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**SECTION 4**

**Battery 1B Combustion Stack**

PA-65-00853A

OFFICIAL FILE COPY

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF AIR QUALITY

COMBUSTION

Submit in Triplicate

Application for Plan Approval to Construct, Modify or  
Reactivate an Air Contamination Source and/or Air Cleaning Device

Section A - Identity and Location of Air Contamination Source

1A. Application is being made for:		OFFICIAL USE ONLY	
<input type="checkbox"/> Construction of New Source <input type="checkbox"/> Reactivation of a Source <input checked="" type="checkbox"/> Modification of Existing Source <input type="checkbox"/> Installation of Air Cleaning Device <input type="checkbox"/> Amendment to a Previous Application Previous Application No. _____ <input type="checkbox"/> Other _____		Application No. _____ Plant Code _____ Unit ID _____ Date Received _____ Reviewed By _____  Potential Emissions (TPY) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____  Actual Emissions (TPY) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____  Change in Actual Emissions (+ or -) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____	
1B. Type of source <b>COMBUSTION STACK - UNDERFIRE</b>			
1C. Plant in which source is located			
<input type="checkbox"/> NEW <input checked="" type="checkbox"/> EXISTING			
1D. If source is new, does it replace another source		1E. Expected date of completion	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		NA	
2A. Owner of source <b>KOPPERS INDUSTRIES, INC., MONESSEN COKE PLANT</b>		2B. Employer I.D. No. (Federal IRS No.) <b>25-1588399</b>	
3A. Owners designation of source and /or plant if any <b>BATTERY 1B COMBUSTION STACK. THE APPLICATION WILL ONLY ADDRESS EMISSIONS OF NOX AND VOC SINCE THESE POLLUTANTS ARE ADDRESSED IN THE RACT PERMIT.</b>		3B. Location of source (Street address or Route No.) <b>345 DONNER AVENUE MONESSEN, PA 15062</b>	
		Political Subdivision      County (Township, etc.) <b>MONESSEN      WESTMORELAND</b>	
3C. Mailing address (Street or P.O. Box, City, Zip Code) <b>345 DONNER AVENUE MONESSEN, PENNSYLVANIA 15062</b>		3D. Telephone No. <b>724-684-1009</b>	
4A. Person to contact regarding this Application (name and title) <b>GREGORY SHAMITKO</b>		4B. Mailing address (Street, P.O. Box, City State Zip Code) <b>345 DONNER AVENUE MONESSEN, PENNSYLVANIA 15062</b>	
		4C. Telephone No. <b>724-684-1009</b>	
5. Official signing application must be an agent of the Company having primary responsibilities for operation of the for operation of the facility to which this application applies. Although he may not have participated in the design of the facility he should be responsible for approval of the design.			

AFFIDAVIT

I, RICHARD JAMES BURKHART, being duly sworn according to law depose and say that I am the official have in primary responsibility for the design and operation of the facilities to which this application applies and that the information included in the foregoing application is true to the best of my knowledge, information and belief.

Sworn to and subscribed before me this 3rd day of February 2003.

Ella L. Watkins  
Notarial Seal  
Ella L. Watkins, Notary Public  
Monessen, Westmoreland County  
My Commission Expires Nov. 24, 2003

R.J. Burkhart  
Signature  
PLANT MANAGER

Section B.2 - Combustion Units Information

1. COMBUSTION UNITS		
A. Manufacturer <b>AMERICAN BRIDGE</b>	B. Model No. <b>KOPPERS - BECKERS</b>	C. No. of Units <b>1</b>
D. Rated heat input (Btu/hr) <b>~ 134 MMBTU/HR</b>	E. Peak heat input (Btu/hr)	F. Use <b>UNDERFIRING</b>
G. Method firing <b>SEQUENTIALLY</b>		

