



State of Ohio Environmental Protection Agency

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2/25/2010

Certified Mail

Pat Gallo  
AK Steel Corporation  
1801 Crawford Street  
Middletown, OH 45043-0001

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 1409010006  
Permit Number: P0105639  
Permit Type: Initial Installation  
County: Butler

No	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
Yes	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Journal News. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
122 South Front Street  
Columbus, Ohio 43215

and Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA  
HCD OES; Indiana; Kentucky

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director



**PUBLIC NOTICE PUBLIC HEARING  
OHIO ENVIRONMENTAL PROTECTION AGENCY  
ISSUANCE OF DRAFT PERMIT TO INSTALL  
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION  
AND NON-ATTAINMENT REVIEW  
TO THE AK STEEL CORPORATION.**

Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued, on February 25, 2010, a draft action of Permit to Install (PTI) number P0105639 to AK Steel Corporation. This draft permit proposes to allow the installation of a series of new coke conveyors and a load-out operation (Coke Conveyor) in conjunction with the installation of the Middletown Coke Company non-recovery coke project. This installation will be located in Middletown, Ohio, Butler County.

This project, if approved, will result in permit allowable emissions for the new sources as defined in the following table. The proposed allowable pollutant air emission rates for the new sources are as follows:

Pollutant	Permit Allowable (Tons/Year)
*PM	1.14
*PM10	0.54
*PM2.5	0.17

\* Note that the proposed Coke Conveyor permit allowable was included with the Middletown Coke Company's permit allowable emission rates of 168.9 tons per year of PM; 125.0 tons per year of PM10 and 112.2 ton per year of PM2.5 in determining the applicability of the New Source Review (NSR) regulations.

This facility is subject to the applicable provisions of the Non Attainment New Source Review (NNSR) and the Prevention of Significant Deterioration (PSD) regulations. The proposed project will trigger PSD review for PM and PM10 and will also trigger NNSR for PM2.5.

The ambient air impact for criteria pollutants allowed by this permit is described in the following table:

Pollutant	Averaging Averaging Period	Modeled Ambient Impact (ug/m <sup>3</sup> )	Rule/Policy Allowed	
			Ambient Impact (ug/m <sup>3</sup> )	Basis
PM <sub>10</sub> <sup>(1)</sup>	24-hr	3.80	150	NAAQS
PM <sub>2.5</sub> <sup>(2)</sup>	N/A	N/A	N/A	N/A

- (1) Complies with the NNSR rules by meeting the National Ambient Air Quality Standard (NAAQS).
- (2) Under the applicable U.S. EPA surrogate policy, PM10 is modeled in place of PM2.5.

A public hearing and information session on the draft air permit will be held on Wednesday, March 31, 2010, at Middletown City Council Chambers, One Donham Plaza, Middletown, Ohio. The information session will commence at 6:30 pm and the public hearing will follow immediately to accept comments on the draft permit. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments on the draft permit must be received by the close of business on Wednesday, April 7, 2010. Comments received after this date will not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to: Mike Ploetz, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.

Copies of the draft permit, permit application and technical support information may be reviewed and/or copies made by first calling to make an appointment at the Hamilton County Department of Environmental Services, located at the above address, telephone number (513) 946-7777.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**  
**Permit Number:** P0105639  
**Facility ID:** 1409010006

## Permit Strategy Summary

**STAFF DETERMINATION FOR THE APPLICATION TO CONSTRUCT  
UNDER BOTH THE PREVENTION OF SIGNIFICANT DETERIORATION  
AND NON-ATTAINMENT REVIEW REGULATIONS  
FOR AK STEEL CORPORATION  
LOCATED IN BUTLER COUNTY, OHIO  
PTI NO. P0105639**

Ohio Environmental Protection Agency  
Division of Air Pollution Control  
Lazarus Government Center  
50 West Town St., Suite 700  
Columbus, Ohio 43215

