will accept a facility wide limit of 45.4 TPY OC, 31.4 TPY OC for this permit and less than 10 tons per year for each individual HAP and less than 25 tons per year for combined HAPs to avoid being a major source and Title V requirements. The facility will also keep rolling, 12-month summation production records to demonstrate compliance with the permit limits.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL  
HAMILTON COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:  
Lazarus Gov.  
Center

**Application No:** 14-05811

**Fac ID:** 1431260080

**DATE:** 3/28/2006

Degussa Corporation  
William Griffith  
379 Interpace Parkway  
Parsippany, NJ 07054

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$200** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

HCDES

OH-KY-IN Regional Council of Govs

KY

IN

**HAMILTON COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 14-05811 FOR AN AIR CONTAMINANT SOURCE FOR  
Degussa Corporation**

On 3/28/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Degussa Corporation**, located at **620 Shepherd Drive, Lockland, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05811:

**Chapter 31 modification to PTI 14-04380 for emissions unit P018.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Brad Miller, Hamilton County Department of Environmental Services, 250 William Howart Taft Pkwy,  
Cincinnati, OH 45219-2660 [(513)946-7777]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 14-05811**

Application Number: 14-05811  
Facility ID: 1431260080  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Degussa Corporation  
Person to Contact: William Griffith  
Address: 379 Interpace Parkway  
Parsippany, NJ 07054

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**620 Shepherd Drive  
Lockland, Ohio**

Description of proposed emissions unit(s):  
**Chapter 31 modification to PTI 14-04380 for emissions unit P018.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

**A. Permit to Install General Terms and Conditions**

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

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conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

**Degussa Corporation**

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Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

#### **11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available

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Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

### **13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

### **14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

### **15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

## **B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

### SUMMARY (for informational purposes only) TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	31.5
PE/PM10	1.6

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - South Premix Tanks and Mills Solvent Based Production	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions from this emissions unit shall not exceed 1.55 pounds per hour.
		See term and condition B.2.
	OAC rule 3745-31-05(C) (Synthetic minor to avoid title V permitting)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).  See terms and conditions A.2.c., A.2.d., and B.1.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the usage limitation, emissions limitations and the use of a cover.
- 2.b The hourly emission limitation is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limit.
- 2.c The organic compound (OC) emissions from the solvent-based colorant production shall not exceed 31.4 tons per year for emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and

Emissions Unit ID: **P007**

Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production) combined, based upon a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

- 2.d** The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production), P010 (North Premix Tanks and Mills Aqueous Based Production), P011 (West Toning Mixture and Tanks Aqueous Based Production), P012 (East Toning Mixer and Tanks Aqueous Based Production), P013 (MMT Mixer A and Tanks Aqueous Based Production), P014 (MMT Mixer B and Tanks Aqueous Based Production), P015 (MMT Mixer C and Tanks Aqueous Based Production), P016 (West Stir-in Mixer and Tank Aqueous Based Production), P017 (East Stir-in Mixer and Tanks Aqueous Based Production), P019 (Mixer and Tank V4043), P020 (Mixer and Tank V4071 with associated Mill) and P021 (Mixer and Tank V4072 with associated Mill) shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

## **B. Operational Restrictions**

1. The maximum annual production rate for solvent-based colorants in emissions units P007 through P009, combined shall not exceed 6,000,000 pounds of colorant per year, based on a rolling 12-month summation of the production rates.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

2. The permittee shall use fitted covers on this emissions unit while in operation or holding any material containing organic compounds.

## **C. Monitoring and/or Recordkeeping Requirements**

**Issued: To be entered upon final issuance**

1. The permittee shall collect and record the following information each month for emissions units P007 through P009:
  - a. The name and identification number of each colorant produced;
  - b. The number of pounds of each colorant produced;
  - c. The organic compound content, in percent by weight, of each solvent-based colorant produced;
  - d. The total organic compound emission rate for all colorants produced, in pounds or tons;
  - e. The updated rolling, 12-month summation of the total colorant usage, in pounds; (This shall include the information for the current month and the preceding eleven months.) and
  - f. The rolling, 12-month summation of the OC emissions, in tons.
  
