



State of Ohio Environmental Protection Agency

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

**RE: DRAFT PERMIT TO INSTALL MODIFICATION
MUSKINGUM COUNTY
Application No: 06-04694
Fac ID: 0660010006**

CERTIFIED MAIL

DATE: 7/24/2007

AK Steel Corporation - Zanesville Works
J. Cory Leavengood
1724 Linden Ave
Zanesville, OH 43701-2307

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

A Permit to Install modification may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **\$ 625** will be due. Please do not submit any payment now.

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

Sincerely,

Michael W. Ahern

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

CC: USEPA

SEDO

WV

MUSKINGUM COUNTY

**PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL**

06-04694 FOR AN AIR CONTAMINANT SOURCE FOR AK Steel Corporation - Zanesville Works

On 7/24/2007 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **AK Steel Corporation - Zanesville Works**, located at **1724 Linden Ave, Zanesville, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 06-04694:

Administrative modification - to revise short term production limit.

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

Bruce Weinberg, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138
[(740)385-8501]



**Permit To Install
Terms and Conditions**

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

DRAFT MODIFICATION OF PERMIT TO INSTALL 06-04694

Application Number: 06-04694
Facility ID: 0660010006
Permit Fee: **To be entered upon final issuance**
Name of Facility: AK Steel Corporation - Zanesville Works
Person to Contact: J. Cory Leavengood
Address: 1724 Linden Ave
Zanesville, OH 43701-2307

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1724 Linden Ave
Zanesville, Ohio**

Description of proposed emissions unit(s):
Administrative modification - to revise short term production limit.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

AK Steel Corporation - Zanesville Works

Facility ID: 0660010006

PTI Application: 06-04694

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

AK Steel Corporation - Zanesville Works

Facility ID: 0660010006

PTI Application: 06-04694

Issued: To be entered upon final issuance

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. 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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the

permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance

Facility ID: 0660010006

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance

Facility ID: 0660010006

- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance
this permit.

Facility ID: 0660010006

AK Steel Corporation - Zanesville Works

Facility ID: 0660010006

PTI Application: 06-04694

Issued: To be entered upon final issuance

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

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

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of

AK Steel Corporation - Zanesville Works

Facility ID: 0660010006

PTI Application: 06-04694

Issued: To be entered upon final issuance

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

5. Construction of New Sources(s)

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

6. Public Disclosure

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

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

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

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance

Facility ID: 0660010006

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

14

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance

Facility ID: 0660010006

AK Steel Corporation - Zanesville Works**Facility ID: 0660010006****PTI Application: 06-04694****Issued: To be entered upon final issuance****C. Permit-To-Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	3.47
SO2	0.31
VOC	2.85
NOx	258.35
CO	43.41
HF	0.63

16

AK Steel Corporation - Zanesville Works
PTI Application: 06-04694
Issued: To be entered upon final issuance

Facility ID: 0660010006

AK S1

PTI A

Emissions Unit ID: **P008**

Issued: To be entered upon final issuance

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

AK S1

PTI A

Emissions Unit ID: **P008**

Issued: To be entered upon final issuance

Applicable Emissions Limitations/Control Measures	rolling, 12-month summation:
Particulate emissions (PE) shall not exceed 1.13 lb/hr.	258.35 tons NO _x ; 3.47 tons PE.
Emissions of sulfur dioxide (SO ₂) shall not exceed 0.07 lb/hr, 0.31 tpy.	See A.II.4 below
Emissions of volatile organic compounds (VOC) shall not exceed 0.65 lb/hr, 2.85 tpy.	See A.I.2.a below.
Emissions of nitrogen oxides (NO _x) shall not exceed 84.82 lbs/hr.	The emission limitation required by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
Emissions of carbon monoxide (CO) shall not exceed 9.91 lbs/hr, 43.41 tpy.	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
Emissions of hydrogen fluoride (HF) shall not exceed 0.225 lb/hr, 0.63 tpy.	The emission limitation required by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), and 3745-21-08(B).	See A.I.2.b below.
Emissions shall not exceed the following as a	