The Clean Air Act and regulations promulgated thereunder require that major air pollution sources undergoing construction or modification comply with all applicable Prevention of Significant Deterioration (PSD) provisions and nonattainment area New Source Review requirements. The federal PSD rules govern emission increases in attainment areas for major stationary sources, which are facilities with the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act, or 100 tons per year or more if the source is included in one of 28 source categories. In nonattainment areas, the definition of major stationary source is one having at least 100 tons per year potential emissions. A major modification is one resulting in a contemporaneous net increase in emissions which exceeds the significance level of one or more pollutants. Any changes in actual emissions within this five- or ten-year period are considered to be contemporaneous. In addition, Ohio has incorporated the PSD and NSR requirements by rule under OAC 3745-31, and currently has a program that is fully approved by USEPA. For PM<sub>2.5</sub> Ohio will have to use the requirements established in 40 CFR Part 51, Appendix S until the Ohio Administrative Code regulations are modified to include PM<sub>2.5</sub> emissions.

Both PSD and nonattainment rules require that certain analyses be performed before a facility can obtain a permit authorizing construction of a new source or major modification to a major stationary source. The principal requirements of the PSD regulations are:

- 1) Best Available Control Technology (BACT) review - A detailed engineering review must be performed to ensure that BACT is being installed for the pollutants for which the new source is a major stationary source.
- 2) Ambient Air Quality Review - An analysis must be completed to ensure the continued maintenance of the National Ambient Air Quality Standards (NAAQS) and that any increases in ambient air pollutant concentrations do not exceed the incremental values set pursuant to the Clean Air Act.



For nonattainment areas, the requirements are:

1) Lowest Achievable Emission Rate (LAER)

The most stringent emission limitation that is contained in the implementation plan of any state for such class or category of emissions unit, unless the owner or operator of the proposed emissions unit demonstrates that such limitations are not achievable; or

The most stringent emission limitation that is achieved in practice by such class or category of emissions unit. This limitation, when applied to a major modification, means lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified emissions unit to emit any air pollutant in excess of the amount allowable under applicable new source standards of performance.

2) Compliance certification

The applicant must certify that all existing major stationary sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in Ohio as the proposed major stationary source or major modification are in compliance with all applicable emission limitations and standards under the Clean Air Act (or are in compliance with an expeditious schedule which is federally enforceable or contained in a court decree).

3) Emission offsets

(a) Emission reductions (offsets) from existing air contaminant sources in the area of the proposed major stationary source (whether or not under the same ownership) are required such that there will be reasonable progress, as determined by the director, toward attainment of the applicable national ambient air quality standard.

(b) Only intra air pollutant emission offsets will be acceptable (e.g., hydrocarbon increases may not be offset against sulfur dioxide reductions).

(c) Emission offsets must meet the baseline limitations of rule 3745-31-24 of the Administrative Code, the location limitations of rule 3745-31-25 of the Administrative Code, and the offset ratio limitations of rule 3745-31-26 of the Administrative Code.

(d) Emission offsets are required only for those air pollutants for which the increased allowable emissions exceed the significant emission rates.

(e) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset in accordance with Section 173 of the Clean Air Act shall be determined by summing the difference between the allowable

(f) emissions after the major modification and the actual emissions before the modification for each emissions unit.

4) Net air quality benefit

The emission offsets must provide a positive net air quality benefit in the affected area pursuant to rule 3745-31-25 of the Administrative Code. Atmospheric dispersion modeling is not necessary for VOCs and nitrogen oxides in ozone nonattainment areas. Instead, complying with the requirements of



paragraphs (A)(1) to (A)(3) of this rule and rule 3745-31-25 of the Administrative Code will be considered adequate to meet this condition.

Finally, New Source Performance Standards (NSPS), New Emission Standards of Hazardous Air Pollutants (NESHAPS), SIP emission standards and public participation requirements must be followed in all cases.

### Site Description

The AK Steel Corporation's installation of a series of new coke conveyors and load-out operation (Coke Conveyor) in conjunction with the Middletown Coke Company non-recovery coke project will be located in Middletown, Ohio, Butler County.

This area is classified as nonattainment for particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and ozone (volatile organic compounds) and attainment for all other criteria pollutants, including total suspended particulate matter (PM), particulate matter 10 microns and less in diameter (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and lead (Pb).

