



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P029 (Polyamide manufacturing) Polyamide reactor 955

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

**Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215**

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date 03/23/04

Expiration Date 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P029 (Polyamide manufacturing)
Polyamide reactor 955

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in blue ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyamide Reactor V-955	OAC rule 3745-31-05(A)(3) PTI # 06-1443	This PTI only required compliance with the applicable law that was in effect on the date the permit was issued.
	OAC rule 3745-35-07	See Sections A.2.b - A.2.g.
	OAC rule 3745-21-07(G)(2)	The permittee shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any article, machine, equipment, or other contrivance for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material, unless said discharge has been reduced by at least eighty-five per cent. See Section A.2.h.

2. Additional Terms and Conditions

- 2.a The Polyamide Plant has three reactors [P038, P029, and P039 (945, 955, and 965, respectively)] and associated equipment, including several process storage tanks (T019, T020, T940, T949, T950, T951, and T953), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Polyamide Plant emits three regulated air pollutants: toluene, xylene, and volatile organic compounds (VOC). These emissions are generated from drum/tank truck loading activities, continuous breathing losses from process tanks, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Polyamide Plant sends small amounts of toluene, xylene, and VOC solvents to the wastewater treatment plant which results in emissions of these regulated air pollutants at that location.
- 2.b Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.c Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
 Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
 Emissions of each individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- 2.f Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

2. Additional Terms and Conditions (continued)

- 2.g Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
- 2.h This emissions unit is not vented to the atmosphere. Solvent vapors circulate through a condenser. Mass balance calculations have determined that 97-98% of solvent additions remain in the final products. The remainder is entrained in the wastewater and is processed in the treatment plant. Therefore, except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit. Continued compliance with this requirement will obviate the need for monitoring, record keeping and reporting requirements to demonstrate ongoing compliance with OAC rule 3745-21-07.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

1. For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.
2. The permittee shall maintain monthly records of the following information for the Polyamide Plant
 - a. the company identification for each product manufactured;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Polyamide Plant products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Polyamide Plant products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC from the entire facility, in tons; and
 - b. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC from the entire facility, in tons.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Polyamide Plant and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

D. Reporting Requirements (continued)

- The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of any individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Xylene	Toluene	VOC	Key Input
A	NONE	NONE	1.150 E-06	Butanol
B	1.880 E-06	NONE	1.880 E-06	Xylene
C	NONE	NONE	2.050 E-06	IPA
D	1.750 E-07	4.450 E-07	1.061 E-06	Tol/Xy/PGME
E	1.290 E-06	NONE	1.290 E-06	Xylene
E1	7.660 E-07	NONE	7.660 E-07	Xylene
F	NONE	3.280 E-06	3.280 E-06	Toluene
G	NONE	2.100 E-06	2.100 E-06	Toluene
H	NONE	3.820 E-06	6.622 E-06	Tol/IPA
J	NONE	NONE	2.480 E-06	IPA
K	NONE	5.700 E-06	1.157 E-06	Tol/IPA
L	NONE	7.620 E-07	7.620 E-07	Toluene
M	NONE	NONE	5.740 E-07	EGMP
N	NONE	NONE	3.920 E-07	EDA

The emission factor[s] for each product manufactured in the Polyamide Plant include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: toluene = 0.059 ton per month; xylene = 0.030 ton per month; and VOC = 0.12 ton per month.

NOTE: If the permittee documents that no toluene or xylene has been stored in any of the equipment identified in section A.2.a. during the given month, the corresponding emission constant does not need to be included in the monthly emission calculations.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2) and PTI # 06-4536, all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P038 (Reactor 945) Polyamide Reactor V-945

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

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Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P038 (Reactor 945)
Polyamide Reactor V-945

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received

Part II Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Polyamide Reactor V-945	OAC rule 3745-31-05(A)(3) PTI # 06-1443	This PTI only required compliance with the applicable law that was in effect on the date the permit was issued.
	OAC rule 3745-35-07	See Sections A.2.b - A.2.g.
	OAC rule 3745-21-07(G)(2)	The permittee shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any article, machine, equipment, or other contrivance for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material, unless said discharge has been reduced by at least eighty-five per cent. See Section A.2.h.

2. Additional Terms and Conditions

- 2.a The Polyamide Plant has three reactors [P038, P029, and P039 (945, 955, and 965, respectively)] and associated equipment, including several process storage tanks (T019, T020, T940, T949, T950, T951, and T953), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Polyamide Plant emits three regulated air pollutants: toluene, xylene, and volatile organic compounds (VOC). These emissions are generated from drum/tank truck loading activities, continuous breathing losses from process tanks, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Polyamide Plant sends small amounts of toluene, xylene, and VOC solvents to the wastewater treatment plant which results in emissions of these regulated air pollutants at that location.
- 2.b Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.c Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.d Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.e Emissions of each individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- 2.f Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

2. Additional Terms and Conditions (continued)

- 2.g Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
- 2.h This emissions unit is not vented to the atmosphere. Solvent vapors circulate through a condenser. Mass balance calculations have determined that 97-98% of solvent additions remain in the final products. The remainder is entrained in the wastewater and is processed in the treatment plant. Therefore, except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit. Continued compliance with this requirement will obviate the need for monitoring, record keeping and reporting requirements to demonstrate ongoing compliance with OAC rule 3745-21-07.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

1. For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.
2. The permittee shall maintain monthly records of the following information for the Polyamide Plant:
 - a. the company identification for each product manufactured;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Polyamide Plant products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Polyamide Plant products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC from the entire facility, in tons; and
 - b. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP combined HAPs and VOC from the entire facility, in tons.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Polyamide Plant and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

D. Reporting Requirements (continued)

2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of any individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Xylene	Toluene	VOC	Key Input
A	NONE	NONE	1.150 E-06	Butanol
B	1.880 E-06	NONE	1.880 E-06	Xylene
C	NONE	NONE	2.050 E-06	IPA
D	1.750 E-07	4.450 E-07	1.061 E-06	Tol/Xy/PGME
E	1.290 E-06	NONE	1.290 E-06	Xylene
E1	7.660 E-07	NONE	7.660 E-07	Xylene
F	NONE	3.280 E-06	3.280 E-06	Toluene
G	NONE	2.100 E-06	2.100 E-06	Toluene
H	NONE	3.820 E-06	6.622 E-06	Tol/IPA
J	NONE	NONE	2.480 E-06	IPA
K	NONE	5.700 E-06	1.157 E-06	Tol/IPA
L	NONE	7.620 E-07	7.620 E-07	Toluene
M	NONE	NONE	5.740 E-07	EGMP
N	NONE	NONE	3.920 E-07	EDA

The emission factor[s] for each product manufactured in the Polyamide Plant include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: toluene = 0.059 ton per month; xylene = 0.030 ton per month; and VOC = 0.12 ton per month.

NOTE: If the permittee documents that no toluene or xylene has been stored in any of the equipment identified in section A.2.a. during the given month, the corresponding emission constant does not need to be included in the monthly emission calculations.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2) and PTI # 06-4536, all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P039 (Reactor 965) Polyamide Reactor V-965

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P039 (Reactor 965)
Polyamide Reactor V-965

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2 Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

**Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501**

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyamide Reactor V-965	OAC rule 3745-31-05(A)(3) PTI # 06-4536	See Sections A.2.a - A.2
	OAC rule 3745-35-07	See Sections A.2.b - A.2.g.
	OAC rule 3745-21-07(G)(2)	The permittee shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any article, machine, equipment, or other contrivance for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material, unless said discharge has been reduced by at least eighty-five per cent. See Section A.2.h.

2 Additional Terms and Conditions

- 2.a The Polyamide Plant has three reactors [P038, P029, and P039 (945, 955, and 965, respectively)] and associated equipment, including several process storage tanks (T019, T020, T940, T949, T950, T951, and T953), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Polyamide Plant emits three regulated air pollutants: toluene, xylene, and volatile organic compounds (VOC). These emissions are generated from drum/tank truck loading activities, continuous breathing losses from process tanks, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Polyamide Plant sends small amounts of toluene, xylene, and VOC solvents to the wastewater treatment plant which results in emissions of these regulated air pollutants at that location.
- 2.b Emissions of each individual hazardous air pollutant (HAP) shall not exceed 18.7 pounds per hour and 9.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.c Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.d Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.
- 2.e Emissions of each individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- 2.f Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.
- 2.g Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

2. Additional Terms and Conditions (continued)

- 2.h This emissions unit is not vented to the atmosphere. Solvent vapors circulate through a condenser. Mass balance calculations have determined that 97-98% of solvent additions remain in the final products. The remainder is entrained in the wastewater and is processed in the treatment plant. Therefore, except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit. Continued compliance with this requirement will obviate the need for monitoring, record keeping and reporting requirements to demonstrate ongoing compliance with OAC rule 3745-21-07.
- 2.i When transferring a batch from a reactor to a process tank or tank truck, the reactor gases shall be passed through a condenser that condenses 90% of the gases. [Although this requirement was specified in the Permit to Install, due to the configuration of the reactor system and the manner in which it is operated, it is not feasible to perform emission tests to demonstrate compliance with this requirement.]

B Operational Restrictions

None

C Monitoring and/or Record Keeping Requirements

1. For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.
2. The permittee shall maintain monthly records of the following information for the Polyamide Plant:
 - a the company identification for each product manufactured;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Polyamide Plant products, in tons;
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP combined HAPs and VOC for all Polyamide Plant products, for the previous twelve-month period, in tons;
 - i. the hours of operation for each of the reactors; and
 - j. the average hourly individual HAP emission rate, in pounds per hour, i.e., the highest total emissions from [g] of the individual HAPs emitted, divided by the highest number of hours of operation of the reactors in operation.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC from the entire facility, in tons; and
 - b. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP combined HAPs and VOC from the entire facility, in tons.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Polyamide Plant and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of any individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of total VOC shall not exceed 19.0 tons during any rolling 12-month period from the Polyamide Plant.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method.