2. The permittee shall collect and record the following information each month for emissions units P007 - P017 and P019 - P021:
  - a. The name and identification number of each colorant produced;
  - b. The individual Hazardous Air Pollutant (HAP) content for each HAP of each colorant in pounds of individual HAP per pound of colorant, as applied;
  - c. The total combined HAP content of each colorant in pounds of combined HAPs per pound of colorant, as applied [sum all the individual HAP contents from (b)];
  - d. The number of pounds of each colorant produced;
  - e. The name and identification of each cleanup material employed;
  - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];

**Degussa Corporation**

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**Emissions Unit ID: P007**

- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP emissions for each HAP from all colorants produced and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP emissions from all colorants produced and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (g) times (h) for each cleanup material];
- k. The updated rolling, 12-month summation of the individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a individual emissions unit basis.

3. The permit to install for this emissions unit [P007, P008 and P009] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide 70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: trimethyl benzene

TLV (mg/m<sup>3</sup>): 123

Maximum Hourly Emission Rate (lbs/hr): 0.69

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 157

**Degu:****PTI A**Emissions Unit ID: **P007****Issued: To be entered upon final issuance**

MAGLC (ug/m3): 2928

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new

Emissions Unit ID: **P007**

pollutants emitted, change in stack/exhaust parameters, etc.);

- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports which identify any exceedance of the OC emission limitation set forth in term A.2.c. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

2. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.d. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month colorant usage limitation in term B.1. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

#### **E. Testing Requirements**

**Issued: To be entered upon final issuance**

1. Compliance with the emission limitations in Section A. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
1.55 lbs/hr OC

## Applicable Compliance Method:

Compliance with the OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F$$

E is the OC emission rate, lb/hr

A is the maximum hourly solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

- b. Emissions Limitation:  
31.4 TPY OC for emissions units P007 through P009 based upon a rolling, 12-month summation.

## Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2.

The OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F \times 0.0005 \text{ tons/lb}$$

E is the OC emission rate, TPY

A is the annual solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

- c. Emissions Limitation:  
9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

**Degussa Corporation**  
**PTI Application: 14-05911**  
**Issue**

**Facility ID: 1431260080**

**Emissions Unit ID: P007**

Applicable Compliance Method:

Compliance with the HAP emission limitations will be determined by the record keeping requirements specified in term and condition C.3.

2. Compliance with the rolling, 12-month colorant production limitation in term and condition B.1. shall be based upon the record keeping requirements as specified in term and condition C.2.

#### **F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede Permit to Install 14-04380, for emissions units P007 through P009, P018 and T003, as issued on September 24, 1997 and modified on July 22, 1998.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1, C.2, D and E.

Degussa  
PTI A

Emissions Unit ID: **P008**

Issued: To be entered upon final issuance

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P008 - South Toning Mixer A and Tanks Solvent Based Production	OAC rule 3745-31-05(A)(3)          OAC rule 3745-31-05(C) (Synthetic minor to avoid title V permitting)	Organic compound (OC) emissions from this emissions unit shall not exceed 24.5 pounds per hour.  See term and condition B.2.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).  See terms and conditions A.2.c., A.2.d., and B.1.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the usage limitation, emissions limitations and the use of a cover.
- 2.b The hourly emission limitation is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limit.
- 2.c The organic compound (OC) emissions from the solvent-based colorant production shall not exceed 31.4 tons per year for emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and

Degu:  
PTI A

Emissions Unit ID: **P008**

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Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production) combined, based upon a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

- 2.d** The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production), P010 (North Premix Tanks and Mills Aqueous Based Production), P011 (West Toning Mixture and Tanks Aqueous Based Production), P012 (East Toning Mixer and Tanks Aqueous Based Production), P013 (MMT Mixer A and Tanks Aqueous Based Production), P014 (MMT Mixer B and Tanks Aqueous Based Production), P015 (MMT Mixer C and Tanks Aqueous Based Production), P016 (West Stir-in Mixer and Tank Aqueous Based Production), P017 (East Stir-in Mixer and Tanks Aqueous Based Production), P019 (Mixer and Tank V4043), P020 (Mixer and Tank V4071 with associated Mill) and P021 (Mixer and Tank V4072 with associated Mill) shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

**B. Operational Restrictions**

1. The maximum annual production rate for solvent-based colorants in emissions units P007 through P009, combined shall not exceed 6,000,000 pounds of colorant per year, based on a rolling 12-month summation of the production rates.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

2. The permittee shall use fitted covers on this emissions unit while in operation or holding any material containing organic compounds.

