



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov.
Center

RE: **FINAL PERMIT TO INSTALL MODIFICATION**
FRANKLIN COUNTY
Application No: 01-07396

CERTIFIED MAIL

DATE: 2/22/2001

ISP Fine Chemicals Inc
Jere Ellison
1979 Atlas St
Columbus, OH 43228

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

CDO



Permit To Install
Terms and Conditions

Issue Date: **2/22/2001**
Effective Date: **2/22/2001**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 01-07396

Application Number: **01-07396**
APS Premise Number: **0125040931**
Permit Fee: **\$100**
Name of Facility: **ISP Fine Chemicals Inc**
Person to Contact: **Jere Ellison**
Address: **1979 Atlas St**
Columbus, OH 43228

Location of proposed air contaminant source(s) [emissions unit(s)]:
1979 Atlas St
Columbus, OHIO

Description of modification:
3,000 gallon stainless steel reactor and ancillary equipment.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Director

Facility Name: ISP FINE CHEMICALS, Inc.

Application Number: 01-07396

Date: February 22, 2001

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental 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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio 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 Ohio Administrative Code (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 applicable standards.

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PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code section 3745.11, the specified permit to install fee must be remitted within 15 days of the effective date of this permit to install.

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.

APPLICABILITY

This permit to install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A permit to operate application must be submitted to the appropriate field office for each new or modified air contaminant source in this permit to install. In accordance with OAC rule 3745-35-02, the application shall be filed no later than 30 days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each new or modified source described by this permit to install for 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.

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Facility Name: ISP FINE CHEMICALS, Inc.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
<u>AIR EMISSION SUMMARY</u>				

The air contaminant emissions units listed below comprise the Permit to Install for **ISP FINE CHEMICALS, Inc.** located in **Franklin** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

		P020		
Ohio EPA Source Number	P007		P027	
P001		P021		P033
			P028	
	P009			
P003		P022		P034
			P029	
	P010			P035
		P024		
P004				
	P015		P030	P037
		P025		
P006	P016			
		P026	P031	

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		T014		
	T002		T022	T027
P038 (originally permitted as P024)	T003	T015		
			T023	T028
P039 (NEW)	T004	T016		
		T017		T029
	T005		T024	
P039 Cont'd		T018		
			T025	
P040 (NEW)	T006	T019		
	T007	T020		
	T013	T021		
			T026	
T001				

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	100 gallon reactor (R1107)	4000 gallon reactor (R1112)	rotary vacuum dryer (D1013)	500 gallon low temperature refrigeration system (super chiller)
Source Identification Description		rotary vacuum dryer (D1001)	vacuum tray dryer (D1014)	4000 gallon reactor for synthetic organic chemicals (reactor system R-10)
2000 gallon reactor (R1101)	500 gallon still (S2102)	horizontal vacuum dryer (D1004)		
	500 gallon still (S2103)		top unloading centrifuge (C3404)	
500 gallon reactor (R1103)	500 gallon evaporator (E3601)	vacuum tray dryer (D1005)		
		rotary vacuum dryer (D1006)	top unloading centrifuge (C3405)	3000 gallon reactor for synthetic organic chemicals (reactor system R-11)
500 gallon reactor (R1104)	1000 gallon reactor (R1108)	rotary vacuum dryer (D1011)	bottom unloading centrifuge (C3411)	
			2000 gallon reactor for synthetic organic chemicals (reactor system R-2)	
200 gallon reactor (R1106A)	4000 gallon reactor (R1105B)	horizontal vacuum dryer (D1012)		6000 gallon OC storage tank (T1123)
	4000 gallon reactor (R1109)			4000 gallon OC