E. Testing Requirements (continued)

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Xylene	Toluene	VOC	Key Input
A	NONE	NONE	1.150 E-06	Butanol
B	1.880 E-06	NONE	1.880 E-06	Xylene
C	NONE	NONE	2.050 E-06	IPA
D	1.750 E-07	4.450 E-07	1.061 E-06	Tol/Xy/PGME
E	1.290 E-06	NONE	1.290 E-06	Xylene
E1	7.660 E-07	NONE	7.660 E-07	Xylene
F	NONE	3.280 E-06	3.280 E-06	Toluene
G	NONE	2.100 E-06	2.100 E-06	Toluene
H	NONE	3.820 E-06	6.622 E-06	Tol/IPA
J	NONE	NONE	2.480 E-06	IPA
K	NONE	5.700 E-06	1.157 E-06	Tol/IPA
L	NONE	7.620 E-07	7.620 E-07	Toluene
M	NONE	NONE	5.740 E-07	EGMP
N	NONE	NONE	3.920 E-07	EDA

The emission factor[s] for each product manufactured in the Polyamide Plant include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: toluene = 0.059 ton per month; xylene = 0.030 ton per month; and VOC = 0.12 ton per month.

NOTE: If the permittee documents that no toluene or xylene has been stored in any of the equipment identified in section A.2.a. during the given month, the corresponding emission constant does not need to be included in the monthly emission calculations.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2) and PTI # 06-4536, all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.
2. If the permittee develops a new product that emits any regulated air pollutant, the permittee shall evaluate the product's implications on federal and state regulations. If this evaluation shows that the new product emissions are applicable to federal or state regulations, the permittee shall be required either (1) to comply with those rules, (2) to develop new emission limitations to avoid applicability, or (3) install emission controls to avoid applicability. If the permittee uses methods 2 or 3, the permittee shall develop an emission factor for that product and submit the revisions, with documentation, and an applicability determination to OEPA/SEDO before commencing production. If method 1 is used, the permittee shall follow the procedures specified in those regulations.
3. If the permittee modifies existing equipment, the permittee shall evaluate implications on federal and state regulations. If this evaluation shows that the modification is applicable to federal or state regulations, the permittee shall be required either (1) to comply with those rules, (2) to develop new emission limitations to avoid applicability, or (3) install emission controls to avoid applicability. If the permittee uses methods 2 or 3, the permittee shall submit the revisions, with documentation, and an applicability determination to OEPA/SEDO before commencing production. If method 1 is used, the permittee shall follow the procedures specified in those regulations.

F Miscellaneous Requirements (continued)

4. If the permittee constructs new equipment or obtains new emission information, the permittee shall evaluate the implications on emissions and on federal and state regulations. If this evaluation shows an increase or a decrease in emissions, the permittee shall revise all the affected product's emission factors and revise the emission constants. If this evaluation shows that the new emissions are applicable to federal or state regulations, the permittee shall be required either (1) to comply with those rules, (2) to develop new emission limitations to avoid applicability, or (3) to install engineering emission controls to avoid applicability. If the permittee uses methods 2 or 3, the permittee shall submit to OEPA/SEDO the emission factor and emission constant revisions, with documentation, an applicability determination, and, if appropriate, a PTI application before commencing construction. If method 1 is used, the permittee shall follow the procedures specified in those regulations.
5. Prior to beginning any change that requires a PTI under federal or Ohio rules, a PTI shall be obtained.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

**P027 (Dimer Manufacturing) Dimer Clay hopper for
Dimer Manufacturing**

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P027 (Dimer Manufacturing)
Dimer Clay hopper for Dimer Manufacturing

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in blue ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Dimer Clay Hopper Equipped with a Fabric Filter	OAC rule 3745-35-07(B)	Particulate emissions (PE) shall not exceed 2.1 tons per year from this emissions unit.
	OAC rule 3745-17-11(B)(2)	Total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
	OAC rule 3745-17-07(A)	PE shall not exceed 11.3 pounds per hour. Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

2. Additional Terms and Conditions

None

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

1. The current emission factor to be used in keeping the records required in Section C.2 is shown in Section E.1. The permittee shall update the emission factor by submitting new calculations to the Ohio EPA Southeast District Office whenever a modification is made, or new information becomes available which has an impact on the emission factor calculation. The permittee's calculation of the emission factor has been submitted to the Ohio EPA Southeast District Office in the FESOP application.
2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the total production or transfer rate, in pounds; and
 - b. the total PE, in tons, i.e., (total production or transfer rate) x (emission factor).
3. The permittee shall maintain monthly records of the following information for the entire facility
 - a. the total PE, in tons; and
 - b. the total, rolling 12-month PE, in tons

C. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the fabric filter serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit summaries of all the records required by Sections C.2 and C.3.

The reports shall be submitted quarterly, i.e., by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the fabric filter serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emissions Limitations:
PE shall not exceed 11.3 pounds per hour.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance by performing emission tests in accordance with USEPA test methods 1 - 5.
 - 1.b Emissions Limitations:
PE shall not exceed 2.1 tons per year from this emissions unit.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in section C.2, using the following emission factor: 0.0000001 ton/pound of production or transfer rate. The annual PE shall be calculated by summing the monthly emission rates required by Section C.2 for the calendar year.
 - 1.c Emissions Limitations:
The total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:
Compliance shall be determined by the record keeping in Section C.3.
 - 1.d Emissions Limitations:
Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:
Compliance with the visible PE limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

**P030 (Pellet Transfer System) Transfers Pellets from
pellet granulator to pellet bagger**

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P030 (Pellet Transfer System)
Transfers Pellets from pellet granulator to pellet bagger

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3 Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyamide Pellet Transfer System Equipped with a Fabric Filter	OAC rule 3745-35-07(B)	Particulate emissions (PE) shall not exceed 0.62 ton per year from this emissions unit.
	OAC rule 3745-31-05(A)(3) [PTI # 06-2313]	Total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility. Particulate emissions shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases.
	OAC rule 3745-17-11(B)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). The requirements of this rule are less stringent than the requirements of OAC 3745-31-05(A)(3) above.
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

2. Additional Terms and Conditions

None

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

- The current emission factor to be used in keeping the records required in Section C.2 is shown in Section E.1. The permittee shall update the emission factor by submitting new calculations to the Ohio EPA Southeast District Office whenever a modification is made, or new information becomes available which has an impact on the emission factor calculation. The permittee's calculation of the emission factor has been submitted to the Ohio EPA Southeast District Office in the FESOP application.
- The permittee shall maintain monthly records of the following information for this emissions unit:
 - the total production or transfer rate, in pounds; and
 - the total PE, in tons, i.e., (total production or transfer rate) x (emission factor)

C. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain monthly records of the following information for the entire facility:
 - a. the total PE, in tons; and
 - b. the total, rolling 12-month PE, in tons.
4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the fabric filter serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions

D. Reporting Requirements

1. The permittee shall submit summaries of all the records required by Sections C.2 and C.3

The reports shall be submitted quarterly, i.e., by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the fabric filter serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emissions Limitation:
Emissions of particulate matter shall not exceed 0.030 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:
Compliance may be demonstrated by the following calculation, using the approved emission factor (2.004E-9 ton/pound), the maximum production rate, and the rated capacity of the exhaust fan:

$$(2.004E-9 \text{ ton/pound})(6500 \text{ pounds/hour})(7000 \text{ gr/lb}) / [(375 \text{ dscf/min})(60 \text{ min/hr})] = 0.000004 \text{ gr/dscf}$$

If required, the permittee shall demonstrate compliance by performing emission tests in accordance with USEPA test methods 1 - 5.
 - 1.b PE shall not exceed 0.62 ton per year from this emissions unit

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in section C.2, using the following emission factor: 2.004E-9 ton/pound of production or transfer rate. The annual PE shall be calculated by summing the monthly emission rates required by Section C.2 for the calendar year.

E. Testing Requirements (continued)

1.c Emissions Limitations:

The total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be determined by the record keeping in Section C.3.

1.d Emissions Limitations:

Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:

Compliance with the visible PE limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P031 (Pellet Dust Collector) Pellet transfer system - Dust collector from both bagging lines

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P031 (Pellet Dust Collector)
Pellet transfer system - Dust collector from both bagging lines

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyamide Granulator Transfer System Equipped with a Wet Cyclonic Scrubber	OAC rule 3745-35-07(B)	Particulate emissions (PE) shall not exceed 0.62 ton per year from this emissions unit.
	OAC rule 3745-31-05(A)(3) [PTI # 06-2313]	Total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility. PE shall not exceed 0.1 pound per hour.
	OAC rule 3745-17-11(B)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	The requirements of this rule are less stringent than the requirements of OAC 3745-31-05(A)(3) above. Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

2. Additional Terms and Conditions

None

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

1. The current emission factor to be used in keeping the records required in Section C.2 is shown in Section E.1. The permittee shall update the emission factor by submitting new calculations to the Ohio EPA Southeast District Office whenever a modification is made, or new information becomes available which has an impact on the emission factor calculation. The permittee's calculation of the emission factor has been submitted to the Ohio EPA Southeast District Office in the FESOP application.
2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the total production or transfer rate, in pounds; and
 - b. the total PE, in tons, i.e., (total production or transfer rate) x (emission factor).

C. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain monthly records of the following information for the entire facility:
 - a. the total PE, in tons; and
 - b. the total, rolling 12-month PE, in tons.
4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet cyclonic scrubber serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions

D. Reporting Requirements

1. The permittee shall submit summaries of all the records required by Sections C.2 and C.3
The reports shall be submitted quarterly, i.e., by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the fabric filter serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emissions Limitation:
PE shall not exceed 0.1 pound per hour.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance by performing emission tests in accordance with USEPA test methods 1 - 5.
 - 1.b PE shall not exceed 0.62 ton per year from this emissions unit

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in section C.2, using the following emission factor: 2.004E-9 ton/pound of production or transfer rate. The annual PE shall be calculated by summing the monthly emission rates required by Section C.2 for the calendar year.
 - 1.c Emissions Limitations:
The total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:
Compliance shall be determined by the record keeping in Section C.3.