### New Source Review (NSR)/PSD Applicability

Ohio EPA has determined that the Coke Conveyor operation is considered part of the same project as the Middletown Coke Company non-recovery coke project. On June 1, 2009, Ohio EPA issued a draft air permit-to-install as a minor source permit for a thirty day comment period and held a public hearing for the issuance of the draft to secure comments.

During that period, Ohio EPA was accepting comments, a commentor objected to Ohio EPA proposing to issue a final air permit-to-install as a minor source permit and believed that Ohio EPA should be requiring a major stationary new source review (NSR) permit application because Ohio EPA considered the Coke Conveyor operation as part of the same project as the Middletown Coke Company non-recovery coke project. That is, a major stationary source modification at a current major stationary source for purposes of NSR.

Based upon Ohio EPA's review of those comments, Ohio EPA agreed with the commentor and therefore required AK Steel Corporation to submit a NSR permit application to them.

Therefore, this staff determination is a result of that submittal which includes a BACT analysis for PM and PM<sub>10</sub> and a LAER analysis for PM<sub>2.5</sub> for emission increases (major modification at a current major stationary source) associated with the Coke Conveyor project.

As more detailed background information on the above, once a source emits a regulated pollutant (in this case, PM and PM<sub>10</sub> for PSD and PM<sub>2.5</sub> for non-attainment) that triggers being a major modification at a current major stationary source as part of a project, then if any regulated pollutants that are emitted in excess of the significance emission levels as specified in 3745-31-01 of the Administrative Code would also require the source to perform either a PSD and/or non-attainment analysis for those pollutants.

In this case, the AK Steel Corporation must comply with the attainment provisions listed in 3745-31-11 thru 19 of the Administrative Code for the following pollutants: PM and PM<sub>10</sub> and must comply with the non-attainment provisions listed in 3745-21 thru 27 of the Administrative Code and/or 40 CFR Part 51, Appendix S for the following pollutant: direct PM<sub>2.5</sub>.



MIDDLETOWN COKE COMPANY'S POLLUTANT EMISSION RATES

Pollutant	Allowable Emission Rate (in tpy)	Significant Threshold (in tpy)
PM10 ((filterable for purposes of non-attainment review) surrogate for PM2.5 for purposes of PSD review))	125.0	15
PM2.5 (filterable for purposes of non-attainment review).	112.2	10

Note that the proposed Coke Conveyor permit allowable will be 1.14 tons per year of PM; 0.54 ton per year of PM10 (note due to recent court decisions concerning PM10 as a surrogate for PM2.5. See discussion below of BACT analysis for PM2.5) and 0.17 ton per year of PM2.5 are included with above Middletown Coke Company's pollutant emission rates that trigger NSR.

Control Technology Review (LAER and BACT)

In accordance with OAC rules 3745-31-22 and 3745-31-01, "Lowest achievable emission rate" or "LAER" determinations are to be based upon the following:

- A. The most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of emissions unit, unless the owner or operator of the proposed emissions unit demonstrates that such limitations are not achievable; or
- B. The most stringent emissions limitation that is achieved in practice by such class or category of emissions unit. This limitation, when applied to a major modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified emissions unit to emit any air pollutant in excess of the amount allowable under applicable new source standards of performance.

The requirement to conduct a BACT analysis and determination is set forth in section 165(a)(4) of the Clean Air Act (Act), in federal regulations at 40 CFR Part 52.21.(j) and also in OAC rules 3745-31-15(C) and 3745-31-01(S). The BACT requirement is defined as:

"... an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such major stationary source or major modification through application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63. If the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be approved by the director instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results."



The BACT process was further formalized in a memorandum by USEPA on December 1, 1987 and in the draft New Source Review Workshop Manual (EPA 1990b) issued on March 15, 1990, by introducing a “top-down” concept for BACT analysis. The top-down process requires that all available control technologies be ranked in descending order of control effectiveness. The BACT process first examines the most stringent - or “top”- alternative. That alternative is established as BACT unless it is demonstrated that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not applicable. If the most stringent technology is eliminated, then the next most stringent alternative is considered, and this process is continued until an acceptable BACT is selected.