**C. Monitoring and/or Recordkeeping Requirements**

Emissions Unit ID: **P008**

1. The permittee shall collect and record the following information each month for emissions units P007 through P009:
  - a. The name and identification number of each colorant produced;
  - b. The number of pounds of each colorant produced;
  - c. The organic compound content, in percent by weight, of each solvent-based colorant produced;
  - d. The total organic compound emission rate for all colorants produced, in pounds or tons;
  - e. The updated rolling, 12-month summation of the total colorant usage, in pounds; (This shall include the information for the current month and the preceding eleven months.) and
  - f. The rolling, 12-month summation of the OC emissions, in tons.
  
2. The permittee shall collect and record the following information each month for emissions units P007 - P017 and P019 - P021:
  - a. The name and identification number of each colorant produced;
  - b. The individual Hazardous Air Pollutant (HAP) content for each HAP of each colorant in pounds of individual HAP per pound of colorant, as applied;
  - c. The total combined HAP content of each colorant in pounds of combined HAPs per pound of colorant, as applied [sum all the individual HAP contents from (b)];
  - d. The number of pounds of each colorant produced;
  - e. The name and identification of each cleanup material employed;
  - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];

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- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP emissions for each HAP from all colorants produced and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP emissions from all colorants produced and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (g) times (h) for each cleanup material];
- k. The updated rolling, 12-month summation of the individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a individual emissions unit basis.

3. The permit to install for this emissions unit [P007, P008 and P009] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide 70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: trimethyl benzene

TLV (mg/m3): 123

Maximum Hourly Emission Rate (lbs/hr): 0.69

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 157

MAGLC (ug/m3): 2928

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new

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pollutants emitted, change in stack/exhaust parameters, etc.);

- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports which identify any exceedance of the OC emission limitation set forth in term A.2.c. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

2. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.d. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month colorant usage limitation in term B.1. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

**E. Testing Requirements**

Emissions Unit ID: **P008**

1. Compliance with the emission limitations in Section A. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
24.5 lbs/hr OC

Applicable Compliance Method:

Compliance with the OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F$$

E is the OC emission rate, lb/hr

A is the maximum hourly solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

- b. Emissions Limitation:  
31.4 TPY OC for emissions units P007 through P009 based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2.

The OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F \times 0.0005 \text{ tons/lb}$$

E is the OC emission rate, TPY

A is the annual solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

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- c. Emissions Limitation:  
9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations will be determined by the record keeping requirements specified in term and condition C.3.

- 2. Compliance with the rolling, 12-month colorant production limitation in term and condition B.1. shall be based upon the record keeping requirements as specified in term and condition C.2.

**F. Miscellaneous Requirements**

- 1. The terms and conditions in this permit to install supersede Permit to Install 14-04380, for emissions units P007 through P009, P018 and T003, as issued on September 24, 1997 and modified on July 22, 1998.
- 2. The following terms and conditions of this permit are federally enforceable: A, B, C.1, C.2, D and E.

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**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P009 - South Toning Mixer B and Tanks Solvent Based Production	OAC rule 3745-31-05(A)(3)          OAC rule 3745-31-05(C) (Synthetic minor to avoid title V permitting)	Organic compound (OC) emissions from this emissions unit shall not exceed 24.5 pounds per hour.  See term and condition B.2.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).  See terms and conditions A.2.c., A.2.d., and B.1.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the usage limitation, emissions limitations and the use of a cover.
- 2.b The hourly emission limitation is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limit.
- 2.c The organic compound (OC) emissions from the solvent-based colorant production shall not exceed 31.4 tons per year for emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and

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Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production) combined, based upon a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