E. Testing Requirements (continued)

- 1.d Emissions Limitations:
Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:

Compliance with the visible PE limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate may be requested pursuant to OAC rule 3745-15-04(A).

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P032 (Pellet Dryer) Pellet dryer for underwater pelletizer

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P032 (Pellet Dryer)
Pellet dryer for underwater pelletizer

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyamide Pellet Dryer Equipped with a Fabric Filter	OAC rule 3745-35-07(B)	Particulate emissions (PE) shall not exceed 0.62 ton per year from this emissions unit.
	OAC rule 3745-31-05(A)(3) [PTI # 06-2313]	Total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility. PE shall not exceed 0.05 pound per hour and 0.22 ton per year.
	OAC rule 3745-17-11(B)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	The requirements of this rule are less stringent than the requirements of OAC 3745-31-05(A)(3) above. Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

2. Additional Terms and Conditions

None

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

- The current emission factor to be used in keeping the records required in Section C.2 is shown in Section E.1. The permittee shall update the emission factor by submitting new calculations to the Ohio EPA Southeast District Office whenever a modification is made, or new information becomes available which has an impact on the emission factor calculation. The permittee's calculation of the emission factor has been submitted to the Ohio EPA Southeast District Office in the FESOP application.
- The permittee shall maintain monthly records of the following information for this emissions unit:
 - the total production or transfer rate, in pounds; and
 - the total PE, in tons, i.e., (total production or transfer rate) x (emission factor).

C. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain monthly records of the following information for the entire facility:
 - a. the total PE, in tons; and
 - b. the total, rolling 12-month PE, in tons.
4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the fabric filter serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the visible emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit summaries of all the records required by Sections C.2 and C.3.

The reports shall be submitted quarterly, i.e., by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the fabric filter serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by February 15 and August 15 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emissions Limitation:
PE shall not exceed 0.05 pound per hour.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance by performing emission tests in accordance with USEPA test methods 1 - 5.
 - 1.b PE shall not exceed 0.22 ton per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in section C.2, using the following emission factor: 2.004E-9 ton/pound of production or transfer rate. The annual PE shall be calculated by summing the monthly emission rates required by Section C.2 for the calendar year.
 - 1.c Emissions Limitations:
The total particulate emissions shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:
Compliance shall be determined by the record keeping in Section C.3.

E. Testing Requirements (continued)

- 1.d Emissions Limitations:
Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:

Compliance with the visible PE limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P050 (Powerhouse Generator) Powerhouse generator

Arizona Chemical Co (06-79-01-0013)

Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P050 (Powerhouse Generator)
Powerhouse generator

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

1 Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Diesel Fuel Fired Standby Generator for Powerhouse	OAC rule 3745-35-07	See Additional Terms and Conditions in sections A.2.c - A.2.h.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.25 lb/mmBtu of actual heat input. See section A.1.2.a.
	OAC rule 3745-17-07(A)	PE shall not exceed 0.310 lb/MMBtu of actual heat input. See section A.1.2.b.
	OAC rule 3745-18-06(G)	Visible PE from the stack shall not exceed 20% opacity except as provided by rule. Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.

2. Additional Terms and Conditions

- 2.a The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This PE limitation shall be federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.c Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.d Emissions of sulfur dioxide (SO₂) shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.e Emissions of nitrogen oxides (NO_x) shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.f Emissions of carbon monoxide (CO) shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.g Emissions of volatile organic compounds (VOC) shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.h Emissions of hazardous air pollutants (HAPs) shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

B. Operational Restrictions

1. The quality of the oil burned in emissions units P050, P051 and P052 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following records for P050, P051 and P052, combined, during each calendar month:
 - a. the total diesel fuel usage;
 - b. the rolling twelve-month diesel fuel usage; and
 - c. the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

- 2.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

D. Reporting Requirements

1. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates for P050, P051 and P052, combined for each month of the previous calendar quarter:
2. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate from section C.2 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method:

E. Testing Requirements (continued)

1.a Emissions Limitations:

Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of SO₂ shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of NO_x shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of CO shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of VOC shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of HAP shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

Applicable Compliance Method:

The permittee shall use the emission factors from AP-42, Section 3.3 (10/96), and listed below, for calculating monthly emissions from P050, P051 and P052, combined. The emission calculation procedure consists of multiplying the appropriate emission factor (lb/MMBtu) times the fuel usage for the period (gallons/month), times the Btu content of the fuel (MMBtu/gallon).

PE: 0.31
SO₂: 0.29
NO_x: 4.41
CO: 0.95
VOC: 0.36
HAP: 0.005

1.b Emissions Limitations:

Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emission limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit, but may be requested pursuant to OAC rule 3745-15-04(A).

1.c Emissions Limitations:

Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P051 (Fire Pump Generator) Fire Pump Generator

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P051 (Fire Pump Generator)
Fire Pump Generator

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Diesel Fuel Fired Standby Generator for Fire Pumps	OAC rule 3745-35-07	See Additional Terms and Conditions in sections A.2.c - A.2.h. Particulate emissions (PE) shall not exceed 0.25 lb/mmBtu of actual heat input. See section A.1.2.a. PE shall not exceed 0.310 lb/MMBtu of actual heat input. See section A.1.2.b. Visible PE from the stack shall not exceed 20% opacity except as provided by rule. Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(a)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-18-06(G)	

2. Additional Terms and Conditions

- The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- This PE limitation shall be federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.
- Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined.
- Emissions of sulfur dioxide (SO₂) shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined.
- Emissions of nitrogen oxides (NO_x) shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- Emissions of carbon monoxide (CO) shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- Emissions of volatile organic compounds (VOC) shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined.
- Emissions of hazardous air pollutants (HAPs) shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

B. Operational Restrictions

- The quality of the oil burned in emissions units P050, P051 and P052 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following records for P050, P051 and P052, combined, during each calendar month:
 - a. the total diesel fuel usage;
 - b. the rolling twelve-month diesel fuel usage; and
 - c. the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

2.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

2.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

- 2.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

D. Reporting Requirements

1. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates for P050, P051 and P052, combined for each month of the previous calendar quarter:
2. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate from section C.2 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method:

E. Testing Requirements (continued)

1.a Emissions Limitations:

Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of SO₂ shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of NO_x shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of CO shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of VOC shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined.

Emissions of HAP shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

Applicable Compliance Method:

The permittee shall use the emission factors from AP-42, Section 3.3 (10/96), and listed below, for calculating monthly emissions from P050, P051 and P052, combined. The emission calculation procedure consists of multiplying the appropriate emission factor (lb/MMBtu) times the fuel usage for the period (gallons/month), times the Btu content of the fuel (MMBtu/gallon).

PE: 0.31
SO₂: 0.29
NO_x: 4.41
CO: 0.95
VOC: 0.36
HAP: 0.005

1.b Emissions Limitations:

Visible PE from the stack shall not exceed 20% opacity except as provided by rule

Applicable Compliance Method:

Compliance with the visible emission limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit, but may be requested pursuant to OAC rule 3745-15-04(A).

1.c Emissions Limitations:

Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P052 (Lift Pump Generator) Lift Pump Generator

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P052 (Lift Pump Generator)
Lift Pump Generator

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Diesel Fuel Fired Standby Generator for Sanitary Lift Pump	OAC rule 3745-35-07	<p>See Additional Terms and Conditions in sections A.2.c - A.2.h.</p> <p>Particulate emissions (PE) shall not exceed 0.25 lb/mmBtu of actual heat input. See section A.I.2.a.</p> <p>PE shall not exceed 0.310 lb/MMBtu of actual heat input. See section A.I.2.b.</p> <p>Visible PE from the stack shall not exceed 20% opacity except as provided by rule.</p> <p>Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.</p>
	OAC rule 3745-17-11(B)(5)(a)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-18-06(G)	

2. Additional Terms and Conditions

- 2.a The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This PE limitation shall be federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.c Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.d Emissions of sulfur dioxide (SO₂) shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.e Emissions of nitrogen oxides (NO_x) shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.f Emissions of carbon monoxide (CO) shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.g Emissions of volatile organic compounds (VOC) shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined.
- 2.h Emissions of hazardous air pollutants (HAPs) shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

B. Operational Restrictions

1. The quality of the oil burned in emissions units P050, P051 and P052 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following records for P050, P051 and P052, combined, during each calendar month:
 - a. the total diesel fuel usage;
 - b. the rolling twelve-month diesel fuel usage; and
 - c. the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

2.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

2.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

- 2.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

D. Reporting Requirements

1. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates for P050, P051 and P052, combined for each month of the previous calendar quarter:
2. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate from section C.2 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method:

E Testing Requirements (continued)

1.a Emissions Limitations:

Emissions of PE shall not exceed 1.2 tons per rolling 12-month period from P050, P051 and P052, combined
Emissions of SO₂ shall not exceed 1.1 tons per rolling 12-month period from P050, P051 and P052, combined
Emissions of NO_x shall not exceed 16.6 tons per rolling 12-month period from P050, P051 and P052, combined.
Emissions of CO shall not exceed 3.6 tons per rolling 12-month period from P050, P051 and P052, combined.
Emissions of VOC shall not exceed 1.4 tons per rolling 12-month period from P050, P051 and P052, combined
Emissions of HAP shall not exceed 0.02 tons per rolling 12-month period from P050, P051 and P052, combined.

Applicable Compliance Method:

The permittee shall use the emission factors from AP-42, Section 3.3 (10/96), and listed below, for calculating monthly emissions from P050, P051 and P052, combined. The emission calculation procedure consists of multiplying the appropriate emission factor (lb/MMBtu) times the fuel usage for the period (gallons/month), times the Btu content of the fuel (MMBtu/gallon).