The objective of the BACT analysis is to conduct pollutant-specific control technology evaluation per USEPA requirements. The BACT evaluation steps consist of:

- Step 1: identify all control technologies;
- Step 2: eliminate technically infeasible options;
- Step 3: rank remaining control technologies by control effectiveness;
- Step 4: evaluate most effective controls and document results; and
- Step 5: select the most effective control based on energy, environmental and economic impacts (generally the feasible technology that is also considered to be cost effective)

**LAER/BACT Analysis: Coke Conveyor Ohio EPA emissions unit number F028.**

Fugitive Dust Operations	LAER/BACT Control Technology	LAER/BACT Opacity Limitation	LAER Emission Rate for PM2.5 (tpy)	BACT Emission Rate for PM10 (tpy)	BACT Emission Rate for PM2.5 (tpy)
Coke Conveyor to railcar or truck load-out.	Enclosures and wet material.	Visible fugitive dust particulate emissions shall not exceed 10% opacity, as a 3-minute average.	0.17	0.54	1.14

See specific details of both the LAER and the BACT analysis in the air permit-to-install application.

Ohio EPA has an approved PSD program contained within its NSR state implementation plan and therefore based upon a U.S. EPA final rule dated May 16, 2008, Ohio EPA employs for purposes of a BACT analysis for PM2.5, U.S. EPA’s PM10 Surrogate Policy, where PM10 is being used as surrogate to PM2.5. Due to recent court decisions concerning that policy, the courts have directed the regulatory community as well as regulators



to investigate in more detail the relationship (called reasonable rationale) between PM<sub>10</sub> and PM<sub>2.5</sub> via an evaluation using two methods. They are first to show in the record a strong statistical relationship between PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the proposed unit, both with and without the proposed control technology in operation and second to demonstrate that the degree of control of PM<sub>2.5</sub> by the control technology selected in the PM<sub>10</sub>, BACT analysis will be at least as effective as the technology that could have been selected if a BACT analysis specific to PM<sub>2.5</sub> emissions have been conducted.

Under AP-42, table 13.2.4, dated 11/06, the coke conveyor is expected to emit  $7.99 \times 10^{-4}$  lb. of PM<sub>10</sub>/ton of coke conveyed and  $2.55 \times 10^{-4}$  lb. of PM<sub>2.5</sub>/ton of coke conveyed employing a control efficiency of 95 percent based upon Ohio EPA's Reasonable Achievable Control Measures, table 2.2.1-2, dated 10.80, PM<sub>2.5</sub> emissions are expected to be about one third of the overall PM<sub>10</sub> emissions from this emissions unit. Based on this information, no more than 0.17 ton of PM<sub>2.5</sub> per year is expected to be emitted.

Ohio EPA has reviewed similar sources to determine appropriate controls measures for coke conveying. Ohio EPA could not find any other similar sized facilities that use more stringent controls for either BACT or LAER. Therefore, Ohio EPA believes that the control measures employed for this source are the same control measures Ohio EPA would require if BACT applied for PM<sub>2.5</sub>.

### **Emission Offsets**

The permittee is required to provide emission offsets for PM<sub>2.5</sub>, as part of the nonattainment requirements contained in OAC rule 3745-31. The PM<sub>2.5</sub> emission offsets will be calculated and subsequently reported using the filterable forms of PM<sub>2.5</sub>. Offsets were obtained from AK Steel – Middletown Works (14-09-01-0006) as part of the Middletown Coke Company's NSR permitting action and these same offsets are being used for the Coke Conveyor project. Emission offsets were a result of a permanent shutdown of operations listed below

as part of the Middletown Coke Company's NSR permitting action and will be federally enforceable upon issuance of the final action of the director.

### **AK Steel (14-09-01-0006)**

The AK Steel facility permanently shutdown emissions units F009, P908, P936, and F007 on April 1, 2004 and the PM<sub>2.5</sub> emission offset calculations meet the actual emission definition, as specified OAC rule 3745-31-01. The actual emission definition requires the use of the preceding 24 month period from the date of the permanent reduction activity, however, the Director can allow a facility to request a different baseline period if the facility can show that the alternative time period is more representative of normal emission unit operation. AK Steel chose to use the period (June 1999 thru May 2001) as their baseline period to calculate actual emissions. Based on the information AK submitted to Ohio EPA, we believe that this period is representative

of normal operation. In addition, these emission offsets meet the minimum federal requirements of being permanent, surplus, quantifiable, and federally enforceable. The total amount of emission offsets, as described below, will be federally enforceable upon issuance of the final action of the director.