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
storage tank (T1124)	750 gallon OC storage tank (T1129)	8000 gallon OC storage tank (T8108)		
1500 gallon OC storage tank (T1125)	4000 gallon OC storage tank (T8101)	14600 gallon OC storage tank (T8111)	14600 gallon OC storage tank (T8117)	<u>BAT Determination</u> use of emergency vent catch tank and compliance with permitted limits
1000 gallon OC storage tank (T1126)	4000 gallon OC storage tank (T8102)	14600 gallon OC storage tank (T8112)	14600 gallon OC storage tank (T8118)	use of emergency vent catch tank and compliance with permitted limits
1000 gallon OC storage tank (T1127)	4000 gallon OC storage tank (T8103)	14600 gallon OC storage tank (T8113)	6000 gallon acid storage tank (T1141)	use of emergency vent catch tank and compliance with permitted limits
1000 gallon OC storage tank (T1128)	4000 gallon OC storage tank (T8104)	14600 gallon OC storage tank (T8114)		use of emergency vent catch tank and compliance with permitted limits
	4000 gallon OC storage tank (T8105)	14600 gallon OC storage tank (T8115)		use of emergency vent catch tank and compliance with permitted limits
	4000 gallon OC storage tank (T8106)			
	4000 gallon OC storage tank (T8107)	14600 gallon OC storage tank (T8116)		use of emergency vent catch tank and compliance with permitted limits

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Ohio
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EPA Source

Permit Allowable Mass
Emissions and/or
Control/Usage
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<u>Source Number</u>	<u>Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Applicable Federal & OAC Rules</u>
rules	nce with the applicable rules	fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-31-05
use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	use of submerged fill and compliance with the applicable rules	3745-21-07 (G) (2)

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
3745-31-05		3745-31-05		3745-31-05
3745-31-05	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	3745-21-07 (D)
3745-21-07 (G) (2)	3745-31-05		3745-21-07 (G) (2)	3745-31-05
3745-31-05		3745-31-05		3745-21-07 (D)
3745-31-05	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	
3745-21-07 (G) (2)	3745-31-05		3745-21-07 (G) (2)	3745-31-05
3745-31-05	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	3745-21-07 (D)
3745-31-05		3745-31-05		3745-31-05
3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-21-07 (G) (2)		3745-21-07 (D)
3745-31-05		3745-31-05		3745-31-05
3745-31-05	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	3745-31-05
3745-21-07 (G) (2)	3745-31-05		3745-21-07 (G) (2)	3745-21-07 (D)
3745-31-05		3745-31-05		3745-31-05
3745-31-05	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	3745-21-07 (D)
3745-21-07 (G) (2)	3745-31-05		3745-21-07 (G) (2)	3745-31-05
3745-31-05		3745-31-05		3745-21-07 (D)
3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-21-07 (G) (2)	3745-31-05	3745-21-07 (D)
3745-31-05		3745-31-05		3745-31-05

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<u>Source Number</u>	<u>Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
3745-21-07 (D)	3745-31-05	3745-21-07 (D)		35.6 tons OC/yr*
	3745-21-07 (D)	40 CFR Part 60, Subpart Kb	Permit Allowable Mass Emissions and/or Control/Usage Requirements	8 lbs OC/hr 40 lbs OC/day
3745-31-05	40 CFR Part 60, Subpart Kb	3745-31-05		35.6 tons OC/yr*
3745-21-07 (D)	3745-31-05	3745-21-07 (D)	35.6 tons OC/yr*	8 lbs OC/hr 40 lbs OC/day
	3745-21-07 (D)	40 CFR Part 60, Subpart Kb	8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*
3745-31-05	40 CFR Part 60, Subpart Kb	3745-31-05		8 lbs OC/hr 40 lbs OC/day
3745-21-07 (D)	3745-31-05	3745-21-07 (D)	35.6 tons OC/yr*	40 lbs OC/day
	3745-31-05	40 CFR Part 60, Subpart Kb	8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*
3745-31-05	3745-21-07 (D)	3745-31-05	35.6 tons OC/yr*	8 lbs OC/hr 40 lbs OC/day
3745-21-07 (D)	3745-31-05	3745-21-07 (D)	8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*
	3745-31-05			8 lbs OC/hr 40 lbs OC/day
3745-31-05	3745-21-07 (D)		35.6 tons OC/yr*	40 lbs OC/day
3745-21-07 (D)	40 CFR Part 60, Subpart Kb		8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*
3745-31-05				8 lbs OC/hr 40 lbs OC/day
3745-31-05	3745-21-07 (D)		35.6 tons OC/yr*	35.6 tons OC/yr*
3745-21-07 (D)	40 CFR Part 60, Subpart Kb		8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day
3745-31-05				35.6 tons OC/yr*
3745-21-07 (D)			35.6 tons OC/yr*	8 lbs OC/hr 40 lbs OC/day
	3745-31-05		8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*