PE: 0.31
SO₂: 0.29
NO_x: 4.41
CO: 0.95
VOC: 0.36
HAP: 0.005

1.b Emissions Limitations:

Visible PE from the stack shall not exceed 20% opacity except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emission limit of 20% opacity as a six-minute average shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit, but may be requested pursuant to OAC rule 3745-15-04(A).

1.c Emissions Limitations:

Emissions of sulfur dioxide shall not exceed 0.5 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P028 (Dimer Drum Filling) Dimer drum filling (with vent hood)

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P028 (Dimer Drum Filling)
Dimer drum filling (with vent hood)

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Dimer Drum Filling	OAC rule 3745-35-07	Emissions of total volatile organic compounds (VOC) from the entire facility shall not exceed 95.0 tons during any rolling 12-month period

2. Additional Terms and Conditions

- 2.a The dimer drum filling (P028) generates VOCs from drum and tank loading. Fugitive emissions also occur from valves, flanges, and pumps in associated tanks [T062 - T066] and piping. The process sends small amounts of VOC to the wastewater treatment plant which results in emissions at that location.

B. Operational Restrictions

None

Monitoring and/or Record Keeping Requirements

1. The current emission factor, emission constants, and identified key parameter to be used in keeping the records required in Section C.2 are shown in Section E.1. The permittee shall update the emission factor and emission constants by submitting new calculations to the Ohio EPA Southeast District Office whenever a modification is made, or new information becomes available which has an impact on the emission factor and emission constant calculations.
2. The permittee shall maintain monthly records of the following information:
 - a. The total amount of dimer loaded, in lbs.
 - b. The total amount of dimer loaded, in lbs., for the previous twelve-month period.
 - c. The VOC emissions, in tons, i.e., $[[a] \times [emission\ factor]] + [emission\ constant]$.
 - d. The rolling twelve-month VOC emissions, in tons, i.e., $[[b] \times [emission\ factor]] + [emission\ constant]$.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions, including all the emission constants, of each individual HAP, combined HAPs and VOC from the entire facility, in tons; and
 - b. the total, rolling 12-month emissions, including all the emission constants, of each individual HAP, combined HAPs and VOC from the entire facility, in tons.

D. Reporting Requirements

1. The permittee shall submit summaries of all records required by Sections C.2 and C.3.

The reports shall be submitted quarterly, i.e., by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.

D. Reporting Requirements (continued)

2. The permittee shall submit all calculations for the emission factor and emission constants to the Ohio EPA, Southeast District Office, by the effective date of this permit.

E. Testing Requirements

1. Compliance with the emission limitation in Section A. of these terms and conditions shall be determined based upon the record keeping requirements specified in sections C.2 and C.3 of these terms and conditions.

An emission factor has been developed by the permittee for this emissions unit based on physical laws, conservative emissions assumptions and established written procedures for each process. Emission constants (for tank breathing losses and leaks from valves, flanges and pumps) have been developed by the permittee based on physical laws, conservative emissions assumptions and leak testing. The dimer drum filling emission factor of 1.209 E-11 ton VOC per pound of dimer transferred and the associated emission constants of 0.5448 ton per month and 6.538 tons per year, as presented in the permittee's permit application, have been accepted by the Ohio EPA, Southeast District Office.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P043 (Reactor 3) Reactor 3

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P043 (Reactor 3)
Reactor 3

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7 Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Esters Plant Reactor 3	OAC rule 3745-35-07	See Sections A.2.b - A.2.g

2. Additional Terms and Conditions

The Esters Plant has four reactors (P043 - P046), two distillation columns (P047, P048), twenty process storage tanks (T033 - T052), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Cenwax Process has one reactor vessel (P049) and seven process storage tanks (T053 - T055, four exempt). The Esters Plant and Cenwax Process emit two regulated air pollutants: methanol and VOC. These emissions are generated from drum/tank truck loading and unloading activities, continuous breathing losses from process tanks, column venting, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Esters Plant and Cenwax Process sewer small amounts of methanol and VOC solvents to the WWTP which result in emissions of these regulated air pollutants at that location.

- Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

- For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.

C. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following for each product produced during the month of record:
 - a. the company identification for the product;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions of each individual HAP, combined HAPs and VOC from the entire facility; and
 - b. the total 12-month emissions of each individual HAP, combined HAPs and VOC from the entire facility

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Esters Plant and Cenwax Process and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Methanol (HAP)	VOC	Key Input
ESTERS			
A1	2.053 E-06	2.080 E-06	Methanol
B1	1.041 E-06	2.499 E-06	IPA
C1	NONE	3.327 E-06	IPA
D1	NONE	4.408 E-06	Butanol
E1	NONE	4.470 E-06	Isobutanol
F1	NONE	3.448 E-07	Capryl, 2E
G1	NONE	NONE	Glycols
CENWAX			
H1	1.828 E-06	1.828 E-06	Methanol
H1-1	4.151 E-06	4.151 E-06	Methanol
I1	NONE	NONE	NONE

The emission factor[s] for each product manufactured in the Esters Plant and the Cenwax Process include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: methanol (HAP) = 0.175 ton per month and 2.103 tons per year; and VOC = 0.287 ton per month and 3.447 tons per year.

F Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P044 (Reactor 4) Reactor 4

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P044 (Reactor 4)
Reactor 4

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1 Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2 Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3 Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Esters Plant Reactor 4	OAC rule 3745-35-07	See Sections A.2.b - A.2.g

2. Additional Terms and Conditions

- The Esters Plant has four reactors (P043 - P046), two distillation columns (P047, P048), twenty process storage tanks (T033 - T052), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Cenwax Process has one reactor vessel (P049) and seven process storage tanks (T053 - T055, four exempt). The Esters Plant and Cenwax Process emit two regulated air pollutants: methanol and VOC. These emissions are generated from drum/tank truck loading and unloading activities, continuous breathing losses from process tanks, column venting, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Esters Plant and Cenwax Process sewer small amounts of methanol and VOC solvents to the WWTP which result in emissions of these regulated air pollutants at that location.
- Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
- Except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

- For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.

C. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following for each product produced during the month of record:
 - a. the company identification for the product,
 - b. the number of pounds of key input material employed for the product,
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information
 - a. the total emissions of each individual HAP, combined HAPs and VOC from the entire facility; and
 - b. the total 12-month emissions of each individual HAP, combined HAPs and VOC from the entire facility

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Esters Plant and Cenwax Process and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Methanol (HAP)	VOC	Key Input
ESTERS			
A1	2.053 E-06	2.080 E-06	Methanol
B1	1.041 E-06	2.499 E-06	IPA
C1	NONE	3.327 E-06	IPA
D1	NONE	4.408 E-06	Butanol
E1	NONE	4.470 E-06	Isobutanol
F1	NONE	3.448 E-07	Capryl, 2E
G1	NONE	NONE	Glycols
CENWAX			
H1	1.828 E-06	1.828 E-06	Methanol
H1-1	4.151 E-06	4.151 E-06	Methanol
I1	NONE	NONE	NONE

The emission factor[s] for each product manufactured in the Esters Plant and the Cenwax Process include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: methanol (HAP) = 0.175 ton per month and 2.103 tons per year; and VOC = 0.287 ton per month and 3.447 tons per year.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P045 (Reactor 7) Reactor 7

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013

Arizona Chemical Co

875 Harger Street

Dover, OH 44622

of a permit to operate for:

P045 (Reactor 7)

Reactor 7

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office

2195 Front Street

Logan, OH 43138

(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones

Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Esters Plant Reactor 7	OAC rule 3745-35-07	See Sections A.2.b - A.2.g

2. Additional Terms and Conditions

- 2.a The Esters Plant has four reactors (P043 - P046), two distillation columns (P047, P048), twenty process storage tanks (T033 - T052), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Cenwax Process has one reactor vessel (P049) and seven process storage tanks (T053 - T055, four exempt). The Esters Plant and Cenwax Process emit two regulated air pollutants: methanol and VOC. These emissions are generated from drum/tank truck loading and unloading activities, continuous breathing losses from process tanks, column venting, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Esters Plant and Cenwax Process sewer small amounts of methanol and VOC solvents to the WWTP which result in emissions of these regulated air pollutants at that location.
- 2.b Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- 2.c Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- 2.d Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- 2.e Emissions of individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- 2.f Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

1. For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.

C. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following for each product produced during the month of record:
 - a. the company identification for the product;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions of each individual HAP, combined HAPs and VOC from the entire facility; and
 - b. the total 12-month emissions of each individual HAP, combined HAPs and VOC from the entire facility.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Esters Plant and Cenwax Process and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations

Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Methanol (HAP)	VOC	Key Input
ESTERS			
A1	2.053 E-06	2.080 E-06	Methanol
B1	1.041 E-06	2.499 E-06	IPA
C1	NONE	3.327 E-06	IPA
D1	NONE	4.408 E-06	Butanol
E1	NONE	4.470 E-06	Isobutanol
F1	NONE	3.448 E-07	Capryl, 2E
G1	NONE	NONE	Glycols
CENWAX			
H1	1.828 E-06	1.828 E-06	Methanol
H1-1	4.151 E-06	4.151 E-06	Methanol
I1	NONE	NONE	NONE

The emission factor[s] for each product manufactured in the Esters Plant and the Cenwax Process include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: methanol (HAP) = 0.175 ton per month and 2.103 tons per year; and VOC = 0.287 ton per month and 3.447 tons per year.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P046 (Reactor 8) Reactor 8

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P046 (Reactor 8)
Reactor 8

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", written over a horizontal line.