From June 1999 thru May 2001, AK Steel produced a 24 month average actual emissions of 134 tons of filterable PM<sub>2.5</sub>. The PM<sub>10</sub> actual emissions and subsequent emission offsets as a result of a permanent shutdown meet the requirements contained in OAC Chapter 3745-31. The total above mentioned tons per year values can be used as emission offsets for this permit to meet the nonattainment requirements of OAC rule 3745-31-22.



**Modeling Summary:**

The AK Steel is located in AQCR 079 in Butler County in Middletown, Ohio. The area is attainment for all criteria pollutants, except PM2.5 and Ozone. U.S. EPA regulations require the establishment of baseline air quality in the vicinity of the proposed project. This is normally accomplished using representative air quality monitoring data. Air quality modeling can be utilized to demonstrate that the project will have less than a threshold impact. This threshold impact is identified as the PSD monitoring de minimus level. If the projected impact from the proposed project exceeds this level, ambient data must be collected or existing representative data must be identified which is representative of the area.

AK Steel has conducted ambient air quality modeling to determine the potential impact due to the proposed installation of a coke conveyor. Since the area is non-attainment for PM2.5 it is assumed that there is no available increment to consume. Ohio EPA has identified representative PM10 data for use by AK Steel in this project. Therefore, AK Steel would not be required to perform preconstruction or post-construction monitoring. The following are the projected impacts:

Pollutant	Modeled Period	Modeled Impact	Monitoring De Minimus
PM10	24-hour	3.80 ug/m3	10 ug/m3

**Modeling**

Modeling for the Middletown Coke Company permit only included one transfer point with respect to the conveyor. Modeling was performed for the additional three transfer points associated with the AK Steel conveyor.

Air quality dispersion modeling was conducted to assess the effect of this project on the national ambient air quality standards (NAAQS). AERMOD (version 07026) was used in the regulatory default, rural mode. Five

years of representative meteorological data (Cincinnati/Covington surface data and Dayton upper air data, 1987-1991) were used.

Peak impacts of PM10 from the three transfer points were above their respective PSD significant impact levels. Therefore, additional modeling to address PSD increments and NAAQS were necessary. Comparing modeled concentrations of the Middletown Coke Company facility to modeled concentrations of the three transfer points and the Middletown Coke Company facility indicates little to no increase in the modeled concentrations. It is believed that the additional three transfer points associated with the AK Steel conveyor will not cause or contribute to NAAQS exceedances and/or exceed allowable PSD increment threshold levels.

**Secondary Impact Analysis**

AK Steel is incorporating by reference the secondary impact analysis for the Middletown Coke Company's NSR application dated July 2009, as related to particulate matter.

Therefore, AK Steel has demonstrated that the predicted pollutant concentrations throughout the study area are below the secondary NAAQS thresholds. The secondary NAAQS are designed to limit the amount of pollutants in the ambient air to levels below those which could have an adverse impact on human welfare, soils and vegetation. The modeling analyses demonstrate that no significant impacts on human welfare, soils or vegetation will occur from the proposed modification.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**  
**Permit Number:** P0105639  
**Facility ID:** 1409010006

See specific details in both of AK Steel's NSR air permit-to-install application and Middletown Coke Company's NSR air permit-to-install application dated July 2009.

### **Conclusions**

Based upon the review of the permit to install application and the supporting documentation provided by the applicant, the Ohio EPA staff has determined the installation will comply with all applicable State and Federal environmental regulations and that the requirements for nonattainment and attainment area review are satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to AK Steel Corporation for the installation of the new conveyor system.