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			35.6 tons OC/yr*	
8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day			1.0 ton OC/yr
			35.6 tons OC/yr*	
35.6 tons OC/yr*	35.6 tons OC/yr*	35.6 tons OC/yr*		1.0 ton OC/yr
8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*	
		35.6 tons OC/yr*		1.0 ton OC/yr
35.6 tons OC/yr*	35.6 tons OC/yr*	8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*	
8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day			1.0 ton OC/yr
8 lbs OC/hr 40 lbs OC/day	35.6 tons OC/yr*		35.6 tons OC/yr*	
	8 lbs OC/hr 40 lbs OC/day			1.0 ton OC/yr
35.6 tons OC/yr*	35.6 tons OC/yr*	35.6 tons OC/yr*	35.6 tons OC/yr*	1.0 ton OC/yr
8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day	8 lbs OC/hr 40 lbs OC/day		
40 lbs OC/day	35.6 tons OC/yr*		35.6 tons OC/yr*	1.0 ton OC/yr
35.6 tons OC/yr*	8 lbs OC/hr 40 lbs OC/day			1.0 ton OC/yr
			1.0 ton OC/yr	1.0 ton OC/yr

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Permit Allowable Mass
Emissions and/or
Control/Usage
Requirements

<u>Source Number</u>	<u>Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>
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1.0 ton OC/yr

1.0 ton
OC/yr

1.0 ton OC/yr

1.0 ton
OC/yr

35.6 tons
OC/yr*

1.0 ton
OC/yr

1.0 ton
OC/yr

1.0 ton
OC/yr

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* - this emission limitation is a grouped limit established for emissions units P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, P037-P040, T001-T007, and T029 which are directly associated with the computer program which incorporates the approved Synthetic Organic Chemical Manufacturers Association's methodology for determining PTE for batch chemical operations.

The 35.6 tons of OC/yr grouped emission limitation includes fugitive OC emissions for each affected emissions unit.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compounds	51.60

CONSTRUCTION STATUS

The Ohio EPA, Central District Office shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: P039 and P040.

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than five years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install

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need only be submitted to the Ohio EPA, Central District Office, Air Pollution Control Group, P.O. Box 163669, Columbus, OH 43216-3669.

WASTE DISPOSAL

The owner/operator shall comply with any applicable State and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC Rule 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Ohio EPA, Central District Office, Air Pollution Control Group, P.O. Box 163669, Columbus, OH 43216-3669.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NEW SOURCE PERFORMANCE STANDARD SUBPART Kb

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.

In accordance with 40 CFR 60.116b(a) and (b), the owner and operator of the following storage vessel(s) shall keep readily accessible records showing the dimension of each storage vessel and an analysis

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showing the capacity of each storage vessel for the life of each source.

<u>Source Number(s)</u>	<u>Tank Size</u>
T021-T028	14600 gallons each

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Potential to Emit

The facility's potential to emit (PTE) is less than the threshold values for both criteria and hazardous air pollutants which would trigger the requirements of OAC Chapter 3745-77.

The facility's PTE was determined, in part, through the use of a computer program which incorporates the approved Synthetic Organic Chemical Manufacturers Association's methodology for determining PTE for batch chemical operations. The emissions from other emissions units at the facility, which are not directly associated with the batch chemical operations, were also incorporated into the facility's PTE. This approach for determining the facility's PTE was performed in accordance with U.S. EPA's August 29, 1996 guidance memorandum entitled "Clarification of Methodology for Calculating Potential to Emit for Batch Chemical Production Operations."

The methodology employed through the computer program enables the permittee to calculate and document the emissions (criteria and hazardous air pollutants) generated by each emissions unit directly associated with each batch chemical operation. The emissions generated by each emissions unit are determined on an average hourly basis. The emissions from each individual emissions unit are then combined to determine the total emissions associated with the batch operation. The records of the individual emissions for each emissions unit, for each batch operation that the permittee currently produces or knows they

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will produce, are retained within the original engineering analysis used to establish the "worst-case" PTE for this facility. The computer program addressed the emissions generated for each batch operation for the following emissions units: P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, P037-P040, T001-T007, and T029. The records of the individual emissions for each emissions unit, for batch operations that were not included in the original engineering analysis, will be retained within any revised engineering analysis developed by the permittee.