Christopher Jones
Director

Part I: General Terms and Conditions

Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Esters Plant Reactor 8	OAC rule 3745-35-07	See Sections A.2.b - A.2.g

2. Additional Terms and Conditions

- The Esters Plant has four reactors (P043 - P046), two distillation columns (P047, P048), twenty process storage tanks (T033 - T052), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Cenwax Process has one reactor vessel (P049) and seven process storage tanks (T053 - T055, four exempt). The Esters Plant and Cenwax Process emit two regulated air pollutants: methanol and VOC. These emissions are generated from drum/tank truck loading and unloading activities, continuous breathing losses from process tanks, column venting, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Esters Plant and Cenwax Process sewer small amounts of methanol and VOC solvents to the WWTP which result in emissions of these regulated air pollutants at that location.
- Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- Emissions of individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.
- Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
- Except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit.

B. Operational Restrictions

None

C. Monitoring and/or Record Keeping Requirements

- For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.

C. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following for each product produced during the month of record:
 - a. the company identification for the product;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions of each individual HAP, combined HAPs and VOC from the entire facility; and
 - b. the total 12-month emissions of each individual HAP, combined HAPs and VOC from the entire facility

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Esters Plant and Cenwax Process and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations

Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Methanol (HAP)	VOC	Key Input
ESTERS			
A1	2.053 E-06	2.080 E-06	Methanol
B1	1.041 E-06	2.499 E-06	IPA
C1	NONE	3.327 E-06	IPA
D1	NONE	4.408 E-06	Butanol
E1	NONE	4.470 E-06	Isobutanol
F1	NONE	3.448 E-07	Capryl, 2E
G1	NONE	NONE	Glycols
CENWAX			
H1	1.828 E-06	1.828 E-06	Methanol
H1-1	4.151 E-06	4.151 E-06	Methanol
	NONE	NONE	NONE

The emission factor[s] for each product manufactured in the Esters Plant and the Cenwax Process include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: methanol (HAP) = 0.175 ton per month and 2.103 tons per year; and VOC = 0.287 ton per month and 3.447 tons per year.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

P049 (Cenwax Process) Cenwax Process

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

P049 (Cenwax Process)
Cenwax Process

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Cenwax Process	OAC rule 3745-35-07	See Sections A.2.b - A.2.g

2. Additional Terms and Conditions

- 2.a The Esters Plant has four reactors (P043 - P046), two distillation columns (P047, P048), twenty process storage tanks (T033 - T052), an unloading station (for tanks trucks), and a loading station (for drums and tank trucks). The Cenwax Process has one reactor vessel (P049) and seven process storage tanks (T053 - T055, four exempt). The Esters Plant and Cenwax Process emit two regulated air pollutants: methanol and VOC. These emissions are generated from drum/tank truck loading and unloading activities, continuous breathing losses from process tanks, column venting, and material transfer activities. Minuscule fugitive emissions occur from valves, flanges, and pumps. The Esters Plant and Cenwax Process sewer small amounts of methanol and VOC solvents to the WWTP which result in emissions of these regulated air pollutants at that location.
- 2.b Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.
- 2.c Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.
- 2.f Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.
- 2.g Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.
- 2.h Except for the minor fugitive emissions that may occur from valves, flanges and pumps, there shall be no VOC, OC and HAP emissions from the reactor vents or during the transfer of materials into or from this emissions unit.

B Operational Restrictions

None

C Monitoring and/or Record Keeping Requirements

- For each product generated in this emissions unit, the permittee shall develop an accurate emission factor for the emissions of each individual HAP and the total amount of VOC emitted from the manufacture of that product. The emission factors shall be in units of tons of pollutant emitted per pound of key input material used for each product generated. The permittee's calculation of each emission factor shall be submitted to the Ohio EPA Southeast District Office prior to the use of the emission factor in calculating emissions for this facility.

C. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following for each product produced during the month of record:
 - a. the company identification for the product;
 - b. the number of pounds of key input material employed for the product;
 - c. the individual HAP emission factor for the product, in tons of pollutant emitted per pound of key input material;
 - d. the individual HAP emission rate for each product, in tons (b x c);
 - e. the VOC emission factor for the product, in tons of pollutant emitted per pound of key input material employed;
 - f. the VOC emission rate for each product, in tons (b x e);
 - g. the total emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, in tons; and
 - h. the total, rolling 12-month emissions, including the emission constants [see E.1], of each individual HAP, combined HAPs and VOC for all Esters Plant and Cenwax Process products, for the previous twelve-month period, in tons.
3. The permittee shall maintain monthly records of the following information:
 - a. the total emissions of each individual HAP, combined HAPs and VOC from the entire facility; and
 - b. the total 12-month emissions of each individual HAP, combined HAPs and VOC from the entire facility

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable rolling 12-month individual HAP, combined HAPs and/or VOC emission limitations for either the Esters Plant and Cenwax Process and/or the entire facility, based upon the calculated emission rates from Sections C.2 and C.3 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit an annual summary of the emissions data required by Sections C.2 and C.3 by February 15 of each year.

E. Testing Requirements

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

Emissions Limitations:

Emissions of each individual hazardous air pollutant (HAP) shall not exceed 9.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total combined HAPs shall not exceed 19.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of total VOC shall not exceed 35.0 tons during any rolling 12-month period from the Esters Plant and Cenwax Process.

Emissions of any individual HAP shall not exceed 9.0 tons during any rolling 12-month period from the entire facility.

Emissions of total combined HAPs shall not exceed 24.0 tons during any rolling 12-month period from the entire facility.

Emissions of total VOC shall not exceed 95.0 tons during any rolling 12-month period from the entire facility.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections C.2 and C.3, using the following currently approved emission factors and key input materials for the specified products:

Product	Methanol (HAP)	VOC	Key Input
ESTERS			
A1	2.053 E-06	2.080 E-06	Methanol
B1	1.041 E-06	2.499 E-06	IPA
C1	NONE	3.327 E-06	IPA
D1	NONE	4.408 E-06	Butanol
E1	NONE	4.470 E-06	Isobutanol
F1	NONE	3.448 E-07	Capryl, 2E
G1	NONE	NONE	Glycols
CENWAX			
H1	1.828 E-06	1.828 E-06	Methanol
H1-1	4.151 E-06	4.151 E-06	Methanol
I1	NONE	NONE	NONE

The emission factor[s] for each product manufactured in the Esters Plant and the Cenwax Process include[s] all the emissions that would occur from the emissions units and other operations and sources identified in paragraph A.2.a.

The emission constants for tank breathing losses and leaks from valves, flanges and pumps are as follows: methanol (HAP) = 0.175 ton per month and 2.103 tons per year; and VOC = 0.287 ton per month and 3.447 tons per year.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all of these terms and conditions are federally enforceable. The applicant has requested that such restrictions, as specified in OAC rule 3745-35-07(C), be imposed in order to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

TELE: (614) 644-3020 FAX: (614) 644-2329

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

**B010 (Boiler No. 9) Natural Gas Fired Boiler with
by-product and fuel oil firing capability**

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

B010 (Boiler No. 9)
Natural Gas Fired Boiler with by-product and fuel oil firing capability

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1 Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
76 million Btu/hr, natural gas/organic byproduct/number two fuel oil fired boiler (boiler # 9)	OAC rule 3745-35-07	See Additional Terms and Conditions in Section A.2.
	OAC rule 3745-17-10 (C)(2)	Particulate emissions (PE) from the boiler's exhaust shall not exceed 0.25 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.
	OAC rule 3745-18-85 (C)	Emissions of sulfur dioxide (SO ₂) from the boiler's exhaust shall not exceed 7.9 pounds per million Btu actual heat input.
	OAC rule 3745-17-10 (B)(1)	PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil is (are) burned.
	OAC rule 3745-17-07 (A)	Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

- 2.a The emissions units that comprise the category of "fuel burning equipment" at this facility are B002, B005, B006, B010, B011, B012, B015, B019, B020, B022, and B025.

Potential emissions of particulates, sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and organic compounds (OC) from each of B002, B005, B006, B015, B019, and B022 are less than 10 lbs/day based on the maximum rated natural gas usage for each emissions unit and the emission factors for particulates, SO₂, NO_x, CO, and OC for natural gas combustion in AP-42, 5th Edition (7/98) tables 1.4-1, 1.4-2, and 1.4-3. Therefore, these emissions units are exempt from the requirements of OAC Chapter 3745-35 based on the "de minimis" exemption in OAC rule 3745-15-05. Particulate, SO₂, NO_x, CO, volatile organic compound (VOC), and hazardous air pollutant (HAP) emissions from these emissions units are included with the emissions from B010, B011 and B020 for the purpose of determining compliance with the emission limits listed in this permit.

- 2.b PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.c Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.d Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

2. Additional Terms and Conditions (continued)

- 2.e Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.f Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.g Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

B. Operational Restrictions

- 1. The quality of the oil burned in emissions units B010, B011 and B020 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.
- 2. The quality of the organic byproduct burned in emissions units B010, B011 and B020 shall have a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain the following records of the natural gas usage, in million cubic feet burned, during each calendar month:
 - a. total natural gas usage for all fuel burning equipment at the facility;
 - b. total natural gas usage in the boiler with a rated heat input capacity equal to or greater than 100 million Btu/hr; and
 - c. total natural gas usage in all the boilers with rated heat input capacities less than 100 million Btu/hr (the permittee shall calculate the natural gas usage for these boilers by subtracting the natural gas usage for the boiler with a rated heat input capacity greater than 100 million Btu/hr from the total facility natural gas usage i.e., 1.a - 1.b).
- 2. The permittee shall maintain records of the total gallons of number two fuel oil burned in emissions units B010 B011 and B020 during each calendar month.
- 3. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- 3.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

3.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

- 3.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

C. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall maintain records of the total gallons of organic byproduct burned in emissions units B010, B011 and B020 during each calendar month.
5. The permittee shall collect a representative grab sample for each batch of organic byproduct that is burned in this emissions unit. The permittee shall have each sample analyzed for density, heat content, ash content and sulfur content in accordance with the following ASTM methods: ASTM method D240 for heat content, ASTM method D482 for ash content and ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA Southeast District Office.