**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**DRAFT**

**Air Pollution Permit-to-Install  
for  
AK Steel Corporation**

Facility ID: 1409010006  
Permit Number: P0105639  
Permit Type: Initial Installation  
Issued: 2/25/2010  
Effective: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Permit-to-Install**  
for  
AK Steel Corporation

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105639

**Facility ID:** 1409010006

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

## Authorization

Facility ID: 1409010006  
Facility Description: Steel Plant  
Application Number(s): A0038535  
Permit Number: P0105639  
Permit Description: Installation of a Coke Conveyor from the Middletown Coke Company to Railcar Loadout  
Permit Type: Initial Installation  
Permit Fee: \$1,250.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 2/25/2010  
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

AK Steel Corporation  
1801 Crawford Street  
Middletown, OH 45043-0001

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660  
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105639

**Facility ID:** 1409010006

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

## Authorization (continued)

Permit Number: P0105639

Permit Description: Installation of a Coke Conveyor from the Middletown Coke Company to Railcar Loadout

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>F030</b>
Company Equipment ID:	Coke Conveyor
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105639

**Facility ID:** 1409010006

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

## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 2.a), Severability Clause
  - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A. 9., Reporting Requirements
  - (5) Standard Term and Condition A. 10., Applicability
  - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A. 14., Public Disclosure
  - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A. 16., Fees
  - (10) Standard Term and Condition A. 17., Permit Transfers

**2. Severability Clause**

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

**3. 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.

#### **4. Monitoring and Related Record Keeping 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:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) 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:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Hamilton County Dept. of Environmental Services.



(2) 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 Hamilton County Dept. of Environmental Services. The written 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 A.15. below if no deviations occurred during the quarter.

(3) 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 Hamilton County Dept. of Environmental Services 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.

(4) This permit is for an emissions unit located at a Title V facility. 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.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Hamilton County Dept. of Environmental Services 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).

**6. Compliance Requirements**

a) 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.

b) 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.

c) 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:



- (1) 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.
  - (2) 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.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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.
- d) The permittee shall submit progress reports to the Hamilton County Dept. of Environmental Services 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) 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.

**7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

**8. Air Pollution Nuisance**

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

**9. 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 Hamilton County Dept. of Environmental Services.
- 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 Hamilton County Dept. of Environmental Services. 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.)

**10. 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).

**11. Construction of New Sources(s) and Authorization to Install**

- a) 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.
- b) If applicable, authorization to install any new 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 installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

**12. Permit-To-Operate Application**

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).

**13. Construction Compliance Certification**

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. 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.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

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.

**16. 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.



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**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Hamilton County Dept. of Environmental Services must be notified in writing of any transfer of this permit.

**18. 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.

**19. 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.



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## **B. Facility-Wide Terms and Conditions**



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1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.



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## **C. Emissions Unit Terms and Conditions**



**1. F030, Coke Conveyor**

**Operations, Property and/or Equipment Description:**

Coke Conveyor from Middletown Coke Company to Railcar Loadout

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 20	<p>Particulate emissions (PE) shall not exceed 1.14 tons per year (TPY) as a rolling, 12-month summation.</p> <p>Filterable particulate emissions with a diameter of 10 microns and less (PM10) shall not exceed 0.54 TPY as a rolling, 12-month summation.</p> <p>Visible particulate emissions from fugitive dust shall not exceed 10 percent opacity as a three-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).</p>
b.	OAC rules 3745-31-21 through 27	<p>Filterable particulate emissions with a diameter of 2.5 microns and less (PM2.5) shall not exceed 0.17 TPY as a rolling, 12-month summation.</p> <p>Visible particulate emissions from fugitive dust shall not exceed 10 percent opacity as a three-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).</p>
c.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 1.86 pounds per hour.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Filterable particulate emissions with a diameter of 10 microns and less (PM10) shall not exceed 0.88 pound per hour.</p> <p>Filterable particulate emissions with a diameter of 2.5 microns and less (PM2.5) shall not exceed 0.28 pound per hour.</p> <p>See b)(2)d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 thru 27 and 3745-17-08(B).</p>
d.	OAC rule 3745-17-07(B)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible emission limitation established pursuant to OAC rules 3745-31-10 through 20 and OAC rules 3745-31-21 through 27.
e.	OAC rule 3745-17-08(B)	<p>Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p> <p>See b)(2)c. and e.</p>

(2) Additional Terms and Conditions

- a. The permittee has performed a Lowest Achievable Emission Rate (LAER) review for PM2.5. The emission limitation based on the LAER requirements are listed under OAC rules 3745-31-(21) through (27) above. It has been determined that enclosure and conveying material in wet condition constitute LAER for coke being transferred by belt conveyor, and the loading of material in wet condition for the railcar and truck loading chutes constitutes LAER for the loading operations.
- b. Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that enclosure and conveying material in wet condition constitute BACT for coke being transferred by belt conveyor and the loading of material in wet condition for the railcar and truck loading chutes constitutes BACT for the loading operations. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 above.
- c. The permittee shall employ reasonably available control measures for the coke conveyor for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee has committed to convey coke in wet



condition and to maintain full enclosure of the belt conveyor at all points except for railcar and/or truck loadout.