2. FUEL REQUIREMENTS

TYPE	QUANTITY HOURLY	ANNUALLY	SULFUR	% ASH (WEIGHT)	BTU CONTENT
OIL NUMBER _____	GPH @ 60 °F	x 10 <sup>3</sup> Gal.	% by wt.		Btu/Gal. & lbs/Gal. @ 60°F
NATURAL GAS	SCFH	x 10 <sup>6</sup> SCF	gr/100 SCF		Btu/SCF
GAS (OTHER) _____	SCFH	x 10 <sup>6</sup> SCF	gr/100 SCF		Btu/SCF
COAL _____	TPH	Tons	% by wt.		Btu/lb.
OTHER <b>COG</b>	<b>~ 245,000 scf/hr</b>	<b>~ 2,200 mmcf/yr</b>	<b>45 gr/100 scf</b>	<b>Trace</b>	<b>~ 490-550 BTU/SCF</b>

3. COMBUSTION AIDS, CONTROLS, AND MONITORS

<input type="checkbox"/> A. Oven fire jets <b>NA</b>	Type	Number	Height above grate
<input type="checkbox"/> B. Draft controls <b>NA</b>	Type		
<input type="checkbox"/> C. Oil preheat <b>NA</b>			
<input type="checkbox"/> D. Soot cleaning <b>NA</b>	Temperature (°F)	Frequency	
<input type="checkbox"/> E. Stack sprays <b>NA</b>	Method		
<input type="checkbox"/> F. Opacity monitoring device <b>NA</b>		Method	Cost
<input checked="" type="checkbox"/> G. Sulfur oxides monitoring device <b>H2S Monitor</b>	Type <b>Tutweiler</b>	Method	Cost
<input type="checkbox"/> H. Nitrogen oxides monitoring device <b>NA</b>	Type	Method	Cost
<input type="checkbox"/> I. Fuel metering and/or recording devices <b>NA</b>	Type	Method	Cost
<input type="checkbox"/> J. Atomization interlocking device <b>NA</b>	Type	Method	Cost
<input type="checkbox"/> K. Collected flyash re entrainment preventative device <b>NA</b>	Type		
<input type="checkbox"/> L. Modulation controls  <input type="checkbox"/> Step <input type="checkbox"/> Automatic			

4.  Flyash reinjection      Describe Operation  
**NA**

5. Describe method of supplying make up air to the furnace room.

**NA**

Section B.2 - Combustion Units Information, Continued

6. OPERATING SCHEDULE

24 hours/day

7 days/week

52 weeks/year

7. SEASONAL PERIODS (MONTHS) ALL YEAR ROUND

Operating using primary fuel \_\_\_\_\_ to \_\_\_\_\_

Operating using secondary fuel \_\_\_\_\_ to \_\_\_\_\_

Non-operating \_\_\_\_\_ to \_\_\_\_\_

8. If heat input is in excess of 250 x 10<sup>6</sup> Btu/hr., describe fully the facilities provided to record the following: rate of fuel burned; heating value; sulfur and ash content of fuels; smoke, sulfur oxides and nitrogen oxides emissions; and if electric generating plant, the average electrical output and the minimum and maximum hourly generation rate.

NA

9. Describe modification to boiler in detail.

**AS DESCRIBED IN THE COVER LETTER, KH IS RENEWING THE RACT PERMIT, WHICH EXPIRES ON MARCH 20, 2003. THE RACT PERMIT IMPOSES BOTH HOURLY AND ANNUAL EMISSIONS LIMITATIONS FOR NOX AND VOC. KH WISHES TO REVISE THESE LIMITS BASED ON A STATISTICAL ANALYSIS USING STACK TESTING DATA FROM 1996 TO PRESENT. REFER TO ATTACHMENT 1 WHICH CONTAINS THE STATISTICAL ANALYSIS REPORT.**

10. Type and method of disposal of all waste materials generated by this boiler.

(Is a Solid Waste Disposal Permit needed?  YES  NO )

NA

11. Briefly describe the method of handling the waste water from this boiler and its associated air pollution control equipment.

(Is a Water quality Management Permit needed?  YES  NO )

NA

12. Attach any and all additional information necessary to perform a thorough evaluation of this boiler.

NA

*Section D - Flue and Air Contaminant Emission Information*

1. STACK AND EXHAUSTER

A. Exhauster (attach fan curves) \_\_\_\_\_ in w.g. \_\_\_\_\_ HP @ \_\_\_\_\_ RPM

B. Stack height above grade (ft) **210** C. Stack diameter (ft) **11.25** D. Weather Cap  YES  NO

E. Indicate on an attached sheet the location of sampling ports with respect to exhaust fan, breeching, etc. Give all necessary dimensions.