The permittee shall determine emission factors (lbs pollutant/thousand gallons organic byproduct burned) for particulates and SO₂ for the organic byproduct burned each calendar month by calculating the weighted, arithmetic average of the analytical results for each batch of organic byproduct burned during the calendar month. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). It shall be assumed that all ash is emitted as particulates and all sulfur is converted to SO₂.

The permittee shall maintain records of the monthly organic byproduct ash and sulfur content determinations and emission factor calculations for particulates and SO₂.

6. Organic byproducts are typically materials that meet no product specification and cannot be processed to meet any specification. Off-spec materials are typically reprocessed to meet specifications. No byproducts are PCB-containing materials or hazardous wastes, and they are not generated off site. The by-products are burned in emissions units B010, B011 and B020 and generally consist of the following:
 - a. fatty organics (low ash, low sulfur, good-heating-value by-products of dimer and fatty acid operations);
 - b. esters (low ash, low sulfur, good-heating-value by-products of esterification operations);
 - c. alcohols (low ash, low sulfur, moderate-heating-value by-products of sebacic acid operations [with 8 or more carbon atoms and flash points well above 140 degrees F], plus contaminated long chain alcohols originally purchased for esterification operations); and
 - d. polyamides (low ash, low sulfur, good-heating-value by-products of polyamide operations that do not contain any solvents and are of sufficiently low viscosity to be fired in the atomization burners).

The physical characteristics and fuel quality of the byproducts are similar to number two fuel oil. The byproducts contain no organic nitrogen and no HAPs. Therefore, emission factors for NO_x, CO, VOC and total HAPs are deemed to be the same as the AP-42 emission factors for number two fuel oil combustion for these pollutants.

7. The permittee shall maintain records of the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility, calculated in accordance with Section E.2.e of this permit.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Sections C.3 and C.5 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
2. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the following information for each month of the previous calendar quarter:
 - a. the monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility;
 - b. the 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility; and
 - c. a summary of the monthly organic byproduct emission factors for particulates, SO₂, NO_x, CO, and VOC

E. Testing Requirements

1. The permittee shall use the following emission factors for calculating monthly emissions from all fuel burning equipment:

a. NATURAL GAS COMBUSTION

- (i) 1.9 lbs particulates/million cubic feet burned*
- (ii) 0.6 lb SO₂/million cubic feet burned*
- (iii) 100 lbs NO_x/million cubic feet burned**
- (iv) 84 lbs CO/million cubic feet burned**
- (v) 5.5 lbs VOC/million cubic feet burned*
- (vi) 1.89 lbs HAPs/million cubic feet burned***

* AP-42, Table 1.4-2 (7/98)

** AP-42, Table 1.4-1 (7/98), except NO_x from B011 which is based on the low NO_x burner manufacturer's guaranteed maximum emission rate

*** AP-42, Table 1.4-3 and Table 1.4-4 (7/98)

b. NUMBER TWO FUEL OIL COMBUSTION (B010, B011, B020 only)

- (i) 2 lbs particulates/thousand gallons burned*
- (ii) 157S lbs SO₂/thousand gallons burned (emission factor for B011 only)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iii) 142S lbs SO₂/thousand gallons burned (emission factor for all boilers except B011)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iv) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (v) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (vi) 5 lbs CO/thousand gallons burned*
- (vii) 0.252 lb VOC/thousand gallons burned**
- (viii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, Table 1.3-1 (9/98)

** AP-42, Table 1.3-3 (9/98)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

c. ORGANIC BYPRODUCT COMBUSTION (B010, B01 B020 only)

- (i) The particulate emission factor shall be based on sampling pursuant to Section C.5 of this permit.
- (ii) The SO₂ emission factor shall be based on sampling pursuant to Section C.5 of this permit.
- (iii) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (iv) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (v) 5 lbs CO/thousand gallons burned*
- (vi) 0.252 lb VOC/thousand gallons burned**
- (vii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, table 1.3-1 (9/98) for fuel oil combustion (See section E.6.)

** AP-42, table 1.3-3 (9/98) for fuel oil combustion (See section E.6.)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

2. Compliance with the emission limitation(s) in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method(s):

E. Testing Requirements (continued)

2.a Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.25 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.

Applicable Compliance Method:

Compliance with the emission limitation of 0.25 pound of PE from the boiler's exhaust per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil may be demonstrated as follows:

Divide each emission factor for particulates from section C.5 by the heat content from section C.5, as follows:

$$\frac{(\text{lbs particulate}/1,000 \text{ gallons of organic byproduct burned}) \times (\text{thousand gallons}/\text{million Btu})}{\text{particulates}/\text{million Btu}} = \text{lb}$$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2.b Emissions Limitations:

Emissions of sulfur dioxide (SO₂) from the boiler's exhaust shall not exceed 7.9 pounds per million Btu actual heat input.

Applicable Compliance Method:

Compliance with the emission limitation of 7.9 pounds SO₂ from the boiler's exhaust per million Btu actual heat input shall be demonstrated based on the results of the analyses of each batch of organic byproduct, as specified in section C of this permit. When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation. Compliance with the SO₂ emission limit is assumed when burning natural gas due to the negligible percent sulfur, by weight, contained in natural gas.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2.c Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil are burned.

Applicable Compliance Method:

Compliance with the emission limitation of 0.020 pound PE per million Btu actual heat input when only natural gas and/or number two fuel oil are burned may be demonstrated as follows:

$$\frac{(2 \text{ lbs particulates}/1,000 \text{ gallons of number two fuel oil burned}) \times (\text{thousand gallons}/133 \text{ million Btu})}{\text{particulates}/\text{million Btu}} = 0.015 \text{ lb}$$

or

$$\frac{(1.9 \text{ lbs particulates}/\text{million cubic feet natural gas burned}) \times (1000 \text{ Btu}/\text{cubic foot})}{\text{particulates}/\text{million Btu}} = 0.0019 \text{ lb}$$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

E. Testing Requirements (continued)

2.d Emissions Limitations:

Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit, but may be requested pursuant to OAC rule 3745-15-04 (A).

2.e Emissions Limitations:

PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

Applicable Compliance Method:

The monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility shall be calculated as follows:

i. Multiply the natural gas usage by the appropriate emission factors listed in Section E.1.a of this permit.

ii. Multiply the number two fuel oil usage by the appropriate emission factors listed in Section E.1.b of this permit.

iii. Multiply the organic byproduct usage by the appropriate emission factors listed in Section E.1.c of this permit.

iv. Calculate the monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility as the sum of E.2.e.i, E.2.e.ii, and E.2.e.iii above.

The 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility shall be calculated as the sum of the monthly emissions for the current calendar month and the monthly emissions for the previous 11 calendar months.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address: _____

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL
RE: Final Chapter 3745-35 Permit To Operate

B011 (Boiler No. 11) Natural Gas Fired Boiler with
by-product and fuel oil firing capability

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

B011 (Boiler No. 11)

Natural Gas Fired Boiler with by-product and fuel oil firing capability

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
123 million Btu/hr, natural gas/organic byproduct/number two fuel oil fired boiler (boiler # 11)	OAC rule 3745-35-07	See Additional Terms and Conditions in Section A.2.
	OAC rule 3745-17-10 (C)(2)	Particulate emissions (PE) from the boiler's exhaust shall not exceed 0.25 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.
	OAC rule 3745-18-85 (C)	Emissions of sulfur dioxide (SO ₂) from the boiler's exhaust shall not exceed 7.9 pounds per million Btu actual heat input.
	OAC rule 3745-17-10 (B)(1)	PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil is (are) burned.
	OAC rule 3745-17-07 (A)	Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

2.a The emissions units that comprise the category of "fuel burning equipment" at this facility are B002, B005, B006, B010, B011, B012, B015, B019, B020, B022, and B025.

Potential emissions of particulates, sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and organic compounds (OC) from each of B002, B005, B006, B015, B019, and B022 are less than 10 lbs/day based on the maximum rated natural gas usage for each emissions unit and the emission factors for particulates, SO₂, NO_x, CO, and OC for natural gas combustion in AP-42, 5th Edition (7/98) tables 1.4-1, 1.4-2, and 1.4-3. Therefore, these emissions units are exempt from the requirements of OAC Chapter 3745-35 based on the "de minimis" exemption in OAC rule 3745-15-05. Particulate, SO₂, NO_x, CO, volatile organic compound (VOC), and hazardous air pollutant (HAP) emissions from these emissions units are included with the emissions from B010, B011 and B020 for the purpose of determining compliance with the emission limits listed in this permit.

2.b PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

2.c Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

2. Additional Terms and Conditions (continued)

- 2.d** Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.e** Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.f** Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.
- 2.g** Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

B. Operational Restrictions

- 1. The quality of the oil burned in emissions units B010, B011 and B020 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.
- 2. The quality of the organic byproduct burned in emissions units B010, B011 and B020 shall have a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain the following records of the natural gas usage, in million cubic feet burned, during each calendar month:
 - a. total natural gas usage for all fuel burning equipment at the facility;
 - b. total natural gas usage in the boiler with a rated heat input capacity equal to or greater than 100 million Btu/hr; and
 - c. total natural gas usage in all the boilers with rated heat input capacities less than 100 million Btu/hr (the permittee shall calculate the natural gas usage for these boilers by subtracting the natural gas usage for the boiler with a rated heat input capacity greater than 100 million Btu/hr from the total facility natural gas usage, i.e., 1.a - 1.b).
- 2. The permittee shall maintain records of the total gallons of number two fuel oil burned in emissions units B010, B011 and B020 during each calendar month.
- 3. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

3.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

3.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

C. Monitoring and/or Record Keeping Requirements (continued)

- 3.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
4. The permittee shall maintain records of the total gallons of organic byproduct burned in emissions units B010, B011 and B020 during each calendar month.
5. The permittee shall collect a representative grab sample for each batch of organic byproduct that is burned in this emissions unit. The permittee shall have each sample analyzed for density, heat content, ash content and sulfur content in accordance with the following ASTM methods: ASTM method D240 for heat content, ASTM method D482 for ash content and ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA Southeast District Office.