- d. It has been determined that enclosure and conveying material in wet condition constitute Best Available Technology (BAT) for coke being transferred by belt conveyor and the loading of material in wet condition for the railcar and truck loading chutes constitutes BAT for the loading operations.
- e. The permittee shall employ good operating practices during railcar or truck loading including, but not limited to controlling the release rate of material to minimize or eliminate visible emissions of fugitive dust.
- f. The permittee shall maintain enclosures for the conveyors, and transfer points\* to minimize or eliminate visible emissions of fugitive dust to ensure compliance with the visible fugitive particulate emission limitation specified in b)(1)a. and b. of these terms and conditions.

\*All conveyor transfer points are fully enclosed except the discharge ends of the railcar loading chute and the discharge end of the truck loading chute. The coke being transferred shall be wet because it is quenched with water before it is loaded onto the conveyor.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal



operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The above-mentioned inspections shall be performed during representative, normal operating conditions.

If the daily checks show emissions that are representative of normal operation for 30 consecutive operating days, the required frequency of visible emissions checks may be reduced to weekly (once per week, when the emissions unit is in operation). If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to daily until such time as there are 30 consecutive operating days of normal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

- a. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
- b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

(2) 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 July 1-December 31, and January 1- June 30 periods.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation:

PE shall not exceed 1.14 tons per year as a rolling, 12-month summation;

filterable PM10 shall not exceed 0.54 ton per year as a rolling, 12-month summation; and

filterable PM2.5 shall not exceed 0.17 ton per year as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with fugitive PE, PM10 and PM2.5 emission limitations shall be determined by using the emission factor equations in Section 13.2.4., in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 for Miscellaneous Sources, Aggregate Handling and Storage Piles (revised 11/06). These emission limits were based on a maximum of 613,828 tons of coke transferred per year, and a 95% control efficiency for a totally enclosed conveyor and wet material as allowed by Ohio's RACM guidance document that contains Table 2.2.1-2, dated 10/80, that documents the above mentioned 95% control efficiency employed.

Emission Limitation:

PE shall not exceed 1.86 pounds per hour;

filterable PM10 shall not exceed 0.88 pound per hour; and

filterable PM2.5 shall not exceed 0.28 pound per hour.

Applicable Compliance Method:

Compliance with fugitive PE, PM10 and PM2.5 emission limitations shall be determined by using the emission factor equations in Section 13.2.4., in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 for Miscellaneous Sources, Aggregate Handling and Storage Piles (revised 11/06). Hourly emission limits were based on a maximum of 500 tons of coke transferred per hour, and a 95% control efficiency for a totally enclosed conveyor and wet material as allowed by Ohio's RACM guidance document that contains Table 2.2.1-2, dated 10/80, that documents the above mentioned 95% control efficiency employed.

g) Miscellaneous Requirements

(1) Emission Offset requirements:

Emission offsets required for emissions associated with this permit (for F030, Coke Conveyor) are included in the offset totals required by permit number P0104768, issued final on February 9, 2010, for the Middletown Coke Company, Premise No. 1409011031.

(2) The following emissions units are also part of this project:

Emissions unit description	Permits	Emissions in tons per year
New coke oven battery facility	Middletown Coke Company, Premise No. 1409011031, permit number P0104768, issued final on February 9, 2010.	PM: 168.9; PM10: 125.0; PM2.5: 112.2; SO2: 1092.5; NOx: 477.4; CO: 129.5; VOC: 31.4; Lead: 0.28; HCl: 118.0; H2SO4: 34.15; and



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		Mercury: 12.4 (pounds per year)
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