B. Operational Restrictions

1. The temperature of the exhaust gases from the condenser and receiver vents serving emissions units P020-P022, P037, P039, and P040 shall not exceed 40 degrees Celsius.
2. The temperature of the exhaust gases from the vacuum pumps serving emissions units P024-P031 shall not exceed 40 degrees Celsius.
3. The cooling media supply temperature shall not exceed 25 degrees Celsius when producing water-based products and shall not exceed -20 degrees Celsius when producing solvent-based products.
4. The percentage of caustic in the scrubber liquor in the scrubber serving emissions units P020-P022 and P039 shall be maintained as described in the individual batch packets developed for the specific reaction occurring in these emissions units. The permittee shall ensure that the scrubber operation follows the batch packet instructions for these emissions units.

C. Monitoring and Record Keeping Requirements

1. The permittee shall maintain documentation of the products, raw materials, equipment utilization rates, and individual emissions unit emission rates for each product and their relationship to one another used in the original engineering analysis which established the facility's PTE. The permittee shall also maintain the documentation (ISCST2 facility-wide dispersion modeling analysis for all of the chemicals with Threshold Limit Values (TLVs)) which was used to demonstrate compliance with the Ohio EPA Air Toxics Policy based on the products and their corresponding raw materials as identified in the facility's original engineering analysis.
2. If the permittee desires to produce a product which was not included in the original engineering analysis, then a revised engineering analysis shall be performed to evaluate the effect of the new product against the "worst-case"

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facility PTE established by the original engineering analysis. If the new product does not affect the "worst-case" PTE calculation by increasing the calculated PTE to a level above that calculated in the original engineering analysis, then the permittee may produce the new product at this facility. The permittee shall maintain documentation of any revised engineering analysis which allows for the introduction of a new product without establishing a new facility PTE. The permittee shall also maintain documentation which confirms that the chemical substances emitted as a result of producing the new product or use of any new or modified raw materials will not exceed the maximum acceptable ground level concentration defined by the Ohio EPA Air Toxics Policy based upon modeling using SCREEN3.

3. If a revised engineering analysis for a new product does affect the "worst-case" PTE calculation by increasing the calculated PTE to a level above that calculated in the original engineering analysis, then the permittee may not produce the new product at this facility without obtaining the appropriate permit(s) from the Ohio EPA. In addition, any change to the emissions units that would otherwise be considered a "modification" as defined in OAC rule 3745-31-01 would require prior notification to and approval from the Ohio EPA, including the possible issuance of modifications to this permit and/or operating permits.
4. The permittee shall maintain instrumentation to continuously monitor and record the exhaust gas temperature of each condenser and receiver vent employed during the operation of emissions units P020-P022, P037, P039 or P040. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall maintain instrumentation to continuously monitor and record the exhaust gas temperature of each vacuum pump employed during the operation of emissions units P024-P031. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be calibrated, operated and maintained in accordance with the

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manufacturer's recommendations, with any modifications deemed necessary by the permittee.

6. The permittee shall operate and maintain equipment to continuously monitor the supply temperature of the cooling media used in the production of water-based (i.e., no solvents in the formulation) and solvent-based products. The monitoring devices shall be capable of accurately measuring the desired parameter. The temperature monitors shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
7. The permittee shall maintain the individual batch packet information for each reaction which occurs in emissions units P020-P022 and P039. The batch packet instructions shall identify the quantity of sodium hydroxide (NaOH) and water necessary to neutralize acid gas produced in normal and upset conditions.
8. The permittee shall maintain the following information for each batch produced:
 - a. the identification of the product being produced;
 - b. whether the product is water-based or solvent-based;
 - c. the total batch emissions, in pounds;
 - d. the average hourly emission rate for each emissions unit associated with the batch operation, in pounds;
 - e. the exhaust gas temperature of each condenser and receiver vent serving emissions units P020-P022, P037, P039, and P040 when these emissions units are in operation;
 - f. the exhaust gas temperature of each vacuum pump serving emissions units P024-P031 when these emissions units are in operation; and
 - g. the supply temperature of the cooling media used in the production of each water-based and solvent-based product.
9. The permittee shall maintain records which document the total daily emission rate for each of the following emissions units: P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, and P037-P040.
10. Pursuant to 40 CFR Part 60.116(b), the permittee shall maintain readily accessible records showing the dimensions

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of storage tanks T021-T028 and an analysis showing the capacity of storage tanks T021-T028.