The permittee shall determine emission factors (lbs pollutant/thousand gallons organic byproduct burned) for particulates and SO₂ for the organic byproduct burned each calendar month by calculating the weighted, arithmetic average of the analytical results for each batch of organic byproduct burned during the calendar month. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). It shall be assumed that all ash is emitted as particulates and all sulfur is converted to SO₂.

The permittee shall maintain records of the monthly organic byproduct ash and sulfur content determinations and emission factor calculations for particulates and SO₂.

6. Organic byproducts are typically materials that meet no product specification and cannot be processed to meet any specification. Off-spec materials are typically reprocessed to meet specifications. No byproducts are PCB-containing materials or hazardous wastes, and they are not generated off site. The by-products are burned in emissions units B010, B011 and B020 and generally consist of the following:
- a. fatty organics (low ash, low sulfur, good-heating-value by-products of dimer and fatty acid operations);
 - b. esters (low ash, low sulfur, good-heating-value by-products of esterification operations);
 - c. alcohols (low ash, low sulfur, moderate-heating-value by-products of sebacic acid operations [with 8 or more carbon atoms and flash points well above 140 degrees F], plus contaminated long chain alcohols originally purchased for esterification operations); and
 - d. polyamides (low ash, low sulfur, good-heating-value by-products of polyamide operations that do not contain any solvents and are of sufficiently low viscosity to be fired in the atomization burners).

The physical characteristics and fuel quality of the byproducts are similar to number two fuel oil. The byproducts contain no organic nitrogen and no HAPs. Therefore, emission factors for NO_x, CO, VOC and total HAPs are deemed to be the same as the AP-42 emission factors for number two fuel oil combustion for these pollutants.

7. The permittee shall maintain records of the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility, calculated in accordance with Section E.2.e of this permit.

D. Reporting Requirements

1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Sections C.3 and C.5 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.

D. Reporting Requirements (continued)

2. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the following information for each month of the previous calendar quarter:
 - a. the monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility;
 - b. the 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility; and
 - c. a summary of the monthly organic byproduct emission factors for particulates, SO₂, NO_x, CO, and VOC.

E. Testing Requirements

1. The permittee shall use the following emission factors for calculating monthly emissions from all fuel burning equipment:

a. NATURAL GAS COMBUSTION

- (i) 1.9 lbs particulates/million cubic feet burned*
- (ii) 0.6 lb SO₂/million cubic feet burned*
- (iii) 100 lbs NO_x/million cubic feet burned**
- (iv) 84 lbs CO/million cubic feet burned**
- (v) 5.5 lbs VOC/million cubic feet burned*
- (vi) 1.89 lbs HAPs/million cubic feet burned***

* AP-42, Table 1.4-2 (7/98)

** AP-42, Table 1.4-1 (7/98), except NO_x from B011 which is based on the low NO_x burner manufacturer's guaranteed maximum emission rate

*** AP-42, Table 1.4-3 and Table 1.4-4 (7/98)

b. NUMBER TWO FUEL OIL COMBUSTION (B010, B011, B020 only)

- (i) 2 lbs particulates/thousand gallons burned*
- (ii) 157S lbs SO₂/thousand gallons burned (emission factor for B011 only)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iii) 142S lbs SO₂/thousand gallons burned (emission factor for all boilers except B011)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iv) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (v) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (vi) 5 lbs CO/thousand gallons burned*
- (vii) 0.252 lb VOC/thousand gallons burned**
- (viii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, Table 1.3-1 (9/98)

** AP-42, Table 1.3-3 (9/98)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

E. Testing Requirements (continued)

c. ORGANIC BYPRODUCT COMBUSTION (B010, B011, B020 only)

- (i) The particulate emission factor shall be based on sampling pursuant to Section C.5 of this permit.
- (ii) The SO₂ emission factor shall be based on sampling pursuant to Section C.5 of this permit.
- (iii) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (iv) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (v) 5 lbs CO/thousand gallons burned*
- (vi) 0.252 lb VOC/thousand gallons burned**
- (vii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, table 1.3-1 (9/98) for fuel oil combustion (See section E.6.)

** AP-42, table 1.3-3 (9/98) for fuel oil combustion (See section E.6.)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

2. Compliance with the emission limitation(s) in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method(s):

Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.25 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.

Applicable Compliance Method:

Compliance with the emission limitation of 0.25 pound of PE from the boiler's exhaust per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil may be demonstrated as follows:

Divide each emission factor for particulates from section C.5 by the heat content from section C.5, as follows:

$(\text{lbs particulate}/1,000 \text{ gallons of organic byproduct burned}) \times (\text{thousand gallons}/\text{million Btu}) = \text{lb particulates}/\text{million Btu}$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

Emissions Limitations:

Emissions of sulfur dioxide (SO₂) from the boiler's exhaust shall not exceed 7.9 pounds per million Btu actual heat input.

Applicable Compliance Method:

Compliance with the emission limitation of 7.9 pounds SO₂ from the boiler's exhaust per million Btu actual heat input shall be demonstrated based on the results of the analyses of each batch of organic byproduct, as specified in section C of this permit. When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation. Compliance with the SO₂ emission limit is assumed when burning natural gas due to the negligible percent sulfur, by weight, contained in natural gas.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

E. Testing Requirements (continued)

2.c Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil are burned.

Applicable Compliance Method:

Compliance with the emission limitation of 0.020 pound PE per million Btu actual heat input when only natural gas and/or number two fuel oil are burned may be demonstrated as follows:

$(2 \text{ lbs particulates}/1,000 \text{ gallons of number two fuel oil burned}) \times (\text{thousand gallons}/133 \text{ million Btu}) = 0.015 \text{ lb particulates}/\text{million Btu}$

or

$(1.9 \text{ lbs particulates}/\text{million cubic feet natural gas burned}) \times (1000 \text{ Btu}/\text{cubic foot}) = 0.0019 \text{ lb particulates}/\text{million Btu}$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2.d Emissions Limitations:

Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit, but may be requested pursuant to OAC rule 3745-15-04 (A).

2.e Emissions Limitations:

PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

Applicable Compliance Method:

The monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility shall be calculated as follows:

i. Multiply the natural gas usage by the appropriate emission factors listed in Section E.1.a of this permit.

ii. Multiply the number two fuel oil usage by the appropriate emission factors listed in Section E.1.b of this permit.

iii. Multiply the organic byproduct usage by the appropriate emission factors listed in Section E.1.c of this permit.

iv. Calculate the monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility as the sum of E.2.e.i, E.2.e.ii, and E.2.e.iii above.

The 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility shall be calculated as the sum of the monthly emissions for the current calendar month and the monthly emissions for the previous 11 calendar months.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/23/04

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

**B020 (Zurn Boiler) Natural Gas Fired Boiler with
by-product and fuel oil firing capability**

Arizona Chemical Co (06-79-01-0013)
Richard L. Baker
875 Harger Street
Dover, OH 44622

Dear Richard L. Baker:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 03/23/04

Expiration Date: 03/23/09

This document constitutes issuance to:

Facility ID: 06-79-01-0013
Arizona Chemical Co
875 Harger Street
Dover, OH 44622

of a permit to operate for:

B020 (Zurn Boiler)
Natural Gas Fired Boiler with by-product and fuel oil firing capability

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

This permit is granted subject to the conditions attached hereto.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

Part I: General Terms and Conditions

1 Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

Southeast District Office
2195 Front Street
Logan, OH 43138
(740) 385-8501

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
90 million Btu/hr, natural gas/organic byproduct fired boiler (boiler # 20)	OAC rule 3745-35-07	See Additional Terms and Conditions in Section A.2.
	OAC rule 3745-17-10 (C)(2)	Particulate emissions (PE) from the boiler's exhaust shall not exceed 0.11 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.
	OAC rule 3745-31-05(A)(3) PTI # 06-1300	Emissions of sulfur dioxide (SO ₂) from the boiler's exhaust shall not exceed 1.1 pounds per million Btu actual heat input.
	OAC rule 3745-17-10 (B)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(C)(2), OAC rule 3745-17-10(B)(1), OAC rule 3745-17-07(A) and OAC rule 3745-18-06. PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil is (are) burned.
	OAC rule 3745-17-07 (A)	Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

The emissions units that comprise the category of "fuel burning equipment" at this facility are B002, B005, B006, B010, B011, B012, B015, B019, B020, B022, and B025.

Potential emissions of particulates, sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and organic compounds (OC) from each of B002, B005, B006, B015, B019, and B022 are less than 10 lbs/day based on the maximum rated natural gas usage for each emissions unit and the emission factors for particulates, SO₂, NO_x, CO, and OC for natural gas combustion in AP-42, 5th Edition (7/98) tables 1.4-1, 1.4-2, and 1.4-3. Therefore, these emissions units are exempt from the requirements of OAC Chapter 3745-35 based on the "de minimis" exemption in OAC rule 3745-15-05. Particulate, SO₂, NO_x, CO, volatile organic compound (VOC), and hazardous air pollutant (HAP) emissions from these emissions units are included with the emissions from B010, B011 and B020 for the purpose of determining compliance with the emission limits listed in this permit.

