

Facility ID: 0145020281 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit P001](#)
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Facility ID: 0145020281 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 1 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

2. **Additional Terms and Conditions**
  - (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

1. This emissions unit shall not operate more than 552 hours per month.
2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen

oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.

These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91 pounds PE/hr

Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: 2.5 pounds NOx/hr

Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: .5 pound nitric acid/hr

Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitations: 9.63 tons PE/yr, 8.28 tons NOx/yr and 1.66 tons nitric acid/yr

Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results [PE, NOx or nitric acid] from most recent test, divided by 2000 lbs/ton = tons of pollutant/yr).

Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE, nitric acid and NOx.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute

average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be demonstrated through visible emissions 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).  
Emission Limitation: .32 lb H3PO4/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation: 12 lb sulfuric acid/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

Emission Limitation: 1.06 tons H3PO4/yr and .4 ton sulfuric acid/yr

Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C. 1 of this permit X lb/hr results [phosphoric or sulfuric acid] from the most recent compliance demonstration, divided by 2000 lbs/ton= tons of acid/yr).

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 0145020281 Emissions Unit ID: P002 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 2 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

- 2. **Additional Terms and Conditions**
  - (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

- 1. This emissions unit shall not operate more than 552 hours per month.

2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.
- C. Monitoring and/or Record Keeping Requirements**
1. Daily records shall be maintained for this emissions unit which contain the following information:
    - a. date of each hour of operation
    - b. number of hours of operation
  2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
  3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- D. Reporting Requirements**
1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
  
These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
  2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.
- E. Testing Requirements**
1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91 pounds PE/hr  
  
Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: 2.5 pounds NOx/hr  
  
Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: .5 pound nitric acid/hr  
  
Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitations: 9.63 tons PE/yr, 8.28 tons NOx/yr and 1.66, tons nitric acid/yr  
  
Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results [PE, NOx, or nitric acid] from most recent test, divided by 2000 lbs/ton = tons of pollutant/yr).  
  
Emission testing requirements  
  
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
    - i. The emission testing shall be conducted six months prior to permit renewal.
    - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE, nitric acid and oxides of nitrogen.
    - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
    - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.  
Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test"

notification to the Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA's Central District Office within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation: .32 lb H3PO4/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation: 12 lb sulfuric acid/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

Emission Limitation: 1.06 tons H3PO4/yr and .4 ton sulfuric acid/yr

Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C. 1 of this permit X lb/hr results [phosphoric or sulfuric acid]from the most recent compliance demonstration, divided by 2000 lbs/ton= tons of acid/yr).

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 0145020281 Emissions Unit ID: P003 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 3 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr

1.66 tons nitric acid / yr  
 .32 pound phosphoric acid/hr  
 1.06 tons phosphoric acid/yr  
 .12 pound sulfuric acid/hr  
 .4 ton sulfuric acid/yr  
 9.63 tons PE/yr  
 See additional term and condition 2.a.

**2. Additional Terms and Conditions**

- (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

1. This emissions unit shall not operate more than 552 hours per month.
2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
 A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
 These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
 Emission Limitation: 2.91 pounds PE/hr  
 Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
 Emission Limitation: 2.5 pounds NOx/hr  
 Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below  
 Emission Limitation: .5 pound nitric acid/hr  
 Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
 Emission Limitations: 9.63 tons PE/yr, 8.28 tons NOx/yr and 1.66 tons nitric acid/yr  
 Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results [NOx, PE or nitric acid from most recent test, divided by 2000 lbs/ton = tons of pollutant/yr).  
 Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E.(Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA's Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA's Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA's Central District Office or local air agency within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method:If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation:.32 LB H3PO4/Hr and 1.06 Tons H3PO4/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation:.12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method:If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

#### F. Miscellaneous Requirements

1. None

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Facility ID: 0145020281 Emissions Unit ID: P004 Issuance type: Final State Permit To Operate

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#### Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

#### 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</u>
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anodizing line # 4 w/sulfuric acid scrubber and NOx scrubber OAC rule 3745-17-11(B)  
PTI 01-5226  
OAC rule 3745-17-07(A)(1)  
  
