Koppers Inc

General Information

| ID | Branch | SIC | County | Basin | Start | End |
|-----|---------------------------|------|---------|-------------|------------|-----|
| 876 | Energy and Transportation | 2491 | Grenada | Yazoo River | 11/09/1981 | |

Address

| Mailing Address |
|-----------------------------------|
| PO Box 160 Tie Plant, MS 38960 |
| |

Telecommunications

| Туре | Address or Phone |
|-------------------|-------------------------|
| Work phone number | (662) 226-4584, Ext. 11 |

Alternate / Historic AI Identifiers

| Alt ID | Alt Name | Alt Type | Start Date | End Date |
|--------------|--------------------------|-----------------------------|------------|--------------|
| 2804300012 | Koppers Industries, Inc. | Air-AIRS AFS | 10/12/2000 | |
| 096000012 | Koppers Industries, Inc. | Air-Title V Fee Customer | 03/11/1997 | |
| 096000012 | Koppers Industries, Inc. | Air-Title V Operating | 03/11/1997 | 03/01/2002 |
| 096000012 | Koppers Industries, Inc. | Air-Title V Operating | 01/13/2004 | |
| MSR220005 | Koppers Industries, Inc. | GP-Wood Treating | 09/25/1992 | |
| MSD007027543 | Koppers Industries, Inc. | Hazardous Waste-EPA ID | 08/27/1999 | |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 06/28/1988 | 06/28/1998 |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 11/10/1999 | |
| 876 | Koppers Industries, Inc. | Historic Site Name | 11/09/1981 | |
| 876 | Koppers, Inc. | Official Site Name | 12/11/2006 | |
| MSP090300 | Koppers Industries, Inc. | Water-Pretreatment | 11/14/1995 | 11/13/2000 |
| | Koppers Industries, Inc. | Water-Pretreatment | 09/18/2001 | |
| MSU081080 | Koppers Industries, Inc. | Water-SOP | 11/09/1981 | |

Regulatory Programs

| Program | SubProgram | Start Date | End Date | |
|-----------------|--------------------------|------------|-------------|--|
| Air | Title V - major | 06/01/1900 | | |
| Hazardous Waste | Large Quantity Generator | 08/27/1999 | | |
| Hazardous Waste | TSD - Not Classified | 06/28/1988 | | |
| Water | Baseline Stormwater | 01/01/1900 | | |
| Water | PT CIU | 11/14/1995 | | |
| | PT CIU - Timber Products | | | |

| Water | Processing (Subpart 429) | 11/14/1995 |
|-------|--------------------------|------------|
| Water | PT SIU | 11/14/1995 |

Locational Data

| Latitude | Longitude | Metadata | S/T/R | Map Links |
|------------------------------------|-----------|---|---------------------------------|--------------------------------|
| 33 ° 44 ' 3 .00 (033.734167) | | Point Desc: PG- Plant Entrance (General). Data collected by Mike Hardy on 11/8/2005. Elevation 223 feet. Just inside entrance gate. Method: GPS Code (Psuedo Range) Standard Position (SA Off) Datum: NAD83 Type: MDEQ | Section: Township: Range: | SWIMS TerraServer Map It |

12/20/2006 12:16:40 PM

Koppers Industries Inc

Master AI ID: 876 **Start Date:** 11/9/1981

Agency Interest Type: Energy and Transportation Branch End Date:

SIC 1: 2491

County: Grenada

AI Basin: Yazoo River Basin

File Copy

| Alternate/Historic | AI Identifiers | | | |
|--------------------|--------------------------|------------------------|------------|------------|
| Alt/Hist ID | Alternate/Historic Name | User Group | Start | End |
| 876 | Koppers Industries, Inc. | Official Site Name | 11/9/1981 | |
| 04300012 | Koppers Industries, Inc. | Air-AIRS AFS | 10/12/2000 | |
| MSD007027543 | Koppers Industries, Inc. | Hazardous Waste-EPA ID | 10/12/2000 | |
| 096000012 | Koppers Industries, Inc. | Air-Titie V Operating | 3/11/1997 | 3/1/2002 |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 11/10/1999 | 9/30/2009 |
| HW8854301 | Koppers Industries, Inc. | Hazardous Waste-TSD | 6/28/1988 | 6/28/1998 |
| MSP090300 | Koppers Industries, Inc. | Water-Pretreatment | 11/14/1995 | 11/13/2000 |
| MSU081080 | Koppers Industries, Inc. | Water-SOP | 11/9/1981 | 11/30/1985 |
| MSP090300 | Koppers Industries, Inc. | Water-Pretreatment | 9/18/2001 | 8/31/2006 |
| MSR220005 | Koppers Industries, Inc. | GP-Baseline | 9/25/1992 | 3/23/2003 |
| MSR220005 | Koppers Industries, Inc. | GP-Baseline | 3/24/2003 | 9/11/2005 |