- 2.d** The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P007 (South Premix Tanks Solvent Based Production), P008 (South Toning Mixer A and Tanks Solvent Based Production), P009 (South Toning Mixer B and Tanks Solvent Based Production), P010 (North Premix Tanks and Mills Aqueous Based Production), P011 (West Toning Mixture and Tanks Aqueous Based Production), P012 (East Toning Mixer and Tanks Aqueous Based Production), P013 (MMT Mixer A and Tanks Aqueous Based Production), P014 (MMT Mixer B and Tanks Aqueous Based Production), P015 (MMT Mixer C and Tanks Aqueous Based Production), P016 (West Stir-in Mixer and Tank Aqueous Based Production), P017 (East Stir-in Mixer and Tanks Aqueous Based Production), P019 (Mixer and Tank V4043), P020 (Mixer and Tank V4071 with associated Mill) and P021 (Mixer and Tank V4072 with associated Mill) shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

## **B. Operational Restrictions**

1. The maximum annual production rate for solvent-based colorants in emissions units P007 through P009, combined shall not exceed 6,000,000 pounds of colorant per year, based on a rolling 12-month summation of the production rates.

The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

2. The permittee shall use fitted covers on this emissions unit while in operation or holding any material containing organic compounds.

## **C. Monitoring and/or Recordkeeping Requirements**

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Emissions Unit ID: **P009**

**Issued: To be entered upon final issuance**

1. The permittee shall collect and record the following information each month for emissions units P007 through P009:
  - a. The name and identification number of each colorant produced;
  - b. The number of pounds of each colorant produced;
  - c. The organic compound content, in percent by weight, of each solvent-based colorant produced;
  - d. The total organic compound emission rate for all colorants produced, in pounds or tons;
  - e. The updated rolling, 12-month summation of the total colorant usage, in pounds; (This shall include the information for the current month and the preceding eleven months.) and
  - f. The rolling, 12-month summation of the OC emissions, in tons.
  
2. The permittee shall collect and record the following information each month for emissions units P007 - P017 and P019 - P021:
  - a. The name and identification number of each colorant produced;
  - b. The individual Hazardous Air Pollutant (HAP) content for each HAP of each colorant in pounds of individual HAP per pound of colorant, as applied;
  - c. The total combined HAP content of each colorant in pounds of combined HAPs per pound of colorant, as applied [sum all the individual HAP contents from (b)];
  - d. The number of pounds of each colorant produced;
  - e. The name and identification of each cleanup material employed;
  - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];

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- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP emissions for each HAP from all colorants produced and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP emissions from all colorants produced and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) times the emissions factor in E.1.a divided by 2000 lbs/ton for each colorant plus the sum of (g) times (h) for each cleanup material];
- k. The updated rolling, 12-month summation of the individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a individual emissions unit basis.

3. The permit to install for this emissions unit [P007, P008 and P009] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide 70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: trimethyl benzene

TLV (mg/m<sup>3</sup>): 123

Maximum Hourly Emission Rate (lbs/hr): 0.69

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 157

MAGLC (ug/m3): 2928

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new

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pollutants emitted, change in stack/exhaust parameters, etc.);

- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports which identify any exceedance of the OC emission limitation set forth in term A.2.c. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

2. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.d. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month colorant usage limitation in term B.1. If no deviations occurred during the reporting period, the permittee shall state so in the report.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

#### **E. Testing Requirements**

**Issued: To be entered upon final issuance**

1. Compliance with the emission limitations in Section A. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
24.5 lbs/hr OC

Applicable Compliance Method:

Compliance with the OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F$$

E is the OC emission rate, lb/hr

A is the maximum hourly solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

- b. Emissions Limitation:  
31.4 TPY OC for emissions units P007 through P009 based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in term and condition C.2.

The OC emission rate from the solvent-based colorant production shall be determined by the following equation:

$$E = A \times 0.0005 \text{ tons/lb} \times F \times 0.0005 \text{ tons/lb}$$

E is the OC emission rate, TPY

A is the annual solvent-based colorant production in pounds

F is the emissions factor for the solvent-based colorant provided in the PTI modification of 14-04380 issued on July 22, 1998 (20.93 lbs OC/ton production).

