



Ohio Environmental Protection Agency
 Lazarus Government Center
 50 West Town Street, Suite 700
 P.O. Box 1049
 Columbus, Ohio 43216-1049

Application for Permit to Install (PTI) and Permit to Install/Operate (PTIO)

For EPA Use Only

Application Number _____

Facility Information

Note: Application is incomplete if all bolded questions throughout the application are not completed.

Legal Facility Name AK Steel Corporation

Alternate Name (if any) Middletown Works

Facility Physical Address 1801 Crawford Street
 Middletown 45042

City, ZIP code

County Butler

Facility ID 14-09-01-0006

Facility Description

NAICS Code 331111

Facility Latitude 39 degrees 29 minutes 49 seconds

Facility Longitude 84 degrees 23 minutes 16 seconds

Core Place ID (if known)

SCSC ID (if known)

Portable? Yes No

Portable Type Asphalt Plant Concrete Plant Generator Aggregate Processing Concrete Crusher Grinder Other

Initial Location County _____
 If "Other", describe: _____



Division of Air Pollution Control
Application for Permit-to-Install or Permit-to-Install and Operate

Section I – General Application Information

This section should be filled out for each permit to install (PTI) or Permit to Install and Operate (PTIO) application. A PTI is required for all air contaminant sources (emissions units) installed or modified after January 1, 1974 that are subject to OAC Chapter 3745-77. A PTIO is required for all air contaminant sources (emissions units) that are not subject to OAC Chapter 3745-77 (Title V). See the application instructions for additional information.

For OEPA use only:	<input type="checkbox"/> Installation	<input type="checkbox"/> Request Federally enforceable restrictions
	<input type="checkbox"/> Modification	<input type="checkbox"/> General Permit
	<input type="checkbox"/> Renewal	<input type="checkbox"/> Other

1. Is the purpose of this application to transition from OAC Chapter 3745-77 (Title V) to OAC Chapter 3745-31 (PTIO)?

yes no

2. **Establish PER Due Date** - Select an annual Permit Evaluation Report (PER) due date for this facility (does not apply to facilities subject to Title V, OAC Chapter 3745-77). If the PER has previously been established and a change is now desired, a PER Change Request form must be filed instead of selecting a date here.

<u>Due Date:</u>	<u>For Time Period:</u>
<input type="checkbox"/> February 15	January 1 through December 31
<input type="checkbox"/> May 15	April 1 through March 31
<input type="checkbox"/> August 15	July 1 through June 30
<input type="checkbox"/> November 15	October 1 through September 30

PER not applicable (Title V) or due date already established
 PER Request Permit Change form attached

3. **Federal Rules Applicability** - Please check all of the appropriate boxes below.

New Source Performance Standards (NSPS)

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

not affected subject to Subpart:
 unknown exempt - explain below

National Emission Standards for Hazardous Air Pollutants (NESHAP)

National Emissions Standards for Hazardous Air Pollutants are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

not affected subject to Subpart:
 unknown subject, but exempt - explain below

Maximum Achievable Control Technology (MACT)

The Maximum Achievable Control Technology standards are listed under 40 CFR 63 and OAC rule 3745-31-28.

not affected subject to Subpart: _____
 unknown subject, but exempt - explain below

Prevention of Significant Deterioration (PSD)

These rules are found under OAC rule 3745-31-10 through OAC rule 3745-31-20.

not affected subject to regulation
 unknown

Non-Attainment New Source Review

These rules are found under OAC rule 3745-31-21 through OAC rule 3745-31-27.

not affected subject to regulation
 unknown

112 (r) - Risk Management Plan

These rules are found under 40 CFR 68.

not affected subject to regulation
 unknown

Title IV (Acid Rain Requirements)

These rules are found under 40 CFR 72 and 40 CFR 73.

not affected subject to regulation
 unknown

8. **Authorized Signature** – OAC rule 3745-31-04 states that applications for permits to install or permits to install and operate shall be signed:
- (1) In the case of a corporation, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility.
 - (2) In the case of a partnership by a general partner.
 - (3) In the case of sole proprietorship, by the proprietor, and
 - (4) In the case of a municipal, state, federal or other governmental facility, by the principal executive officer, the ranking elected official, or other duly authorized employee.

Under OAC rule 3745-31-04, this signature shall constitute personal affirmation that all statements or assertions of fact made in the application are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

Authorized Signature (for facility) Date

Print Name Title

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. Air Contaminant Source Installation or Modification Schedule – Check all that apply (must be completed regardless of date of installation or modification):

New installation (for which construction has not yet begun, in accordance with OAC rule 3745-31-33). When will you begin to install the air contaminant source?

(month/year) _____ **OR** after installation permit has been issued

Initial application for an air contaminant source already installed or under construction. Identify installation date or the date construction began (month/year) _____ and the date operation began (month/year) _____

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

When will you begin to modify the air contaminant source? (month/year) _____ **OR** after modification permit has been issued

Modification application for an air contaminant source which has been or is currently being modified. List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

Identify modification date or the date modification began (month/year) _____ and the date operation began (month/year) _____

Reconstruction of an existing air contaminant source/facility. Please explain: _____

Renewal of an existing permit-to-operate (PTO) or PTIO

Identify the date operation began after installation or latest modification (month/year) _____

General Permit General Permit Category _____ General Permit Type _____

Complete, sign and attach the appropriate Qualifying Criteria Document

Other, please explain: _____

Section II - Specific Air Contaminant Source Information

Facility ID: _____
 Emissions Unit ID: _____
 Company Equipment ID: _____

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

2296000000

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions* (lb/hr)	Actual emissions* (ton/year)	Requested Allowable* (lb/hr)	Requested Allowable* (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	9.27	4.17	6.09	4.17	6.09
PM # 10 microns in diameter (PE/PM ₁₀)	2.28	1.02	1.50	1.02	1.50
PM # 2.5 microns in diameter (PE/PM _{2.5})					
Sulfur dioxide (SO ₂)					
Nitrogen oxides (NO _x)					
Carbon monoxide (CO)					
Organic compounds (OC)					
Volatile organic compounds (VOC)					
Lead (Pb)					
Total Hazardous Air Pollutants (HAPs)					
Highest single HAP:					
Toxic Air Contaminants (see instructions):					

* Provide your calculations as an attachment and explain how all process variables and emission factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

4. **Best Available Technology (BAT)** - For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection: BAT will consist of limiting speed on Dicks Creek Remediation Unpaved Roadways to 25 miles per hour and watering roadways twice daily, as needed

5. **Control Equipment** - Does this air contaminant source employ emissions control equipment?

- Yes - fill out the applicable information below.
 No - proceed to Question 6.

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

Select the type(s) of control equipment employed below (required data for selected control equipment in **bold**):

Pollutant abbreviations

PE/PM = Particulate emissions (formerly particulate matter) PE/PM₁₀ = PM # 10 microns in diameter
PE/PM_{2.5} = PM # 2.5 microns in diameter OC = Organic compounds
VOC = Volatile organic compounds SO₂ = Sulfur dioxide
NO_x = Nitrogen oxides CO = Carbon monoxide
Pb = Lead

Adsorber
 Manufacturer: _____ Year installed: _____ **Your ID for control equipment** _____
 Describe this control equipment: _____
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
Type: Fluidized Bed Fixed Bed Moving Bed Disposable Concentrator Other _____
Adsorption Media: _____
For Fluidized Bed, Fixed Bed, Moving Bed and Disposable only:
Maximum design outlet organic compound concentration (ppmv): _____
Media replacement frequency or regeneration cycle time (specify units): _____
Maximum temperature of the media bed, after regeneration (including any cooling cycle): _____
For Concentrator Only:
Design regeneration cycle time (minutes): _____
Minimum desorption air stream temperature (°F): _____
Rotational rate (revolutions/hour): _____
 Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm) : _____
 Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
 List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Catalytic Converter
 Manufacturer: _____ Year installed: _____ **Your ID for control equipment** _____
 Describe this control equipment: _____
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
 List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Catalytic Incinerator
 Manufacturer: _____ Year installed: _____ **Your ID for control equipment** _____
 Describe this control equipment: _____
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
Combustion chamber residence time (seconds): _____
Minimum temperature difference (°F) across catalyst during air contaminant source operation: _____
 Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm) : _____
Minimum inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Condenser
 Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
 Describe this control equipment:
 Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
 Estimated capture efficiency (%): _____ Basis for efficiency: _____
 Design control efficiency (%): _____ Basis for efficiency: _____
 Operating control efficiency (%): _____ Basis for efficiency: _____
 Type: Indirect contact Direct contact Freeboard refrigeration device Other: _____
 Maximum exhaust gas temperature (°F) during air contaminant source operation: _____
 Coolant type: _____
 Design coolant temperature (°F): Minimum _____ Maximum _____
 Design coolant flow rate (gpm): _____
 Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____
 Inlet gas temperature (°F): _____
 This is the only control equipment on this air contaminant source
 If not, this control equipment is: Primary Secondary Parallel
 List all other air contaminant sources that are also vented to this control equipment: _____
 List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Cyclone/Multiclone
 Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
 Describe this control equipment:
 Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
 Estimated capture efficiency (%): _____ Basis for efficiency: _____
 Design control efficiency (%): _____ Basis for efficiency: _____
 Operating control efficiency (%): _____ Basis for efficiency: _____
 Type: Simple Multiclone Rotoclone Other _____
 Operating pressure drop range (inches of water): Minimum: _____ Maximum: _____
 Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____
 This is the only control equipment on this air contaminant source
 If not, this control equipment is: Primary Secondary Parallel
 List all other air contaminant sources that are also vented to this control equipment: _____
 List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Dry Scrubber
 Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
 Describe this control equipment:
 Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
 Estimated capture efficiency (%): _____ Basis for efficiency: _____
 Design control efficiency (%): _____ Basis for efficiency: _____
 Operating control efficiency (%): _____ Basis for efficiency: _____
 Reagent(s) used: Type: _____ Injection rate(s): _____
 Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____
 Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____
 This is the only control equipment on this air contaminant source
 If not, this control equipment is: Primary Secondary Parallel
 List all other air contaminant sources that are also vented to this control equipment: _____
 List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Electrostatic Precipitator
 Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
 Describe this control equipment:
 Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

SO2 NOx CO Pb Other

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Dry Wet Other: _____

Number of operating fields: _____

Secondary voltage (V) range (minimum - maximum): _____

Secondary current (milliamps) range (minimum - maximum): _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fabric Filter/Baghouse

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM10 PE/PM2.5 OC VOC SO2 NOx CO Pb Other

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Operating pressure drop range (inches of water): Minimum: _____ Maximum: _____

Pressure type: Negative pressure Positive pressure

Fabric cleaning mechanism: Reverse air Pulse jet Shaker Other

Bag leak detection system: Yes No Type: _____

Lime injection or fabric coating agent used: Type: _____ Feed rate: _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Flare

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM10 PE/PM2.5 OC VOC SO2 NOx CO Pb Other

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Enclosed Elevated (open)

If Elevated (open): Air-assisted Steam-assisted Non-assisted

Ignition device: Electric arc Pilot flame

Flame presence sensor: Yes No

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fugitive Dust Suppression

Suppressant Type: Water Chemical Calcium chloride Asphaltic cement Other

Method of application: Watering Truck

Application rate (specify units): _____

Application frequency: Twice per day, as needed

List all egress point IDs (from Table 7-B) associated with this control strategy: Road-Fug

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

NOx Reduction Technology
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
Describe this control equipment:
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
NOx Reduction Type: Selective Catalytic Non-Selective Catalytic Selective Non-Catalytic
Inlet temp.: _____ **Outlet temp.:** _____
Inlet gas flow rate (acfm): _____
For Selective types only:
Reagent type: _____
Reagent injection rate (specify units): _____
Reagent slip (acfm): _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Passive Filter
Type: Bin vent Paint booth filter Filter sock Other: _____ **Your ID for filter** _____
Design control efficiency (%): _____ Basis for efficiency: _____
Change frequency: _____
Inlet gas flow rate (acfm): _____ **Outlet gas flow rate (acfm):** _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Settling Chamber
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
Describe this control equipment:
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
Length x Width x Height: _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Thermal Incinerator/Thermal Oxidizer
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
Describe this control equipment:
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
Minimum operating temp. (°F) and sensor location: _____ (See application instructions)
Combustion chamber residence time (seconds): _____
Inlet gas flow rate (acfm): _____ **Outlet gas flow rate (acfm):** _____
Inlet gas temperature (°F): _____ **Outlet gas temperature (°F):** _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

Wet Scrubber
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
Describe this control equipment:
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
Operating pressure drop range (inches of water): Minimum: _____ Maximum: _____
Type: Impingement Packed bed Spray chamber Venturi Other: _____
pH range for scrubbing liquid: Minimum: _____ Maximum: _____
Is scrubber liquid recirculated? Yes No
Scrubber liquid flow rate (gal/min): _____
Scrubber liquid supply pressure (psig): _____ NOTE: This item for spray chambers only.
Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm) : _____
Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Other
Type: describe _____
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____
Describe this control equipment:
Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____
Estimated capture efficiency (%): _____ Basis for efficiency: _____
Design control efficiency (%): _____ Basis for efficiency: _____
Operating control efficiency (%): _____ Basis for efficiency: _____
 This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary Secondary Parallel
List all other air contaminant sources that are also vented to this control equipment: _____
List all egress point IDs (from Table 7-A) associated with this control equipment: _____

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
7. **Modeling information:** (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required.) An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.

Complete Tables 7-A and 7-C for stack emissions egress points and/or Table 7-B and 7-C for fugitive emissions egress points below if the requested allowable annual emission rate for this PTI or PTIO exceeds any of the following:

- Particulate Emissions (PE/PM₁₀): 10 tons per year
- Sulfur Dioxide (SO₂): 25 tons per year
- Nitrogen Oxides (NO_x): 25 tons per year
- Carbon Monoxide (CO): 100 tons per year
- Lead (Pb): 0.6 ton per year
- Toxic Air Contaminants: 1 ton per year. Toxic air contaminants are identified in OAC rule 3745-114-01.

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

Complete Table 7-A below for each stack emissions egress point. An egress point is a point at which emissions from an air contaminant source are released into the ambient (outside) air. List each individual egress point on a separate pair of lines. In each case, use the dimensions of the tallest nearby (or attached) building, building segment or structure.

Table 7-A, Stack Egress Point Information

① Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

② Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

③ Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

④ Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

*Type codes for stack egress points:

- A. vertical stack (unobstructed): There are no obstructions to upward flow in or on the stack such as a rain cap.
- B. vertical stack (obstructed): There are obstructions to the upward flow, such as a rain cap, which prevents or inhibits the air flow in a vertical direction.
- C. non-vertical stack: The stack directs the air flow in a direction which is not directly upward.

Section II - Specific Air Contaminant Source Information

Facility ID: _____
 Emissions Unit ID: _____
 Company Equipment ID: _____

Complete Table 7-B below for each fugitive emissions egress point. List each individual egress point on a separate line. Refer to the description of the fugitive egress point types below the table for use in completing the type column of the table. For an air contaminant source with multiple fugitive emissions egress points, include only the primary egress points.

Table 7-B, Fugitive Egress Point Information			
1 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100° F) (° F)	Minimum Distance to the Fence Line (ft)
2 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100° F) (° F)	Minimum Distance to the Fence Line (ft)
3 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100° F) (° F)	Minimum Distance to the Fence Line (ft)

*Types for fugitive egress point:

Area: an open fugitive source characterized as a horizontal area (L x W) with a release height. For irregular surfaces such as storage piles, enter dimensions of an average cross section; release height is entered as half of the maximum pile height. For process sources such as crushers, use the process opening (e.g., area of crusher hopper opening) and ignore material handling and storage emissions points.

Volume: an unpowered vertical opening, such as a window or roof monitor, characterized as a vertical area (W x H) with a release height, measured at the midpoint of the opening. Multiple openings in a building may be averaged, if necessary.

Use the same Company Name or ID for the Egress Point in Table 7-C that was used in Table 7-A or 7-B. See the line-by-line PTI/PTIO instructions for additional information.

Table 7-C, Egress Point Location						
Company Name or ID for the Egress Point (as identified above)	Egress Point Latitude			Egress Point Longitude		
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec

Section II - Specific Air Contaminant Source Information

Facility ID: _____
Emissions Unit ID: _____
Company Equipment ID: _____

8. Request for Enforceable Restrictions - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting state-only enforceable limits or state and federally enforceable limits to obtain synthetic minor status)?

- yes
- no
- not sure - please contact me to discuss whether this affects the facility.

If yes, why are you requesting enforceable restrictions? Check all that apply.

- a. to avoid being a major Title V source (see OAC rule 3745-77-01 and OAC rule 3745-31)
- b. to avoid being a major MACT source (see OAC rule 3745-31-01)
- c. to avoid being a major stationary source (see OAC rule 3745-31-01)
- d. to avoid being a major modification (see OAC rule 3745-31-01)
- e. to avoid an air dispersion modeling requirement (see Engineering Guide # 69)
- f. to avoid BAT requirements (see OAC rule 3745-31-05(A)(3)(b))
- g. to avoid another requirement. Describe: _____

If you checked a., b. or c., please attach a facility-wide potential to emit (PTE) analysis (for each pollutant) and synthetic minor strategy to this application. (See application instructions for definition of PTE.) If you checked d., please attach a net emission change analysis to this application. If you checked e., f. or g., please attach a description of the restrictions proposed and how compliance with those restrictions will be verified.

9. Continuous Emissions Monitoring – Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

- yes
- no

If yes, complete the following information.

Company Name or ID for the Egress Point _____

CEM Description _____

This CEM monitors (check all that apply):

Opacity Flow CO NOx SO₂ THC HCl HF H₂S TRS CO₂ O₂ PM

10. **EAC Forms** - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source unless a general permit is being requested. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

3111