- 2.b** PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

- 2.f** Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

- 2.g** Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

B. Operational Restrictions

1. The quality of the oil burned in emissions units B010, B011 and B020 shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.
2. The quality of the organic byproduct burned in emissions units B010, B011 and B020 shall have a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in Section A.1 above.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following records of the natural gas usage, in million cubic feet burned, during each calendar month:
 - a. total natural gas usage for all fuel burning equipment at the facility;
 - b. total natural gas usage in the boiler with a rated heat input capacity equal to or greater than 100 million Btu/hr; and
 - c. total natural gas usage in the boilers with rated heat input capacities less than 100 million Btu/hr (the permittee shall calculate the natural gas usage for these boilers by subtracting the natural gas usage for the boiler with a rated heat input capacity greater than 100 million Btu/hr from the total facility natural gas usage, i.e., 1.a - 1.b).
2. The permittee shall maintain records of the total gallons of number two fuel oil burned in emissions units B010, B011 and B020 during each calendar month.
3. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

C. Monitoring and/or Record Keeping Requirements (continued)

3.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

3.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

3.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

4. The permittee shall maintain records of the total gallons of organic byproduct burned in emissions units B010, B011 and B020 during each calendar month.

5. The permittee shall collect a representative grab sample for each batch of organic byproduct that is burned in this emissions unit. The permittee shall have each sample analyzed for density, heat content, ash content and sulfur content in accordance with the following ASTM methods: ASTM method D240 for heat content, ASTM method D482 for ash content and ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA Southeast District Office.

The permittee shall determine emission factors (lbs pollutant/thousand gallons organic byproduct burned) for particulates and SO₂ for the organic byproduct burned each calendar month by calculating the weighted, arithmetic average of the analytical results for each batch of organic byproduct burned during the calendar month. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). It shall be assumed that all ash is emitted as particulates and all sulfur is converted to SO₂.

The permittee shall maintain records of the monthly organic byproduct ash and sulfur content determinations and the emission factor calculations for particulates and SO₂.

C. Monitoring and/or Record Keeping Requirements (continued)

6. Organic byproducts are typically materials that meet no product specification and cannot be processed to meet any specification. Off-spec materials are typically reprocessed to meet specifications. No byproducts are PCB-containing materials or hazardous wastes, and they are not generated off site. The by-products are burned in emissions units B010, B011 and B020 and generally consist of the following:
- a. fatty organics (low ash, low sulfur, good-heating-value by-products of dimer and fatty acid operations);
 - b. esters (low ash, low sulfur, good-heating-value by-products of esterification operations);
 - c. alcohols (low ash, low sulfur, moderate-heating-value by-products of sebacic acid operations [with 8 or more carbon atoms and flash points well above 140 degrees F], plus contaminated long chain alcohols originally purchased for esterification operations); and
 - d. polyamides (low ash, low sulfur, good-heating-value by-products of polyamide operations that do not contain any solvents and are of sufficiently low viscosity to be fired in the atomization burners).

The physical characteristics and fuel quality of the byproducts are similar to number two fuel oil. The byproducts contain no organic nitrogen and no HAPs. Therefore, emission factors for NO_x, CO, VOC and total HAPs are deemed to be the same as the AP-42 emission factors for number two fuel oil combustion for these pollutants.

- 7 The permittee shall maintain records of the monthly and rolling 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility, calculated in accordance with Section E.2.e of this permit.

D. Reporting Requirements

- 1. The permittee shall notify the Southeast District Office in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Sections C.3 and C.5 above. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the deviation occurs.
- 2. The permittee shall submit quarterly reports, by February 15, May 15, August 15, and November 15 of each year, that contain the following information for each month of the previous calendar quarter:
 - a. the monthly particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility;
 - b. the 12-month particulate, SO₂, NO_x, CO, VOC, and HAPs emission rates from all fuel burning equipment at the facility; and
 - c. a summary of the monthly organic byproduct emission factors for particulates, SO₂, NO_x, CO, and VOC.

E. Testing Requirements

1. The permittee shall use the following emission factors for calculating monthly emissions from all fuel burning equipment:

a. NATURAL GAS COMBUSTION

- (i) 1.9 lbs particulates/million cubic feet burned*
- (ii) 0.6 lb SO₂/million cubic feet burned*
- (iii) 100 lbs NO_x/million cubic feet burned**
- (iv) 84 lbs CO/million cubic feet burned**
- (v) 5.5 lbs VOC/million cubic feet burned*
- (vi) 1.89 lbs HAPs/million cubic feet burned***

* AP-42, Table 1.4-2 (7/98)

** AP-42, Table 1.4-1 (7/98), except NO_x from B011 which is based on the low NO_x burner manufacturer's guaranteed maximum emission rate

*** AP-42, Table 1.4-3 and Table 1.4-4 (7/98)

b. NUMBER TWO FUEL OIL COMBUSTION (B010, B011, B020 only)

- (i) 2 lbs particulates/thousand gallons burned*
- (ii) 157S lbs SO₂/thousand gallons burned (emission factor for B011 only)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iii) 142S lbs SO₂/thousand gallons burned (emission factor for all boilers except B011)* (S equals the average weight percent for each month of sulfur in the oil based on the results of the oil quality sampling specified in Section C.3 of this permit. For example, if the fuel is 1% sulfur, then S = 1.)
- (iv) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (v) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (vi) 5 lbs CO/thousand gallons burned*
- (vii) 0.252 lb VOC/thousand gallons burned**
- (viii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, Table 1.3-1 (9/98)

** AP-42, Table 1.3-3 (9/98)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

c. ORGANIC BYPRODUCT COMBUSTION (B010, B011, B020 only)

- (i) The particulate emission factor shall be based on sampling pursuant to Section C.5 of this permit
- (ii) The SO₂ emission factor shall be based on sampling pursuant to Section C.5 of this permit.
- (iii) 24 lbs NO_x/thousand gallons burned (emission factor for B011 only)*
- (iv) 20 lbs NO_x/thousand gallons burned (emission factor for all boilers except B011)*
- (v) 5 lbs CO/thousand gallons burned*
- (vi) 0.252 lb VOC/thousand gallons burned**
- (vii) 6.90E-02 lb HAPs/thousand gallons burned***

* AP-42, table 1.3-1 (9/98) for fuel oil combustion (See section E.6.)

** AP-42, table 1.3-3 (9/98) for fuel oil combustion (See section E.6.)

*** AP-42, Tables 1.3-8 through 1.3-10 (9/98)

2. Compliance with the emission limitation(s) in Sections A.1. and A.2. of these terms and conditions shall be determined in accordance with the following method(s):

E. Testing Requirements (continued)

2.a Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.25 pound per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil.

Applicable Compliance Method:

Compliance with the emission limitation of 0.25 pound of PE from the boiler's exhaust per million Btu actual heat input when organic byproducts are burned or when organic byproducts are co-fired with natural gas and/or number two fuel oil may be demonstrated as follows:

Divide each emission factor for particulates from section C.5 by the heat content from section C.5, as follows:

$$\text{(lbs particulate/1,000 gallons of organic byproduct burned)} \times \text{(thousand gallons/million Btu)} = \text{lb particulates/million Btu}$$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2.b Emissions Limitations:

Emissions of sulfur dioxide (SO₂) from the boiler's exhaust shall not exceed 7.9 pounds per million Btu actual heat input.

Applicable Compliance Method:

Compliance with the emission limitation of 7.9 pounds SO₂ from the boiler's exhaust per million Btu actual heat input shall be demonstrated based on the results of the analyses of each batch of organic byproduct, as specified in section C of this permit. When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation. Compliance with the SO₂ emission limit is assumed when burning natural gas due to the negligible percent sulfur, by weight, contained in natural gas.

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

2.c Emissions Limitations:

PE from the boiler's exhaust shall not exceed 0.020 pound per million Btu actual heat input when only natural gas and/or number two fuel oil are burned.

Applicable Compliance Method:

Compliance with the emission limitation of 0.020 pound PE per million Btu actual heat input when only natural gas and/or number two fuel oil are burned may be demonstrated as follows:

$$\text{(2 lbs particulate/1,000 gallons of number two fuel oil burned)} \times \text{(thousand gallons/133 million Btu)} = 0.015 \text{ lb particulate/million Btu}$$

or

$$\text{(1.9 lbs particulate/million cubic feet natural gas burned)} \times \text{(1000 Btu/cubic foot)} = 0.0019 \text{ lb particulate/million Btu}$$

Emissions testing, if required, shall be conducted using the following test methods: 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures in OAC rule 3745-17-03 (B)(10). Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

E. Testing Requirements (continued)

2.d Emissions Limitations:

Visible PE from the boiler's exhaust shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04 (A).

2.e Emissions Limitations:

PE shall not exceed 9.4 tons per month and 43.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of SO₂ shall not exceed 23.6 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of NO_x shall not exceed 23.2 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of CO shall not exceed 7.9 tons per month and 95.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of VOC shall not exceed 4.4 tons per month and 12.0 tons during any rolling 12-month period from all fuel burning equipment at this facility.

Emissions of combined hazardous air pollutants (HAPs) shall not exceed 0.17 ton per month and 1.8 ton during any rolling 12-month period from all fuel burning equipment at this facility.

Applicable Compliance Method:

The monthly particulate, SO₂, NO_x, CO, VOC, and HAP emission rates from all fuel burning equipment at the facility shall be calculated as follows:

Multiply the natural gas usage by the appropriate emission factors listed in Section E.1.a of this permit.

ii. Multiply the number two fuel oil usage by the appropriate emission factors listed in Section E.1.b of this permit.

iii. Multiply the organic byproduct usage by the appropriate emission factors listed in Section E.1.c of this permit.

iv. Calculate the monthly particulate, SO₂, NO_x, CO, VOC, and HAP emission rates from all fuel burning equipment at the facility as the sum of E.2.e.i, E.2.e.ii, and E.2.e.iii above.

The 12-month particulate, SO₂, NO_x, CO, VOC, and HAP emission rates from all fuel burning equipment at the facility shall be calculated as the sum of the monthly emissions for the current calendar month and the monthly emissions for the previous 11 calendar months.

F. Miscellaneous Requirements

1. Pursuant to OAC rule 3745-35-07(B)(2), all the terms and conditions of this permit are federally enforceable. The applicant has requested the restrictions in this permit to limit the potential to emit and, therefore, avoid Title V applicability.