OAC rule 3745-31-05

**Measures**

2.91 pounds of particulate emissions (PE) per hour  
  
Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.  
2.5 pounds NOx/hr  
8.28 tons NOx/yr  
0.5 pound nitric acid/hr  
1.66 tons nitric acid / yr  
.32 pound phosphoric acid/hr  
1.06 tons phosphoric acid/yr  
.12 pound sulfuric acid/hr  
.4 ton sulfuric acid/yr  
9.63 tons PE/yr  
See additional term and condition 2.a.

**2. Additional Terms and Conditions**

- (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

- 1. This emissions unit shall not operate more than 552 hours per month.
- 2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

- 1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
- 2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

- 1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
  
These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
- 2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

- 1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91 pounds PE/hr  
  
Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: 2.5 pounds NOx/hr  
  
Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: .5 pounds Nitric Acid/hr  
  
Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitations: 9.63 tons PE/yr, 8.28 Tons NOx/yr and 1.66,Tons nitric acid/yr

Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the perating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results from most recent test, divided by 2000 lbs/ton = tons/yr).

Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E.(Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method:If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation:.32 LB H3PO4/Hr  
1.06 Tons H3PO4/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation:.12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method:If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

**F. Miscellaneous Requirements**

1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0145020281 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 5 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

**2. Additional Terms and Conditions**

- (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

1. This emissions unit shall not operate more than 552 hours per month.
2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
  
These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91 pounds PE/hr  
  
Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: 2.5 pounds NOx/hr

Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: .5 pounds Nitric Acid/hr

Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitations: 9.63 tons PE/yr, 8.28 Tons NOx/yr and 1.66,Tons nitric acid/yr

Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results from most recent test, divided by 2000 lbs/ton = tons/yr).

Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method:If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation:.32 LB H3PO4/Hr  
1.06 Tons H3PO4/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation:.12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method:If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 0145020281 Emissions Unit ID: P006 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 6 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

**2. Additional Terms and Conditions**

- (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

1. This emissions unit shall not operate more than 552 hours per month.
2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
  
These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be

submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91pounds PE/hr

Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: 2.5 pounds NOx/hr

Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: .5 pounds Nitric Acid/hr

Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitations: 9.63 tons PE/yr, 8.28 Tons NOx/yr and 1.66,Tons nitric acid/yr

Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results from most recent test, divided by 2000 lbs/ton = tons/yr).

Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method:If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation:.32 LB H3PO4/Hr  
1.06 Tons H3PO4/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation:.12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method:If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 0145020281 Emissions Unit ID: P014 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 7 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

2. **Additional Terms and Conditions**
  - (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

1. This emissions unit shall not operate more than 552 hours per month.
2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively). A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District

Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.

These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:

Emission Limitation: 2.91 pounds PE/hr

Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: 2.5 pounds NOx/hr

Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitation: .5 pounds Nitric Acid/hr

Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below

Emission Limitations: 9.63 tons PE/yr, 8.28 Tons NOx/yr and 1.66, Tons nitric acid/yr

Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results from most recent test, divided by 2000 lbs/ton = tons/yr).

Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted six months prior to permit renewal.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be demonstrated through visible emissions 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).

Emission Limitation: 32 LB H3PO4/Hr  
1.06 Tons H3PO4/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5(modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation: 12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

**F. Miscellaneous Requirements**

- 1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0145020281 Emissions Unit ID: P015 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**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>
anodizing line # 8 w/sulfuric acid scrubber and NOx scrubber	OAC rule 3745-17-11(B) PTI 01-5226	2.91 pounds of particulate emissions (PE) per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.
	OAC rule 3745-31-05	2.5 pounds NOx/hr 8.28 tons NOx/yr 0.5 pound nitric acid/hr 1.66 tons nitric acid / yr .32 pound phosphoric acid/hr 1.06 tons phosphoric acid/yr .12 pound sulfuric acid/hr .4 ton sulfuric acid/yr 9.63 tons PE/yr See additional term and condition 2.a.