**FOUR 90 DEGREE OPPOSED SAMPLING PORTS. TEST PORTS LOCATED 61 FEET DOWNSTREAM NEAREST DISTURBANCE AND 100 FEET UPSTREAM NEAREST DISTURBANCE**

F. Can the control equipment be bypassed: (If Yes, explain)  YES  NO

NA

2. ATMOSPHERIC EMISSIONS

A. Particulate matter emissions (lbs/hr or gr/SCF Dry)  
**NA - Application for NOx and VOC limits only**

B. Gaseous contaminant emissions

Contaminants	Concentration	
(1) <b>NOx</b> _____ ppm (Vol.) _____	_____ lbs/hr	<b>159.1 lb/hr, maximum</b>
(2) <b>VOC</b> _____ ppm (Vol.) _____	_____ lbs/hr	<b>84.5 lb/hr, maximum</b>
(3) _____ ppm (Vol.) _____	_____ lbs/hr	

C. Outlet volume of exhaust gases

@ \_\_\_\_\_ **~ 36,400** CFM (Standard)  
 \_\_\_\_\_ **~ 582** °F  
 \_\_\_\_\_ **~ 17** % Moisture

*Section E - Miscellaneous Information*

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1. Describe fully facilities to monitor and record the emission of air contaminants. Provide detailed information to show that the facilities provided are adequate. Include cost and maintenance information. Periodic maintenance reports are to be submitted to the Department.

**ANNUAL STACK TEST**

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2. Attach Air Pollution Episode Strategy (if applicable)

NA

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3. The following requirements are applicable only to construction of a new source.

a. Briefly describe the nature of the area in which the proposed source is located. Attach a copy of the appropriate portion of the quadrangle map (7 1/2' scale) published by the U.S. Geological Survey and identify the location of proposed source.

NA

b. Demonstrate that the establishment of the new source is justifiable as a result of necessary economic or social development.

NA

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4. Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of Article III of the rules and regulations of the Department of Environmental Resources and those requirements promulgated by the Administrator of the United States Environmental Protection Agency pursuant to the provisions of the Clean Air Act.

**REFER TO ADDENDUM A FOLLOWING THIS FORM.**

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5. List all attachments made to this Application.

**REFER TO TABLE OF CONTENTS OF PACKAGE**

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**Pennsylvania Department of Environmental Protection**  
**Bureau Of Air Quality**  
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**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.

Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID: \_\_\_\_\_
- A single source, Unit ID: Battery 1B Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 65-000-853

**This plan approval (Condition 6 & 7) imposes the following NOx and VOC emission limitations for the unit:**

NOx	60.7 lb/hr	286 tpy
VOC	0.3 lb/hr	1.0 tpy

**KII wishes to revise these limits as follows:**

NOx	159.1 lb/hr	454 tpy
VOC	84.5 lb/hr	139 tpy

**These proposed limits were derived using testing data from 1996 to present and using a statistical approach to derive limits. The hourly limits are the upper bound of the range expected if a next reading is taken at a 99% confidence interval. The annual limits are the upper bound of range expected to contain the mean value of the infinite parent population.**

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

**Method of Compliance Type:** (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?

\_\_\_\_\_  
\_\_\_\_\_

4. How will data be reported? \_\_\_\_\_

\_\_\_\_\_



**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

- 1. Reference Test Method Description: NOx - USEPA Method 7E  
VOC - USEPA Method 18 and 25A
- 2. Reference Test Method Citation: See above

**Condition 8 requires annual testing of this unit. Condition 9 requires all testing to be performed in accordance with 25 PA 139 and the PADEP Source Testing Manual. Condition 10 requires a pre-test protocol at 60 days in advance. Condition 11 requires notification to PADEP two weeks in advance performance test. Condition 12 requires two copies of stack test results to be submitted within 60 days of completion of the test.**

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

- 1. Describe what is to be reported and the frequency of reporting:

Annual emission statements, in accordance with 25 PA 135.21, will be submitted to demonstrate compliance with the annual emission limitations. KII will develop an average emission factor using all testing data to calculate annual emissions.