2. Additional Terms and Conditions

- 2.a** The permittee shall employ low NOx burners, the addition of urea to pickling baths, and a packed bed scrubber to reduce NOx emissions whenever this emissions unit is in operation.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. For the acid fume scrubber (Heil Process Co.), the pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water while the emissions unit is in operation.
2. For the kolene scrubber (Enviroclear), the pressure drop across the scrubber shall be continuously maintained at a value of not less than 1 inch of water while the emissions unit is in operation.
3. The permittee shall maintain the urea feed rate for each product type produced in this emissions unit at an hourly rate that is not less than the urea feed rate established during the most recent emission tests that demonstrated this emissions unit was in compliance with the hourly allowable NOx emission limitation of 84.82 lbs/hr.
4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit. The maximum annual production rate for this emissions unit shall not exceed 251,000 tons, based upon a rolling, 12-month summation of the production rates.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

Issued: To be entered upon final issuance

2. The permittee shall collect and record the following information each day:
 - a. the pressure drop across each scrubber, in inches of water; and
 - b. the downtimes for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall maintain monthly records of the following information:
 - a. the production rate, in tons;
 - b. the operating hours;
 - c. the average hourly production rate, in tons/hour;
 - d. the total amount of natural gas employed by the emissions unit, in mmcf;
 - e. the average hourly natural gas usage, calculated as follows:
$$\text{mmcf/hr} = \frac{\text{the total amount of natural gas employed, in mmcf}}{\text{the total hours of operation}}; \text{ and}$$
 - f. the rolling, 12-month summation of the production rates.
4. The permittee shall maintain records of the following information for each run of each product type produced in this emissions unit:
 - a. the total amount of urea employed, in gallons;
 - b. the hours of operation for the product type run; and
 - c. the average hourly urea feed rate, in gallons/hour.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

Note: The presence of water vapor in the scrubber plume does not constitute visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the static pressure drop across each scrubber was not maintained at or above the required level.
2. The permittee shall submit quarterly deviation (excursion) reports that identify any urea feed rate that did not comply with the operational restriction specified in section A.II.3.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation of the production rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
Particulate emissions (PE) shall not exceed 0.80 lb/hr.

Applicable Compliance Method:

AK SI**PTI A**Emissions Unit ID: **P008****Issued: To be entered upon final issuance**

Compliance shall be determined using the following calculation method, where total particulate emissions equal the summation of emissions from the natural gas annealing furnace and the pickling and kolene process:

- i. Annealing furnace particulate emissions are calculated by multiplying the emission factor from AP-42, Table 1.4-2, 7/98 (1.9 lbs/mmcf) by the annealing furnace maximum fuel usage (0.118 mmcf/hr).
- ii. Pickling and kolene particulate emissions are calculated by multiplying the stack test- derived emission factor of 0.02 lb PE/ton metal (submitted by the permittee in PTI 06-04694 application) by the maximum process weight rate of P008 (45 ton metal/hr).
- iii. Total allowable emissions = 0.22 lb/hr + 0.9 lb/hr = 1.13 lb PE/hr

If required, compliance shall also be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

- b. Emission Limitation:
Particulate emissions (PE) shall not exceed 3.47 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined using the following calculation method, where the annual emissions equal the summation of emissions from the natural gas annealing furnace and the pickling and kolene process:

- i. Annealing furnace particulate emissions are calculated by multiplying the short term emissions of 0.22 lb/hr by the rolling 12-month summation of the hours of operation, and then dividing by 2000 lbs/ton.
- ii. Pickling and kolene particulate emissions are calculated by multiplying the stack test- derived emission factor of 0.02 lb PE/ton metal (submitted by the permittee in PTI 06-04694 application) by the total tons of metal produced during each rolling 12-month period, and then dividing by 2000 lbs/ton.
- iii. Total allowable emissions = 0.96 tons + 2.51 tons = 3.47 tons

AK S1**PTI A**Emissions Unit ID: **P008****Issued: To be entered upon final issuance**

c. Emission Limitation:

Emissions of sulfur dioxide (SO₂) shall not exceed 0.07 lb/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor from AP-42, Table 1.4-2, 7/98 (0.6 lbs SO₂/mmcf) by the annealing furnace maximum fuel usage (0.118 mmcf/hr).