11. The permittee shall maintain a database of all component identification and monitoring data required pursuant to the approved leak detection and repair plans for emissions units P020-P022, P037, P039, and P040.
12. The permittee shall maintain operation and maintenance records to demonstrate that the "Preventative Maintenance and Malfunction Abatement Plan" approved for emissions units P020-P022, P037, P039, and P040 and the pollution control equipment associated with these emissions units is fully implemented.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day (for emissions units P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, and P037-P040);
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day (for emissions units P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, and P037-P040);
 - c. an identification of any period, when the emissions units were in operation, during which the exhaust gas temperature from the condenser and receiver vents exceeded 40 degrees Celsius (for emissions units P020-P022, P037, P039, and P040);
 - d. an identification of any period, when the emissions units were in operation, during which the exhaust gas temperature from the vacuum pumps exceeded 40 degrees Celsius (for emissions units P024-P031);
 - e. an identification of any period, when the emissions

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units were in operation, during which the supply temperature of the cooling media exceeded 25 degrees Celsius when

producing water-based products and/or exceeded -20 degrees Celsius when producing solvent-based products; and

- f. an identification of any period, when the emissions units were in operation, during which the percentage of caustic (NaOH) in the scrubber liquor was not maintained in accordance with the individual batch packet information (for emissions units P020-P022 and P039).

Except as otherwise may be provided in these terms and conditions, 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 record keeping 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 Ohio EPA, Central District Office. 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.)

2. The permittee shall notify the Ohio EPA, Central District Office, in writing, of any new product that can be produced at this facility for which the revised engineering analysis demonstrates that the original calculated facility PTE will not be increased. The notification shall include a copy of the revised engineering analysis (hardcopy or electronic format) and shall be sent to the Ohio EPA, Central District Office at least 7 days prior to producing the new product at this facility.
3. The permittee shall submit semiannual leak detection and repair reports which contain the following data for each type of component identified:
 - a. the components identified and monitored during each monitoring period;

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- b. the leaking equipment identified during each monitoring period;
- c. the leaking equipment that were not repaired within 15 calendar days of discovery and the reason for each delay; and
- d. the dates of process unit shutdowns that occurred during each monitoring period.

The semiannual reports shall be submitted by February 1 and August 1 of each year.

4. The permittee shall also submit annual reports which specify the total organic compound emissions from this facility and by emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Compliance Methods and Test Requirements

1. Emission Limitations - 8 lbs of OC/hr, 40 lbs of OC/day (emissions units P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, and P037-P040), and 35.6 tons of OC/yr (emissions units P001, P003, P004, P006, P007, P009, P010, P015, P016, P020-P022, P024-P031, P033-P035, P037-P040, T001-T007, and T029)

Applicable Compliance Method - Compliance with these emission limitations shall be determined based upon the original and/or any revised engineering analysis established pursuant to the requirements of this permit and the records required pursuant to the Monitoring and Record Keeping Requirements. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

2. Emission Limitation - 1.0 ton OC/yr (emissions units T013-T028)

Applicable Compliance Method- Compliance shall be determined in accordance with the procedures specified in U.S. EPA

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reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.3 or through the use of U.S. EPA's "Tanks" program. Emissions units T001 through T007 and T029 may also determine compliance with the applicable emission limitations using the data generated by the above-mentioned computer program.

F. Miscellaneous

1. The permittee shall continue to comply with the "Leak Detection and Repair Plan" and the "Preventative Maintenance and Malfunction Abatement Plan" approved for emissions units P020-P022, and P037 and the pollution control equipment associated with these emissions units. The "Preventative Maintenance and Malfunction Abatement Plan" was originally submitted on October 15, 1993 and modified to incorporate P037 on May 31, 1995. The "Leak Detection and Repair Plan" was originally submitted on September 1, 1993, revised on May 28, 1995 and modified to incorporate P037 on May 31, 1995. Within 90 days of the effective date of this permit, the permittee shall submit modifications of the approved "Leak Detection and Repair Plan" and the "Preventative Maintenance and Malfunction Abatement Plan" to incorporate emissions units P039 and P040 and the pollution control equipment associated with these emissions units.
2. The terms and conditions contained within this permit to install shall supersede the requirements previously contained in permit to install numbers 01-2410 (issued 5/19/93 and modified 2/17/94), 01-4755 (issued 12/22/93), 01-4925 (issued 1/19/95), and 01-5717 (issued 5/17/95).