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- 2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

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**Pennsylvania Department of Environmental Protection**  
**Bureau Of Air Quality**

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**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.  
 Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID \_\_\_\_\_
- A single source, Unit ID: Battery 1B Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 65-305-048

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

**Method of Compliance Type:** (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?

\_\_\_\_\_  
 \_\_\_\_\_

4. How will data be reported? \_\_\_\_\_  
 \_\_\_\_\_

**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

- 1. Reference Test Method Description: NOx - USEPA Method 7E  
VOC - USEPA Method 18 and 25A
- 2. Reference Test Method Citation: See above

**Condition 15 requires annual testing of this unit. Condition 16 requires all testing to be performed in accordance with 25 PA 139 and the PADEP Source Testing Manual. Condition 17 requires a pre-test protocol at 60 days in advance. Condition 18 requires notification to PADEP two weeks in advance performance test. Condition 20 requires two copies of stack test results to be submitted within 60 days of completion of the test.**

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

1. Describe what is to be reported and the frequency of reporting:

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2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

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**Pennsylvania Department of Environmental Protection  
Bureau Of Air Quality**

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**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.

Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID \_\_\_\_\_
- A single source, Unit ID: Battery 1B Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 25 PA 129.91-129.95

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations: \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?

\_\_\_\_\_  
\_\_\_\_\_

4. How will data be reported? \_\_\_\_\_  
\_\_\_\_\_

**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

1. Reference Test Method Description: \_\_\_\_\_  
\_\_\_\_\_
2. Reference Test Method Citation: \_\_\_\_\_  
\_\_\_\_\_

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

1. Describe what is to be reported and the frequency of reporting:

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2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

**RACT proposal submitted to PADEP June 1994, in accordance with this rule.**

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**SECTION 5**

**Battery 2 Combustion Stack**

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF AIR QUALITY

COMBUSTION

Submit in Triplicate

Application for Plan Approval to Construct, Modify or  
Reactivate an Air Contamination Source and/or Air Cleaning Device

Section A - Identity and Location of Air Contamination Source

1A. Application is being made for:		OFFICIAL USE ONLY	
<input type="checkbox"/> Construction of New Source <input type="checkbox"/> Reactivation of a Source <input checked="" type="checkbox"/> Modification of Existing Source <input type="checkbox"/> Installation of Air Cleaning Device <input type="checkbox"/> Amendment to a Previous Application Previous Application No. _____ <input type="checkbox"/> Other _____		Application No. _____ Plant Code _____ Unit ID _____ Date Received _____ Reviewed By _____  Potential Emissions (TPY) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____  Actual Emissions (TPY) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____  Change in Actual Emissions (+ or -) PM _____ SO <sub>2</sub> _____ VOC _____ NO <sub>x</sub> _____ CO _____ Other _____	
1B. Type of source <b>COMBUSTION STACK - UNDERFIRE</b>			
1C. Plant in which source is located			
<input type="checkbox"/> NEW <input checked="" type="checkbox"/> EXISTING			
1D. If source is new, does it replace another source		1E. Expected date of completion	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		NA	
2A. Owner of source <b>KOPPERS INDUSTRIES, INC., MONESSEN COKE PLANT</b>		2B. Employer I.D. No. (Federal IRS No.) <b>25-1588399</b>	
3A. Owners designation of source and /or plant if any <b>BATTERY 2 COMBUSTION STACK. THE APPLICATION WILL ONLY ADDRESS EMISSIONS OF NOX AND VOC SINCE THESE POLLUTANTS ARE ADDRESSED IN THE RACT PERMIT.</b>		3B. Location of source                      Political Subdivision                      County (Street address or Route No.)           (Township, etc.) <b>345 DONNER AVENUE                      MONESSEN                      WESTMORELAND</b> <b>MONESSEN, PA 15062</b>	
3C. Mailing address (Street or P.O. Box, City, Zip Code) <b>345 DONNER AVENUE MONESSEN, PENNSYLVANIA 15062</b>		3D. Telephone No. <b>724-684-1009</b>	
4A. Person to contact regarding this Application (name and title) <b>GREGORY SHAMITKO</b>		4B. Mailing address (Street, P.O. Box, City State Zip Code) <b>345 DONNER AVENUE MONESSEN, PENNSYLVANIA 15062</b>	
4C. Telephone No. <b>724-684-1009</b>			
5. Official signing application must be an agent of the Company having primary responsibilities for operation of the facility to which this application applies. Although he may not have participated in the design of the facility he should be responsible for approval of the design.			

AFFIDAVIT

I, RICHARD JAMES BURKHART, being duly sworn according to law depose and say that I am the official have in primary responsibility for the design and operation of the facilities to which this application applies and that the information included in the foregoing application is true to the best of my knowledge, information and belief.

Sworn to and subscribed before me this 3<sup>rd</sup> day of February 2003

Ella L. Watkins  
Notary Public  
Ella L. Watkins, Notary Public  
Monessen, Westmoreland County  
My Commission Expires Nov. 24, 2003

R. J. Burkhart  
Signature  
**PLANT MANAGER**

Section B.2 - Combustion Units Information

I. COMBUSTION UNITS		
A. Manufacturer <b>AMERICAN BRIDGE</b>	B. Model No. <b>UNDERJET</b>	C. No. of Units <b>1</b>
D. Rated heat input (Btu/hr) <b>~ 90 MMBTU/HR</b>	E. Peak heat input (Btu/hr)	F. Use <b>UNDERFIRING</b>
G. Method firing <b>SEQUENTIALLY</b>		

2. FUEL REQUIREMENTS					
TYPE	QUANTITY HOURLY	ANNUALLY	SULFUR	% ASH (WEIGHT)	BTU CONTENT
OIL NUMBER _____	GPH @ 60 °F	x 10 <sup>3</sup> Gal.	% by wt.		Btu/Gal. & lbs/Gal. @ 60°F
NATURAL GAS	SCFH	x 10 <sup>6</sup> SCF	gr/100 SCF		Btu/SCF
GAS (OTHER) _____	SCFH	x 10 <sup>6</sup> SCF	gr/100 SCF		Btu/SCF
COAL _____	TPH	Tons	% by wt.		Btu/lb.
OTHER <b>COG</b>	<b>~ 165,000 scf/hr</b>	<b>~ 1,500 mmcf/yr</b>	<b>45 gr/100 scf</b>	<b>Trace</b>	<b>~ 490 - 550 BTU/SCF</b>

3. COMBUSTION AIDS, CONTROLS, AND MONITORS			
<input type="checkbox"/> A. Oven fire jets NA	Type	Number	Height above grate
<input type="checkbox"/> B. Draft controls NA	Type		
<input type="checkbox"/> C. Oil preheat NA			
<input type="checkbox"/> D. Soot cleaning NA	Temperature (°F)	Frequency	
<input type="checkbox"/> E. Stack sprays NA	Method		
<input type="checkbox"/> F. Opacity monitoring device NA		Method	Cost
<input checked="" type="checkbox"/> G. Sulfur oxides monitoring device <b>H2S Monitor</b>	Type <b>Tutweiler</b>	Method	Cost
<input type="checkbox"/> H. Nitrogen oxides monitoring device NA	Type	Method	Cost
<input type="checkbox"/> I. Fuel metering and/or recording devices NA	Type	Method	Cost
<input type="checkbox"/> J. Atomization interlocking device NA	Type	Method	Cost
<input type="checkbox"/> K. Collected flyash re entrainment preventative device NA	Type		
<input type="checkbox"/> L. Modulation controls <input type="checkbox"/> Step <input type="checkbox"/> Automatic			

4.  Flyash reinjection      Describe Operation  
NA

5. Describe method of supplying make up air to the furnace room.

NA



Section B.2 - Combustion Units Information, Continued

6. OPERATING SCHEDULE

24 hours/day 7 days/week 52 weeks/year

7. SEASONAL PERIODS (MONTHS) ALL YEAR ROUND

Operating using primary fuel to Operating using secondary fuel to Non-operating to

8. If heat input is in excess of 250 x 106 Btu/hr., describe fully the facilities provided to record the following: rate of fuel burned; heating value; sulfur and ash content of fuels; smoke, sulfur oxides and nitrogen oxides emissions; and if electric generating plant, the average electrical output and the minimum and maximum hourly generation rate.

NA

9. Describe modification to boiler in detail.

AS DESCRIBED IN THE COVER LETTER, KII IS RENEWING THE RACT PERMIT, WHICH EXPIRES ON MARCH 20, 2003. THE RACT PERMIT IMPOSES BOTH HOURLY AND ANNUAL EMISSIONS LIMITATIONS FOR NOX AND VOC. KII WISHES TO REVISE THESE LIMITS BASED ON A STATISTICAL ANALYSIS USING STACK TESTING DATA FROM 1996 TO PRESENT. REFER TO ATTACHMENT 1 WHICH CONTAINS THE STATISTICAL ANALYSIS REPORT.

10. Type and method of disposal of all waste materials generated by this boiler.

(Is a Solid Waste Disposal Permit needed? YES NO )

NA

11. Briefly describe the method of handling the waste water from this boiler and its associated air pollution control equipment.

(Is a Water quality Management Permit needed? YES NO )

NA

12. Attach any and all additional information necessary to perform a thorough evaluation of this boiler.

NA

Section D - Flue and Air Contaminant Emission Information

1. STACK AND EXHAUSTER

A. Exhauster (attach fan curves) \_\_\_\_\_ in w.g. \_\_\_\_\_ HP @ \_\_\_\_\_ RPM

B. Stack height above grade (ft) 235 C. Stack diameter (ft) 9.33 D. Weather Cap  YES  NO

E. Indicate on an attached sheet the location of sampling ports with respect to exhaust fan, breeching, etc. Give all necessary dimensions.

FOUR 90 DEGREE OPPOSED SAMPLING PORTS. TEST PORTS LOCATED 53 FEET DOWNSTREAM NEAREST DISTURBANCE AND 150 FEET UPSTREAM NEAREST DISTURBANCE

F. Can the control equipment be bypassed: (If Yes, explain)  YES  NO

NA

2. ATMOSPHERIC EMISSIONS

A. Particulate matter emissions (lbs/hr or gr/SCF Dry) NA - Application for NOx and VOC limits only

B. Gaseous contaminant emissions

Contaminants	Concentration	
(1) NOx _____ ppm (Vol.)	_____ lbs/hr	90.1 lb/hr, maximum
(2) VOC _____ ppm (Vol.)	_____ lbs/hr	28.0 lb/hr, maximum
(3) _____ ppm (Vol.)	_____ lbs/hr	

C. Outlet volume of exhaust gases

@ ~ 30,400 CFM (Standard)
~ 479 °F
~ 14 % Moisture

*Section E - Miscellaneous Information*

---

1. Describe fully facilities to monitor and record the emission of air contaminants. Provide detailed information to show that the facilities provided are adequate. Include cost and maintenance information. Periodic maintenance reports are to be submitted to the Department.

**ANNUAL STACK TEST**

---

2. Attach Air Pollution Episode Strategy (if applicable)

NA

---

3. The following requirements are applicable only to construction of a new source.

a. Briefly describe the nature of the area in which the proposed source is located. Attach a copy of the appropriate portion of the quadrangle map (7 1/2' scale) published by the U.S. Geological Survey and identify the location of proposed source.

NA

b. Demonstrate that the establishment of the new source is justifiable as a result of necessary economic or social development.

NA

---

4. Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of Article III of the rules and regulations of the Department of Environmental Resources and those requirements promulgated by the Administrator of the United States Environmental Protection Agency pursuant to the provisions of the Clean Air Act.

**REFER TO ADDENDUM A FOLLOWING THIS FORM.**

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5. List all attachments made to this Application.

**REFER TO TABLE OF CONTENTS OF PACKAGE**

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**Pennsylvania Department of Environmental Protection**  
**Bureau Of Air Quality**  
 -----  
**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.

Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID: \_\_\_\_\_
- A single source, Unit ID: Battery 2 Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 65-000-853

**This plan approval (Condition 6 & 7) imposes the following NOx and VOC emission limitations for the unit:**

NOx	55.4 lb/hr	246 tpy
VOC	0.5 lb/hr	1.9 tpy

**KII wishes to revise these limits as follows:**

NOx	90.1 lb/hr	260 tpy
VOC	28.0 lb/hr	54 tpy

**These proposed limits were derived using testing data from 1996 to present and using a statistical approach to derive limits. The hourly limits are the upper bound of the range expected if a next reading is taken at a 99% confidence interval. The annual limits are the upper bound of range expected to contain the mean value of the infinite parent population.**

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

**Method of Compliance Type:** (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations: \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?

\_\_\_\_\_  
\_\_\_\_\_

4. How will data be reported? \_\_\_\_\_

\_\_\_\_\_

**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

- 1. Reference Test Method Description: NOx - USEPA Method 7E  
VOC - USEPA Method 18 and 25A
- 2. Reference Test Method Citation: See above

**Condition 8 requires annual testing of this unit. Condition 9 requires all testing to be performed in accordance with 25 PA 139 and the PADEP Source Testing Manual. Condition 10 requires a pre-test protocol at 60 days in advance. Condition 11 requires notification to PADEP two weeks in advance performance test. Condition 12 requires two copies of stack test results to be submitted within 60 days of completion of the test.**

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

1. Describe what is to be reported and the frequency of reporting:

Annual emission statements, in accordance with 25 PA 135.21, will be submitted to demonstrate compliance with the annual emission limitations. KII will develop an average emission factor using all testing data to calculate annual emissions.

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2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

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**Pennsylvania Department of Environmental Protection**  
**Bureau Of Air Quality**  
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**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.

Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID \_\_\_\_\_
- A single source, Unit ID: Battery 2 Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 65-305-048

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations: \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?  
 \_\_\_\_\_  
 \_\_\_\_\_

4. How will data be reported? \_\_\_\_\_  
 \_\_\_\_\_

**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

- 1. Reference Test Method Description: NOx - USEPA Method 7E  
VOC - USEPA Method 18 and 25A
- 2. Reference Test Method Citation: See above

**Condition 15 requires annual testing of this unit. Condition 16 requires all testing to be performed in accordance with 25 PA 139 and the PADEP Source Testing Manual. Condition 17 requires a pre-test protocol at 60 days in advance. Condition 18 requires notification to PADEP two weeks in advance performance test. Condition 20 requires two copies of stack test results to be submitted within 60 days of completion of the test.**

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

1. Describe what is to be reported and the frequency of reporting:

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2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

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**Pennsylvania Department of Environmental Protection**  
**Bureau Of Air Quality**  
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**Addendum 1: Method of Compliance Worksheet**

**Section 1: Applicable Requirement**

Federal Tax Id: 25-1588399 Firm Name: Koppers Industries, Inc.

Plant Code: \_\_\_\_\_ Plant Name: Monessen Coke Plant

**Applicable Requirement for:** (please check only one box below)

- The entire site
- A group of sources, Group ID \_\_\_\_\_
- A single source, Unit ID: Battery 2 Combustion Stack
- Alternative Scenario, Scenario Name: \_\_\_\_\_

Citation #: 25 PA 129.91-129.95

**Compliance Method based upon:**  Applicable Requirement  Gap Filling Requirement

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

- Monitoring  Testing  Reporting
- Record Keeping  Workpractice Standard

**Section 2: Monitoring**

1. Monitoring device type (stack test, CEM, etc): \_\_\_\_\_

2. Monitoring device locations \_\_\_\_\_

3. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter?

\_\_\_\_\_  
\_\_\_\_\_

4. How will data be reported? \_\_\_\_\_  
\_\_\_\_\_

**Addendum 1: Method of Compliance Worksheet**

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**Section 3: Testing**

**For demonstration of hourly emissions:**

1. Reference Test Method Description: \_\_\_\_\_  
\_\_\_\_\_
2. Reference Test Method Citation: \_\_\_\_\_  
\_\_\_\_\_

**Section 4: Record Keeping**

Describe what parameters will be recorded and the frequency of recording:

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**Section 5: Reporting**

1. Describe what is to be reported and the frequency of reporting:

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2. Reporting start-date: \_\_\_\_\_

**Section 5: Work Practice Standard**

Describe any work practice standards:

**RACT proposal submitted to PADEP June 1994, in accordance with this rule.**

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