| Program | Sub-Program |
|-----------------|---|
| Air | Titie V - major |
| Hazardous Waste | TSD - Not Classified |
| Water | Baseline Stormwater |
| Water | PT CIU |
| Water | PT CIU - Timber Products Processing (Subpart 429) |
| Water | PT SIU |

AI Location and Mailing Information

Physical Address (Primary)

Regulatory Programs

Mailing Address

1 Koppers Drive

PO Box 160

| Tie Plant, MS 38960 | Tie Plant, MS 38960 | | |
|-----------------------------|---------------------------------------|-------------|----------|
| | | | |
| Location Information | | | |
| Section - Township - Range: | | | |
| | | | |
| Telecommunications | | | |
| Туре | Address or Phone | | |
| Work phone number | (662) 226-4584, Ext. 11 | | |
| Staff to AI Assignments | | | |
| Person Name | Assignment | | |
| Lee, David | Compliance, Management | | <u> </u> |
| Collier, Melissa | Compliance, Staff | | |
| Collier, Melissa | Enforcement | | |
| Rao, Maya | Permitting, Branch Manager | | |
| Rao, Maya | Permitting, Permit Writer | | |
| Whittington, Darryail | Regional Office, Management | | |
| | | | |
| Related People | | | |
| Person | Relationship | Start | End |
| Henderson, Thomas | Is Contact For | 1/1/1980 | |
| Henderson, Thomas | Is Water Permit Contact For | 5/28/2001 | |
| Basilone, Timothy | Is Title V Fee Assessment Contact For | 7/1/2001 | |
| Henderson, Thomas | Is Air Permit Contact For | 10/12/200 | 1 |
| Basilone, Timothy | Is Contact For | 10/12/200 | 1 |
| Collins, Randall | Is Application Signatory for | 3/28/2002 | |
| Biddy, Haley | Is Air Permit Contact For | 5/22/2002 | |
| Schaming, M. Claire | Is General Permit Contact For | 3/24/2003 | |
| Schaming, M. Claire | Is Application Signatory for | 3/24/2003 | |
| Related Organizations | | | · |
| Organization | Relationship | Start | End |

enSearch

MDEQ OPC





July 1, 2003

CERTIFIED MAIL 7000 0520 0021 7551 8951

Koppers Inc.
Utility Poles and Piling
P.O. Box 160
Tie Plant, MS 38960

Tel 662 226 4584 Fax 662 226 4588 www.koppers.com

Ms. Maya Rao Mississippi Department of Environmental Quality P.O. Box 10385 Jackson, MS 39289-0385

RE: Title V Operating Permit - #0960-00012

Koppers Inc. – Grenada, Mississippi Minor Permit Modification, and Second Revision to Renewal Application

Dear Ms. Rao,

On March 11, 1997, Koppers Industries, Inc. was issued the Title V Operating Permit No. 0960-00012 for its wood treating plant (the Plant) at Tie Plant, MS. An application for renewal of the Title V permit was submitted on September 26, 2001, in conformance with MDSEQ requirements. Since that time a modification to the renewal application was submitted on October 22, 2002, with regard to several changes at the facility that affected air emissions described in the original Title V Renewal Application. This transmittal contains information pertaining to a second modification to the Title V Renewal Application as a result of facility equipment changes that will occur.

The attached sheets provide revised and updated information and summarize changes in plant equipment that will occur during the summer of 2003. The subject changes affect air emissions in that the overall air emissions for the facility will be less than estimates provided in the Title V Renewal Application. Changes that will be made to the facility are discussed below, and forms and supplemental information for replacement of information submitted in the original Title V Renewal Application are attached.