- c. Emissions Limitation:  
9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

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Applicable Compliance Method:

Compliance with the HAP emission limitations will be determined by the record keeping requirements specified in term and condition C.3.

2. Compliance with the rolling, 12-month colorant production limitation in term and condition B.1. shall be based upon the record keeping requirements as specified in term and condition C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede Permit to Install 14-04380, for emissions units P007 through P009, P018 and T003, as issued on September 24, 1997 and modified on July 22, 1998.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1, C.2, D and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P018 - Dump Stations 1-13	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE)* and Particulate Matter 10 microns and less in diameter (PM10) emissions from the dump stations shall not exceed 0.36 pound per hour and 1.58 tons per year.  * PE = PM10  See Section A.2.b.
	OAC rule 3745-17-07(A)(1)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, opacity limitation, and use of covers

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and a fabric filter.

- 2.b** Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six- minute average.
- 2.d** The hourly and annual PE and PM10 emissions limitations outlined above are based on the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

**B. Operational Restrictions**

- 1. None

**C. Monitoring and/or Recordkeeping Requirements**

- 1. None

**D. Reporting Requirements**

- 1. None

**E. Testing Requirements**

- 1. Compliance with the emissions limitations in Section A. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.36 lb/hr PE/PM10  
  
Applicable Compliance Method:  
The hourly PE emission rate is based on the emissions unit's potential to emit. The potential to emit was calculated by: [(maximum production rate of 37,714 pounds per hour) x (9.48 lbs PE/1,000,000 lbs product controlled emission factor provided in the PTI application 14-05811 received on January 23, 2006)]. PM10 emissions are assumed equivalent to the PE.
  - b. Emissions Limitation:  
1.58 TPY PE/PM10  
  
Applicable Compliance Method:

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The annual PE emission rate is based on the emissions unit's PTE and the calculation provided in the PTI application 14-05811 received on January 23, 2006. As long as compliance with the hourly emissions limitation is maintained, compliance with the annual emissions limitation is assured.

- c. Emissions Limitation:  
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six- minute average.

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Emissions Unit ID: **P018**

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede Permit to Install 14-04380, for emissions units P007 through P009, P018 and T003, as issued on September 24, 1997 and modified on July 22, 1998.

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Emissions Unit ID: T003

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**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T003 - 32,000 Gallon Storage Tank	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions from the storage tank shall not exceed 0.005 ton per year.
	40 CFR 60 Subpart Kb	The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb and OAC rule 3745-21-07(D).
	OAC rule 3745-21-07(D)	See term and condition C.1
		See term and condition B.1

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitation and the use of submerged fill.
- 2.b The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

**B. Operational Restrictions**

**Degussa Corporation**  
**PTI Application: 14-05911**  
**Issue**

**Facility ID: 1431260080**

**Emissions Unit ID: T003**

1. The fixed roof storage tank shall employ submerged fill during loading.

**Issued: To be entered upon final issuance****C. Monitoring and/or Recordkeeping Requirements**

1. The owner or operator of each storage vessel as specified in 40 CFR 60.110.b(a) shall keep readily available accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall, for storing liquids with a maximum true vapor pressure greater than or equal to 15.0 kPa,
  - a. maintain a record of the volatile organic liquid stored;
  - b. the period of storage; and
  - c. the maximum true vapor pressure of that volatile organic liquid during the respective storage period.

**D. Reporting Requirements**

1. The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Hamilton County Department of Environmental Services within 30 days when the maximum true vapor pressure of the liquid exceeds 27.6 kPa.

**E. Testing Requirements**

1. Compliance with the emissions limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.005 ton per year OC.  
  
Applicable Compliance Method:  
Compliance shall be demonstrated by the emissions calculated using U.S. EPA's Tanks 4.0 program (or later version) and the operational parameters as submitted in PTI 14-04380.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede Permit to Install 14-04380, for emissions units P007 through P009, P018 and T003, as issued on September 24, 1997 and modified on July 22, 1998.

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**Degu:**

**PTI A**

**Issued: To be entered upon final issuance**

Emissions Unit ID: **T003**