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 6.

d. Emission Limitation:

Emissions of sulfur dioxide (SO₂) shall not exceed 0.31 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

e. Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 0.65 lb/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor from AP-42, Table 1.4-2, 7/98 (5.5 lbs VOC/mmcf) by the annealing furnace maximum fuel usage (0.118 mmcf/hr).

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 25.

f. Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 2.85 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

g. Emission Limitation:

Emissions of nitrogen oxides (NO_x) shall not exceed 84.82 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined using the following calculation method, where

Emissions Unit ID: P008

total NO_x emissions equal the summation of emissions from the natural gas annealing furnace and the pickling and kolene process:

- i. Annealing furnace NO_x emissions are calculated using the manufacturer data supplied in the permittee's application (multiply the emission factor of 0.108 lb/million Btu by the maximum rated capacity of the annealing furnace, 127 million Btu/hr).
- ii. Pickling and kolene NO_x emissions are calculated by using the 1995 stack test- derived emission factor supplied in the permittee's application (multiply the emission factor of 1.58 lb NO_x/ton metal by the maximum process weight rate of P008, 45 ton metal/hr).
- iii. Total allowable emissions = 13.72 lbs/hr + 71.1 lbs/hr = 84.82 lbs NO_x/hr

If required, compliance shall also be determined in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 7.

- h. Emission Limitation:
Emissions of nitrogen oxides (NO_x) shall not exceed 258.35 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined using the following calculation method, where the emissions from each rolling 12-month period equal the summation of emissions from the natural gas annealing furnace and the pickling and kolene process:

- i. Annealing furnace particulate emissions are calculated by multiplying the short term emissions of 13.72 lb/hr by the 12-month rolling summation of the hours of operation, and then dividing by 2000 lbs/ton.
- ii. Pickling and kolene particulate emissions are calculated by multiplying the stack test- derived emission factor of 1.58 lb NO_x/ton metal (submitted by the permittee in PTI 06-04694 application) by the total tons of metal produced during each rolling 12-month period, and then dividing by 2000 lbs/ton.
- iii. Total allowable emissions = 60.09 tons + 198.29 tons = 258.35 tons

- i. Emission Limitation:
Emissions of carbon monoxide (CO) shall not exceed 9.91 lbs/hr

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor from AP-42,

AK Si**PTI A**Emissions Unit ID: **P008****Issued: To be entered upon final issuance**

Table 1.4-1, 7/98 (84 lbs CO/mmcf) by the annealing furnace maximum fuel usage (0.118 mmcf/hr).

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 10.

- j. Emission Limitation:
Emissions of carbon monoxide (CO) shall not exceed 43.41 tpy.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by the annual hours of operation, and then dividing by 2000 lbs/ton.

- k. Emission Limitation:
Emissions of hydrogen fluoride (HF) shall not exceed 0.225 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by using the 1995 stack test- derived emission factor supplied in the permittee's application (0.005 lb HF/ton) multiplied by the maximum process weight rate of P008 (45 tons metal/hr) .

If required, compliance shall also be determined in accordance with 40 CFR Part 60, Appendix A, Method 26A.

- l. Emission Limitation:
Emissions of hydrogen fluoride (HF) shall not exceed 0.63 tpy.

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the stack test- derived emission factor of 0.005 lb HF/ton metal (submitted by the permittee in PTI 06-04694 application) by the total tons of metal produced during each calendar year, and then dividing by 2000 lbs/ton. .

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

Applicable Compliance Method:
If required, compliance shall be demonstrated based upon the procedures specified in Test Method 9 as set forth in "Appendix on Test Methods" in 40

AK Steel Corporation - Zanesville Works

PTI A

Issue

Facility ID: 0660010006

Emissions Unit ID: P008

CFR, Part 60.

VI. Miscellaneous Requirements

None.

**AK S1
PTI A**

Emissions Unit ID: **P008**

Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P008 - No. 1 annealing and pickling line vented to 2 packed tower wet scrubbers		

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.