Three tanks located at the Plant will be removed from service and dismantled, including the #4 Work Tank, Creosote Measuring Tank, and the Creosote Dehydrator. Reference Numbers for these tanks in the Renewal Application (Section H, Tank Summary Table) are GRN-09, GRN-11, and GRN-29, respectively. All three of the tanks to be removed are equipment included under Emission Point Number AA-003 in the Renewal Application. Only one of the tanks, the #4 Work Tank, will be replaced at this time. The new tank will be named "#4 Work Tank", and will be referenced as GRN-09 on the Tank Summary Table.

The attached sections contain information that was modified as a result of the changes described above. These sections should be used to replace sections of the renewal application submitted earlier. The following table serves as a guide for making these replacements.



| Attached Information | Replacement For: (Sections in the original renewal application and/or the first modification request dated 10/12/02 to be removed and replaced with the attached information) |
|--|---|
| Renewal Application Narrative - Section 2.1 (2 Pages). | Information provided in original application, and the first modification request on 10/28/02. |
| Section H (2 Pages), and the referenced Tank Summary Table (3 Pages) | Section H (2 Pages), and the Tank Summary Table (3 Pages). |

In addition to information referenced above, a cover page indicating the permitting activity (modification) and a completed Section B, Owners Information (2 Pages), are attached.

Please note that information contained in the Tank Summary Table for Section H was revised to include information on the new Work Tank #4 (GRN-09) that will be installed in July 2003. Information required on the Section H form for the new tank is highlighted in bold print under reference GRN-09 on the Tank Summary Table. Also, information for the Creosote Dehydrator (GRN-29) and the Creosote Measuring Tank (GRN-11) was removed from the Tank Summary Table.

Koppers understands that the new tank will be regulated under 40 CFR 60 Subpart Kb, which requires that a strapping table and a construction drawing of the tank are maintained on file at the facility. The full requirements of Subpart Kb are not applicable because the vapor pressure of the material stored in the tank is below the pressure criteria for Subpart Kb.

If you have any questions or require additional information, please call me at (662) 226-4584 extension 11.

Yours truly,

Plant Manager

Enc.

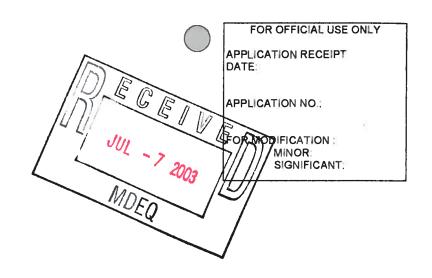
cc. Steve Spengler – Environmental Permits Division MSDEQ
Tim Basilone – KII, Pittsburgh

2.1 Changes in Equipment Reference Numbers

Several of these Reference Numbers have been changed to incorporate the numbering system used in the SPCC Plan for the Plant. Other Reference Numbers have been changed because the 1997 Title V Permit had duplicate Reference Numbers. For example, in the 1997 Title V Permit, both Emission Points AA-003 and AA-0010 had a Reference No. 32. By revising the Reference Number system used in this renewal application, this and other duplicate reference numbers have been avoided.

| Emission Point | Description (1997 Title V References) | Proposed Ref. No | Comments |
|----------------------------|---|---------------------|---|
| AA-001 | Title V, Ref. No. 1 - the 60.0 MMBTUH Wellons/Nebraska Woodwaste Boiler | 40 | See also Section 4 |
| AA-002 | Title V, Ref. No. 26 - the 28.5 MMBTUH fuel oil fired Murray Boiler | 41 | |
| AA-003 | SPCC, Ref. No. 5 - the 34,000 gal treatment cylinder containing Penta in oil. | 1 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 2 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 3 | |
| 74)2-12-1-1-1-2 <i>)</i> 1 | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 4 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote. | 5 | Changed from Creosote to Penta use |
| **** | SPCC, Ref. No. 6 - the 29,7786 gal #1 Work Tank containing Penta in oil. | 6 | |
| | SPCC, Ref. No. 7 - the 29,786 gal #2 Work Tank containing Creosote | 7 | |
| | SPCC, Ref. No. 8 - the 29,786 gal #3 Work Tank containing Creosote | 8 | |
| *** | SPCC, Ref. No. 9 - the 29,786 gal #4 Work Tank containing Creosote | 9 | Original tank replaced in July 2003 |
| | SPCC, Ref. No. 10 - the 29,786 gal #5 Work Tank containing Creosote/Water. | 10 | |
| | SPCC, Ref. No. 11 - the 4,200 gal Measuring Tank containing Creosote | | Removed in July 2003, not replaced |
| | SPCC, Ref. No. 12 - the 100,000 gal #1 Storage Tank containing Creosote | 12 | Changed from creosote storage to a storm water surge tank |
| *** | SPCC, Ref. No. 13 - the 100,000 gal #2 Surge Tank containing Process water | 13 | |
| | SPCC, Ref. No. 14 - the 100,000 gal #5 Storage Tank containing Diesel #2 fuel oil | 14 | |
| | SPCC, Ref. No. 15 - the 105,000 gal #6 Storage Tank containing creosote | 15 | |
| | SPCC, Ref. No. 16 - the 300,000 gal #10 Surge Tank containing process water | 16 | |
| | SPCC, Ref. No. 17 - the 250,000 gal Storm Water surge tank containing Storm Water | 17 | |
| | SPCC, Ref. No. 18 - the 1,500 gal Coagulant Tank containing water treatment system polymer additive | 18 | |
| | SPCC, Ref. No. 19 - the 2,500 gal Decant Tank containing Creo/Oil/Water | 19 | |
| | SPCC, Ref. No. 20 - the 8,000 gal Creosote Blowdown tank containing Creo/Water | 20 | |
| | SPCC, Ref. No. 21 - the 6 ft. Dia. X 60 ft. long, Air Receiver containing compressed air | | Removed from list. Contains only compressed air |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | Comments |
|-------------------|---|---------------------|--|
| | SPCC, Ref. No. 22 - the 7 ft. Dia. X 40 ft. long Air Receiver containing compressed air | | Removed from list. Contains only compressed air |
| | SPCC, Ref. No. 23 - the 8,000 gal Penta Blowdown tank containing water/penta/oil | 23 | |
| | SPCC, Ref. No. 26 - the 150,000 gal Aeration Tank containing waste water | 26 | |
| | SPCC, Ref. No. 27 - the 25,000 gal Clarifier Tank containing waste water | 27 | |
| | SPCC, Ref. No. 28 - the 15,000 gal Discharge Tank containing waste water | 28 | |
| | SPCC, Ref. No. 29 - the 8,000 gal Creosote Dehydrator | | Removed in July 2003, not replaced |
| | SPCC, Ref. No. 30 - the 14,000 gal North Penta Equalization Tank containing water/penta/oil | 30 | |
| | SPCC, Ref. No. 31 - the 14,000 gal South Penta Equalization Tank containing water/penta/oil | 31 | |
| | SPCC, Ref. No. 32 - the 9,400 gal Penta Mix Tank containing Oil/Penta | 32 | |
| | SPCC, Ref. No. 33 - the 5,000 gal Penta Mix Tank containing Oil/Penta | 33 | |
| | SPCC, Ref. No. 34 - the 10,500 gal Penta Concentrate Tank containing 40% Pentachlorophenol Concentrate | 34 | |
| | SPCC, Ref. No. 35 – the 100,000 gal Stormwater Tank | 35 | This Tank has been added. |
| AA-004 | Title V, Ref. No. 27, the Tie Mill and Lumber Mill with cyclone | 42 | |
| AA-005 | Title V, Ref. No. 33, the Boiler House natural gas fired space heater rated at 0.2 MMBTUH | 43 | Insignificant Activity per APC-S-6.IN Three (3) space heaters each rated at 0.2mmbtu/hr. |
| AA-006 | Title V, Ref. No. 35, the natural gas fired steam cleaner rated at 0.44 MMBTUH | 44 | Insignificant Activity per APC-S-6.IV |
| AA-007 | Title V, Ref. No. 36, the Wood Stove Shop Heater rated at 0.10 MMBTUH | | Source no longer exists. Has been removed from site. |
| AA-008 | Title V, Ref. No. 8, the Treated Wood Storage Areas | 46 | |
| AA-009 | Title V, Ref. No. 31, the Pole Kiln | 47 | |
| AA-010 | Title V, Ref. No. 32, the Pole Peeler | 48 | |
| AA-011 | Title V, Ref. No. 34, Wood Fuel Preparation and handling including grinding, conveying, and silo loading | 49 | |
| AA-012 | Title V, Ref. No. 37, the two (2) Parts cleaners- degreasers | 50 | |
| AA-013 | SPCC, Ref. No. 24, the 1,250 gal Gasoline Storage tank containing Gasoline used by company vehicles | 51 | Insignificant Activity per APC-S-6.IV |
| AA-014 | SPCC, Ref. No. 25, the 9,000 gal Diesel Storage tank used by company vehicles/Rolling Stock | 52 | Insignificant Activity per APC-S-6.IV |
| AA-015 | Title V, Ref. No. 33, the Oil Fired Murray Standby boiler room Natural Gas fired Space Heater rated at 0.1 MMBTUH | 54 | Insignificant Activity per APC-S-6.IV |
| AA-016 | Title V, Ref. No. 33, the Fire Pump building Natural Gas fired Space Heater rated at 0.02 MMBTUH | ******* | Source no longer exists. Has been removed from site. |



STATE OF MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF POLLUTION CONTROL AIR DIVISION P.O. BOX 10385 JACKSON, MS. 39289-0385 PHONE NO.: (601) 961 - 5171

APPLICATION FOR TITLE V AIR POLLUTION CONTROL PERMIT TO OPERATE AIR EMISSIONS EQUIPMENT

| PERMITTING | G ACTIVITY: | |
|------------------|--|-------------|
| X | INITIAL APPLICATION MODIFICATION RENEWAL OF OPERATING PERMIT | |
| NAME: | KOPPERS INDUSTRIES INC TIE PLANT | |
| COUNTY: | GRENADA | |
| | | ···· |
| FACILITY No. (if | known): 0960-00012 | |

Section B **Owners Information** 1. Name, Address & Contact for the Owner/Applicant A. Company Name: KOPPERS INC. B. Mailing Address: Street Address or P.O. Box: 1. 436 SEVENTH AVENUE 2. City: **PITTSBURGH** 3. State: 4 Zip Code: 15219-1800 5.. Telephone No.: (412) 227-2114 C. Contact: Name: 1. TIMOTHY R. BASILONE 2. **ENVIRONMENTAL MANAGER** Title: 2. Name, Address, Location and Contact for the Facility: A. Name: KOPPERS INC. B. Mailing Address: 1. Street Address or P.O. Box: P.O. BOX 160 2. City: **TIE PLANT** MS Zip Code: 4 38960 5. Telephone No.: (662) 226-4584 C. Site Location: Street: 1 KOPPERS DRIVE 2. City: TIE PLANT 3. State: MS 4. County: **GRENADA** 5. Zip Code: 38960 Telephone No.: (662) 226-4584 Note: If the facility is located outside of the City limits, please attach a sketch or description to this application showing the approximate location of the site. D. Contact: 1. THOMAS L. HENDERSON 2. PLANT MANAGER Title: 3. SIC Code(s)(including any associated with alternate operating scenarios): 2491 4. Number of Employees: 65 5. Principal Product(s): UTILITY POLES AND RAILROAD CROSSTIES 6. Principal Raw Materials: WOOD POLES, CROSSTIES, LUMBER, CREOSOTE, PENTACHLOROPHENOL, DIESEL FUEL 7. Principal Process(es): WOOD PRESERVING

| 8. | Maxin | num amount of principal product produce 20,000 CUBIC FEET | d or raw materia | l consumed per d | av: |
|---------------|----------------------------|---|--|--|------------------------------------|
| 9. | Facilit | y Operating Schedule (Optional): | | | |
| | A. | Specify maximum hours per day the op | eration will occu | ir: | 24 HOURS |
| | B. | Specify maximum days per week the op | peration will occ | ur: | 7 DAYS |
| | C. | Specify maximum weeks per year the o | peration will occ | eur: _ | 52 WEEKS |
| | D. | Specify the months the operation will o | ccur: | ALL | |
| 10. | Is this | facility a small business as defined by the | Small Business | Act? (Optional) | NO |
| 11. | EACH | APPLICATION MUST BE SIGNED | BY THE APPL | ICANT. | |
| | | pplication must be signed by a respons 3-6, Section I.A.26. | ible official as d | efined in Regula | ation |
| | statem respon respon | fy that to the best of my knowledge of ents and information in this application sible official, my signature shall constit sibility for any alteration, additions, or e and maintain compliance with all appl | are true, comp ute an agreeme changes in ope | lete, and accurate nt that the applic eration that may | e, and that, as a cant assumes the |
| The second of | | HENDERSON | PLANT MAN | AGER | |
| Printed | i Name | of Responsible Official | Title | | |
| | 1-03 | on Signed | Thomas | L Kenolene | 4897 |
| Date A | ppncat | on signed | Signature of A | pplicants Respo | nsible Official |

SECTION H TANK SUMMARY (page 1 of 2)

| 1. | | sion Point No./Name: AA-003, ALL RELATED TANK DATA INCLUDED IN TANK MARY DATA SPREADSHEET (FOLLOWING PAGES) |
|----|----------------------------------|--|
| 2. | | this tank constructed or modified after August 7, 1977? |
| 3. | | nct Stored: re than one product is stored, provide the information in 4.A-E for each product. |
| 4. | Tank | Data: |
| | A. B. C. D. E. F. | True Vapor Pressure at storage temperature: Reid Vapor Pressure at storage temperature: Density of product at storage temperature: Molecular Weight of product vapor at storage temperature: Throughput for most recent calendar year: Tank Capacity: Tank Diameter: gal/yr gal feet |
| | H. I. J. K. L. | Tank Height / Length: Average Vapor Space Height: Tank Orientation: Type of Roof: Is the Tank Equipped with a Vapor Recovery System? If Yes, describe on separate sheet of paper and attach. Indicate efficiency. |
| | M. | Check the Type of Tank: Fixed Roof Pressure Variable Vapor Space Other, describe: External Floating Roof Internal Floating Roof |
| | N. | Check the Closest City: Jackson, MS Memphis, TN New Orleans, LA Birmingham, AL Montgomery, AL Baton Rouge, LA |
| | 0 | Check the Tank Paint Color: Aluminum Specular Aluminum Diffuse Red Other, describe: Baton Rouge, LA Gray Light Gray Medium White |
| | P. Q. | Tank Paint Condition: Good or Poor Check Type of Tank Loading 1. Trucks and Rail Cars |
| | | Submerged Loading of clean cargo tank Submerged Loading: Dedicated Normal Service Submerged Loading: Dedicated Vapor Balance Service Splash Loading of clean cargo tank Splash Loading: Dedicated Normal Service Splash Loading: Dedicated Vapor Balance Service 2. Marine Vessels Submerged Loading: Ships Submerged Loading: Barges |

SECTION H TANK SUMMARY (page 2 of 2)

5.

6.

| R. | For E | External Floating Roof Tanks | | |
|------|------------|---------------------------------|----------------|---------------------|
| | 1, | Check the Type of Tank Seal: | | |
| | | Mechanical Shoe | | |
| | | Primary Seal Only | | |
| | | With Shoe-Mounted | | |
| | | With Rim-Mounted S | Secondary Seal | |
| | | Liquid Mounted Resilient Seal | | |
| | | Primary Seal Only | | |
| | | With Shoe-Mounted | | |
| | | With Rim-Mounted S | Secondary Seal | |
| | | Vapor Mounted Resilient Seal | | |
| | | Primary Seal Only | | |
| | | With Shoe-Mounted | | |
| | _ | With Rim-Mounted S | 5, | |
| | 2. | Type of External Floating Roof: | Pontoon | |
| | | | Double-Deck | |
| S. | For I | nternal Floating Roof Tanks | | |
| Ο. | 1. | Check the Type of Tank Seal: | | |
| | | Liquid Mounted Resilient Seal | | |
| | | Primary Seal Only | | |
| | | With Rim-Mounted S | Secondary Seal | |
| | | Vapor Mounted Resilient Seal | · | |
| | | Primary Seal Only | | |
| | | With Rim-Mounted S | Secondary Seal | |
| | 2. | Number of Roof Columns: | | _ |
| | 3. | Length of Deck Seam | • | feet: |
| | 4. | Area of Deck: | | - feet ² |
| | 5. | Effective Column Diameter: | | _ feet |
| | 6. | Check the Type of Tank: | | _ 1000 |
| | | Bolted with-Column S | Supported Roof | |
| | | Welded with Column | | |
| | | Bolted with Self-Supp | | |
| | | Welded with Self-Sur | | |
| | | - | . • | |
| Emis | ssions Sur | mmary | | |
| | 1. | Breathing Loss: | lb/hr | TPY |
| | 2. | Working Loss: | lb/hr | TPY |
| | 3. | Total Emissions: | lb/hr | TPY |
| | I Coordin | | | |
| A. Z | one | B. North | C. East | |

SECTION H TANK SUMMARY TABLE

| Section H Reference | | Unite | | | | | | | | | | |
|------------------------|---|------------|----------------------------|--------------|--------------|--------------------------------------|-------------------|-------------|---------------|------------------|----------------|----------------|
| | Plant Reference Number | | GRN-06 | GRN-07 | GRADE | GRN-09 | GRN-10 | GRN-12 | GRN-13 | GRN-14 | GRN-15 | GRN-18 |
| | Emission Point Number | | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 |
| | Reference No. (Table 2.1) | | 9 | 7 | 80 | œ | 10 | 12 | 13 | 14 | 15 | 16 |
| | eca. | | #1 Work Tank | #2 Work Tank | #3 Work Tenk | #4 Work Tank | #5 Work Tank | #1 Creosote | #2 Surge Tank | Mr. Storage Tank | #S Street | - derivation |
| 2 | Construction Date | | 1903 | 1903 | 1979 | 2003 | 1930 | 1903 | 1903 | 1903 | 1903 | 1903 |
| ო | Material Stored | | Oil / Pertachlorophenal | Creosote | Crecsole | Craosota | Pertachlorophenol | Creosote | Process Water | #2 CF | approach | Process Water |
| \$ | True Vapor Pressure @ Storage Temperature | e psie | | | | | | | | 2000 | 2000 | and the second |
| 48 | Reid Vapor Pressure @ Storage Temperature | L | | | | | | | | | | |
| | Storage Temperature | Degrees F | | 200 | 200 | 200 | 150 | 200 | 8 | 99 | 150 | 99 |
| ភិ | Density @ Storage Temperature | lag/q | 7.75 | 9.25 | 9.25 | 8.95 | 7.75 | 8.95 | 8.34 | 7.1 | 9.25 | 8.34 |
| | Molecular Weight @ Storage Temperature | lb/fbmole | | | | | | | | | | |
| Ų | Throughput | gallons/yr | 80 | 8,200,000 | 8,200,000 | 8,200,000 | 8,500,000 | 740,000 | 1,600,000 | 127,600 | 960,000 | 1,400,000 |
| # | Tank Capacity | gallons | 29,786 | 29,786 | 29,786 | 29,786 | 29,786 | 100,000 | 100,000 | 100,000 | 105,000 | 300,000 |
| 5 | Tank Diameter | jeet | 13 | 13 | 13 | 13 | 13 | 23 | 3 2 | 27 | 30 | 8 |
| £ | Tank Height / Length | feet | ଚ | က | 30 | 30 | 8 | 24 | 24 | 24 | 8 | 32 |
| 4 | Average Vapor Space Height | feet | - | - | - | • | | - | _ | - | _ | _ |
| 4 | Tank Orientation (Horizontal or Vertical) | | Vertical | Vertical | Verticel | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical |
| ¥ | Type of Roof (Dome or Cone) | | | Dome | Dome | Ооте | Dome | Cone | Cone | Cone | Cone | Cone |
| 4 | Vapor Recovery System? | yes or no | _ | 2 | 2 | ŝ | 2 | ٥N | Š | S. | S _S | No No |
| ₹ | Type of Tank? | | | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof |
| Ž. | Closest City | Memphis | | Memphis | Memphis | Memphie | Memphis | Memphis | Memphis | Memphis | Memphis | Memphis |
| ð | Tenk Paint Color | | Sax | Slack | Back | Aluminum | Black | Black | Black | Black | Black | Black |
| 4 | Paint Condition (Good or Poor) | | Poor | Poor | Poor | Good | Poor | Poor | Poor | Good | Good | Poor |
| | Tank Loading (Splash Loading - Dedicated Normal Service) Splash Loading - Dedicated | | | | | Splash Loading - Dadicated Normal | | | | | | |
| đ | Vapor Balance Service; Bottom) | | Bottom | Вотош | Bottom | Service | Bottom | Bottom | Bottom | Bottom | Bottom | Bottom |
| ₹ | Not Applicable To Any Tenks | | | | | | | | | | | |
| ş | Not Applicable To Any Tenks | | | | | | | | | | | |
| 5.1 | Breathing Loss (See Note) | D/hr | | | | | | | | | | |
| | | ТРҰ | | | | | | | | | | |
| 5.2 | Working Loss (See Note) | ₽/µ | | | | | | | | | | |
| | | тРү | | | | | | | | | | |
| 5.3 | Total Emissions (See Note) | phr | | | | | | | | | | |
| | | τβγ | | | | | | | | | | |
| | NOTE: All tank emissions are included in Plant Summary Table of Section C of the | | | | | | | | | | | |
| | Application. | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| | | 100 | _ | | | _ | _ | | _ | | _ | |

| Section H Reference | | Unita | | | | | | | | | | |
|------------------------|--|------------|-------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------|------------|------------------------------------|------------------------------------|------------------------------------|
| | | | GRN-17 | GRN-18 | GRN-19 | GRN-20 | GRN-23 | GRN-24 | GRN-25 | GRN-26 | GRN-27 | GRN-28 |
| - | Emission Point Number | | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-013 | AA-014 | AA-003 | AA-003 | AA-003 |
| | Reference No. (Table 2.1) | | 1,1 | 18 | 19 | 62 | 23 | 24 | 25 | 26 | 27 | 28 |
| | | | | | | Creosote | Pentachlorophenol | | | | | |
| , | Name Court called Date | | Storm Surge Water | Coagulant | Decaming | Blowdown | Biowdown | Gasoline | Diesel | Aeration | Carifier | Discharge |
| 7 | Constitution Cale | | 1808 | 798 | 1989 | 086 | 1983 | 0/61 | 1930 | 1986 | 1986 | 1986 |
| ო | Material Stored | | Storm Water | Coagulant Polymer | Creosote / Oil / Water | Creosote / Water | Water / Pentachtorophenol / Oil | Gasoline | #2 Diese | Process Waste | Process Waste | Process Waste |
| \$ | True Vapor Pressure (2) Storage Temperature | Bisla | Τ | | | | | | | | | |
| 48 | Reid Vapor Pressure @ Storage Temperature | | | | | | | | | | | |
| | Storage Temperature | Degrees F | 89 | 8 | 8 | 150 | 8 | 8 | 88 | 980 | 8 | 90 |
| Ą | Density @ Storage Temperature | lag/di | 8.34 | 8.67 | 8.34 | 8.34 | 8.34 | 6.5 | 7 | 8.34 | 8.34 | 8.34 |
| 40 | Molecular Weight @ Storage Temperature | Diformole | Ц | | | | | | | | | |
| 4 | Throughput | gallons/yr | ., | 9,000 | 230,000 | 532,000 | 493,000 | 10,000 | 90,000 | 9,000,000 | 9,000,000 | 5,000,000 |
| 4 | Tenk Capacity | gallons | 250,000 | 1,500 | 2,500 | 8,000 | 8,000 | 1,250 | 9,000 | 150,000 | 25,000 | 15,000 |
| ą | Tank Diameter | teet | 38 | 9 | 8 | ₽ | 10 | 4 | 9 | 40 | 15 | 15 |
| £ | Tenk Height / Length | feet | 38 | 5 | 12 | 4 | 4 | 12 | 32 | 25 | 18 | 8 |
| 4 | Average Vapor Space Height | feet | | _ | - | - | - | - | - | - | - | - |
| 3 | Tank Orientation (Horizontal or Vertical) | | Vertical | Vertical | Vertical | Vertical | Vertical | Horizontal | Honzontal | Vertical | Vertical | Vertical |
| ¥ | Type of Roof (Dome or Cone) | | None | Dome | Dome | Dome | Dome | | | Norie | None | None |
| 4 | Vapor Recovery System? | yes or no | | 2 | S | £ | Ş | S | 2 | 2 | 2 | ŝ |
| Ž. | Type of Tank? | | | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | uado. | E C | Open |
| Ž, | Cosesi Civ | Memorias | 2 | Memoris | Membris | Membris | Memoris | Memphis | Memoris | Memphis | Memphis | Memphis |
| 3 | Park Paint Coor | | 950 | Beige | Ago | Pack | Sack | Atmiran | Atminum | White | Bre | B. B. |
| + | Paint Condition (Good of Poor) | | 805 | 805 | 805 | 8 | 8 | 505 | 0005 | 900 | 800 | 9005 |
| ! | Park Loading (Spash Loading - Dedicated Normal Service; Spash Loading - Dedicated | | | Splash Loading Dedicated Normal | Splash Loading Dedicated Normal | Splash Loading Dedicated Normal | Spiesh Loading Dedicated Normal | | | Splash Loading Dedicated Normal | Splash Loading Dedicated Normal | Splash Loading Dedicated Normal |
| đ | Vapor Balance Service, Bottom) | | Service | Service | Service | Service | