

**PTI/PTIO Application A0037951**  
**Middletown Coke Company**  
**1409011031**  
**July 17, 2009**

By transmitting this document using this Personal Identification Number (PIN), I certify that:

- (1) I have been authorized by Ohio EPA to use this PIN;
- (2) I am aware of the requirements of my PIN Subscriber Agreement and it is my belief that I am using this PIN in accordance with my Subscriber Agreement;
- (3) I reviewed, or had the opportunity to review, the electronic version of the document, request or delegation I am transmitting the document, request or delegation knowingly;
- (4) I am without information leading me to believe that the confidentiality of my PIN and/or password have been compromised now or at any time prior to this submission; and
- (5) I understand that I may be subject to civil and criminal liability for falsely certifying.

By transmitting this document using this Personal Identification Number (PIN), I further certify that:

- 1) If the transmitted document is a change to the facility profile and/or a change to the facility contact information only, that I am an employee of the company that owns the facility identified in this document; or
- 2) If the transmitted document is a permit application, permit modification request, or permit re-opening request for a facility subject to OAC Chapter 3745-77 (Title V) that:
  - a) I am a Responsible Official as defined in OAC rule 3745-77-01(GG); and
  - b) Based on information and belief formed after reasonable inquiry, the statements and information as transmitted in this application or request are true, accurate and complete to the best of my knowledge; or
- 3) If transmitted document is an emissions report for a facility subject to OAC Chapter 3745-77 (Title V) that:
  - a) I am a Responsible Official as defined in OAC rule 3745-77-01(GG); and
  - b) Based on information and belief formed after reasonable inquiry, the statements and information contained within this transmitted document is true and complete to the best of my knowledge and that all estimates and judgments relating to such information have been made in good faith.
- 4) If this submission is a permit application or permit modification request for a facility subject to OAC Chapter 3745-31 that:
  - a) I am a person identified in OAC rule 3745-31-04(B) as authorized to sign this document and therefore to (as an equivalent act) electronically transmit this document using this PIN; and
  - b) all statements or assertions of fact made in this application are true and complete, comply fully with applicable state requirements, and subject me to liability under applicable state laws forbidding false or misleading statements.
- 5) If this transmitted document is an emissions report for a Synthetic Minor facility subject to OAC Chapter 3745-31 and required to report emissions for emission fees required pursuant to ORC division 3745.11(D) that:
  - a) I, am the owner or operator of a source subject to OAC Chapter 3745-78 or person authorized to sign; and
  - b) Based on information and belief formed after reasonable inquiry, the statements and information contained within this transmitted document is true and complete to the best of my knowledge and that all estimates and judgments relating to such information have been made in good faith.

Account: MikeThomson

Date/time submitted: Jul 17 2009, 05:44:09

Application for Permit-to-Install or Permit-to-Install and Operate

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 checked="" 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. Please summarize the reason for this permit application. This text will be in the public notice that will appear in the newspaper of the county where the facility is located.

Heat Recovery Coke Plant - 100 Ovens.

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

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.

PER not applicable (Title V) or due date already established

3. **Federal Rules Applicability**

**New Source Performance Standards (NSPS)**

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

Subject to subpart:

- Y - Coal Preparation Plants

**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

**Maximum Achievable Control Technology (MACT)**

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

Subject to subpart:

- CCCCC - Coke Ovens: Pushing, Quenching, and Battery Stacks
- L - Coke Oven Batteries

**Prevention of Significant Deterioration (PSD)**

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

Subject to Regulation

**Non-Attainment New Source Review**

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

Subject to Regulation

**112 (r) - Risk Management Plan**

These rules are found under 40 CFR 68.

Not affected

**Title IV (Acid Rain Requirements)**

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

Not affected

4. **Express PTI/PTIO** - Do you qualify for express PTI or PTIO processing?

No

5. **Air Contaminant Sources in this Application** - Identify the air contaminant source(s) for which you are applying below. Attach additional pages if necessary. Section II of this application and an EAC form should be completed for each air contaminant source.

Emissions Unit ID	Company Equipment ID (company's name for	Equipment Description (List all equipment that
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	air contaminant source)	are a part of this air contaminant source)
F001	Paved Roads	
F002	Storage Piles	
F003	Coal Handling	
F004	Coke Handling	
P001	Quench Tower	
P901	Coke Battery	

*The Emissions Unit ID would have been created when a previous air permit was issued. If no previous permits have been issued for this air contaminant source, leave this field blank. If this air contaminant source was previously identified in STARShip applications as a Z source (e.g., Z001), please provide that identification and a new ID will be assigned when the PTI/PTIO is issued.*

6. **Trade Secret Information** - Is any information included in this application being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?

Yes

7. **Permit Application Contact** - Person to contact for questions about this application:

Delauna Pack

Name	Title	
11400 Parkside Drive	Knoxville, TN	37934
Street Address	City/Township, State	Zip Code
8652885200		
Phone	Fax	E-mail

8. **Application Attachments**

Description	Type	EAC Form Type	Public Document Id
Appendix F - Dispersion Modeling Files- CO Case 2D	Other		287967
Appendix F - Dispersion Modeling Files- Case 2D 24 hr NOx and SO2	Other		287965
Appendix F - Dispersion Modeling Files- PM10 Case 3D All Receptors	Other		287970
Appendix F - Dispersion Modeling files Hg and HCl	Other		287968
Appendix F - Dispersion Modeling - Aermet CVG files	Other		287973
Appendix F - Dispersion Modeling files case 2D CO	Other		285734
Appendix F - Dispersion Modeling 3 hr SO2	Other		287971
Appendix A - SD Maintenance Recommendations	Permit application attachments and supplements		285733
MCC Permit Application July 2009	General permit qualifying criteria		287983
Appendix F - Dispersion Modeling files Nomenclature	Other		285732
MCC Cover Letter July 2009	Other		287982
BACT Backup Information	Permit		285743

Confidential	application attachments and supplements		
preliminary completeness letter	Other		285742
BACT Backup Information Public	Permit application attachments and supplements		285748
Cover Letter	Other		285749
Appendix E - Compliance Assurance Monitoring Plan	General permit qualifying criteria		287949
Appendix F - Dispersion Modeling Files- PM10 Case 3D plus Inventory	Other		287955
Appendix F - Dispersion Modeling files case 3D PM10 SO2	Other		287957
Appendix F - Dispersion Modeling files case 3D PM10 24hr	Other		287959
Appendix F - Dispersion Modeling - Aersurface files	Other		287961
Appendix F - Dispersion Modeling Files- PM10 Case 2D	Other		287962
Appendix D - BACT Backup Information	Permit application attachments and supplements		286077
Appendix F - Dispersion Modeling Files- Case 3D NOx and CO	Other		287963
Appendix C - Supporting Calculations	Calculations		286003
Appendix C - Dispersion Modeling Calculations	Calculations		287840

**Section II - Specific Air Contaminant Source Information**

**Facility ID:** 1409011031

**Emissions Unit ID:** F001

**Company Equipment ID:** Paved Roads

*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?  
after installation permit has been issued

**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).

See Facility Profile

**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)	0	0	1.08	0	1.08
PM # 10 microns in diameter (PE/PM10)	0	0	0.21	0	0.21
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	0.05	0	0.05
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0
Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0

Highest single HAP	0	0	0	0	0
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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:

Paved roads and watering as needed.

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Paved Roads	Process flow diagram		285764

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 Ohios Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
F001 Paved Roads	EAC	3111 Roadways and Parking Areas (2003)	285763

**Section II - Specific Air Contaminant Source Information**

**Facility ID:** 1409011031

**Emissions Unit ID:** F002

**Company Equipment ID:** Storage Piles

*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?  
 after installation permit has been issued

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).

See Facility Profile

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)	0	0	7.51	0	7.51
PM # 10 microns in diameter (PE/PM10)	0	0	3.64	0	3.64
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	1.29	0	1.29
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0
Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0

Highest single HAP	0	0	0	0	0
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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:

See Attachment: Middletown Coke Company Permit to Install.

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coal Processing	Process flow diagram		285765
Coke Processing	Process flow diagram		285767

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, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
F002 Coal and Coke Storage Piles	EAC	3112 Storage Piles (2003)	285766

**Section II - Specific Air Contaminant Source Information**

Facility ID: 1409011031

Emissions Unit ID: F003

Company Equipment ID: Coal Handling

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?  
after installation permit has been issued

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).

See Facility Profile

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)	0	0	3.47	0	3.47
PM # 10 microns in diameter (PE/PM10)	0	0	1.66	0	1.66
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	0.52	0	0.52
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0
Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0

Highest single HAP	0	0	0	0	0
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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:

See Attachment: Middletown Coke Company Application Permit to Install

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coal Processing	Process flow diagram		285761

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, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coal Material Handling	EAC	3113 Material Handling (2003)	285780

**Section II - Specific Air Contaminant Source Information**

**Facility ID:** 1409011031

**Emissions Unit ID:** F004

**Company Equipment ID:** Coke Handling

*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?  
 after installation permit has been issued

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).

See Facility Profile

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)	0	0	18.60	0	18.60
PM # 10 microns in diameter (PE/PM10)	0	0	16.71	0	16.71
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	15.55	0	15.55
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0
Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0

Highest single HAP	0	0	0	0	0
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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:

See Attachment: Middletown Coke Company Application Permit to Install

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coke Processing	Process flow diagram		285757

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, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coke Material Handling	EAC	3113 Material Handling (2003)	285758

**Section II - Specific Air Contaminant Source Information**

**Facility ID:** 1409011031

**Emissions Unit ID:** P001

**Company Equipment ID:** Quench Tower

*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?  
 after installation permit has been issued

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).

See Facility Profile

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)	0	60.00	54.75	60.00	54.75
PM # 10 microns in diameter (PE/PM10)	0	22.00	20.08	22.00	20.08
PM # 2.5 microns in diameter (PE/PM2.5)	0	13.50	12.32	13.50	12.32
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0
Lead (Pb)	0	0.05	0.05	0.05	0.05
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0

Highest single HAP	0	0	0	0	0
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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:

See Attachment: Middletown Coke Company Application Permit to Install

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coke Plant Processes	Process flow diagram		285769

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 Ohios Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
P001 Quenching	EAC	3100 Process operation (2003)	285768

**Section II - Specific Air Contaminant Source Information**

Facility ID: 1409011031

Emissions Unit ID: P901

Company Equipment ID: Coke Battery

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?  
after installation permit has been issued

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).

See Facility Profile

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)	0	0	83.55	0	83.55
PM # 10 microns in diameter (PE/PM10)	0	0	82.69	0	82.69
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	82.50	0	82.50
Sulfur dioxide (SO2)	2492	0	1152.29	0	1152.29
Nitrogen oxides (NOx)	0	0	477.42	0	477.42
Carbon monoxide (CO)	0	0	129.49	0	129.49
Organic compounds (OC)	0	0	31.35	0	31.35
Volatile organic compounds (VOC)	0	0	31.35	0	31.35
Lead (Pb)	0.570	0	0.23	0	0.23
Total Hazardous Air Pollutants (HAPs)	0	0	121.64	0	121.64

Highest single HAP	0	0	118.04	0	118.04
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Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Hydrochloric Acid (Hydrogen Chloride)	0	0	118.04	0	118.04
Sulfuric Acid	91.50	0	15.25	0	15.25

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:

See Attachment: Middletown Coke Company Application Permit to Install

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

See Facility Profile

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
Coke Plant Processes	Process flow diagram		285756

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, DAPCs 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.

See Facility Profile

8. **Request for Federally Enforceable Limits** - 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 federally enforceable limits to obtain synthetic minor status)?

No

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.

See Facility Profile

10. **EAC Forms** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. 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.

Process Flow Diagrams:

Description	Type	EAC Form Type	Public Document Id
P901 Coke Manufacturing	EAC	3115 Coke Manufacturing	285755