**2. Additional Terms and Conditions**

- (a) Anomatic shall purchase and use phosphoric acid with at least 0.5% diammonium phosphate. This material shall be used in the bright dip tanks to suppress the generation of nitrogen oxide emissions

**B. Operational Restrictions**

- 1. This emissions unit shall not operate more than 552 hours per month.
- 2. The nitrogen oxides scrubber serving this emissions unit shall operate with a scrubber liquor pH of at least 11 and a static pressure greater than one inch of water. The mist eliminator serving this emissions unit shall operate with a static pressure greater than two inches of water. The sulfuric acid scrubber serving this emissions unit shall operate in a dry basis with a static pressure between .75 and 1.5 inches of water.

**C. Monitoring and/or Record Keeping Requirements**

- 1. Daily records shall be maintained for this emissions unit which contain the following information:
  - a. date of each hour of operation
  - b. number of hours of operation
- 2. Monitoring and Record Keeping Requirements for this emissions unit's Scrubber
 

This facility shall operate and maintain a continuous scrubber liquor pH monitor and recorder for the nitrogen oxides scrubber which measures and records the scrubber liquor pH when the scrubber is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3. This facility shall operate and maintain continuous static pressure monitors and recorders which measure and record the static pressures when the sulfuric acid scrubber, NOx scrubber and mist eliminator are in operation. The static pressure monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

**D. Reporting Requirements**

1. A quarterly scrubber liquor pH deviation report for the scrubbers controlling NOx emissions shall be submitted by this facility to the Ohio EPA Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause and action taken for any pH readings below the limits specified by this permit. These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).  
A quarterly static pressure deviation report shall be submitted by this facility to the Ohio EPA, Central District Office. This report shall contain at a minimum, the date, time and duration of occurrence, cause, and action taken for any static pressure recordings outside the ranges described above in Part II, section B.2.  
  
These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).
2. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in Section A(1) of these Special Terms and Conditions shall be determined in accordance with the following requirements:  
Emission Limitation: 2.91 pounds PE/hr  
  
Applicable Compliance Method: Methods 1-5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: 2.5 pounds NOx/hr  
  
Applicable Compliance Method: Methods 1-4, 7E of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitation: .5 pounds Nitric Acid/hr  
  
Applicable Compliance Method: Methods 1-4, Modified 5 of 40 CFR Part 60, Appendix A and the emissions testing required below  
  
Emission Limitations: 9.63 tons PE/yr, 8.28 Tons NOx/yr and 1.66 Tons nitric acid/yr  
  
Applicable Compliance Method: Multiply the actual annual operating hours for this emissions unit by the results of the most recent compliance demonstration (i.e., the operating hours taken from the recordkeeping in section C.1 of this permit X lb/hr results from most recent test, divided by 2000 lbs/ton = tons/yr).  
  
Emission testing requirements  
  
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - i. The emission testing shall be conducted six months prior to permit renewal.
  - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for Particulate Emissions, Nitric acid and Nitrogen Oxides.
  - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 1-4, Method 5, Modified Method 5, and 7E. (Note: For purposes of this permit and with respect to nitric acid sampling, "modified Method 5" refers to the methodology employed during the nitric acid testing conducted on May 14, 1997 for emission units P001-P006.)
  - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).  
  
Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.  
  
A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).  
Emission Limitation: Visible particulate emissions shall not exceed 20% opacity at the stack as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: If required, compliance shall be demonstrated through visible emissions 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).  
Emission Limitation: .32 LB H3PO4/Hr  
1.06 Tons H3PO4/yr  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission

limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 (modified). For purposes of this permit and with respect to phosphoric acid sampling, "modified Method 5" refers to the methodology employed during the phosphoric acid testing conducted on August 8, 1991 for emission units P001-P006.

Emission Limitation: .12 LB Sulfuric Acid/Hr and .4 ton Sulfuric Acid/yr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 8.

F. **Miscellaneous Requirements**

1. None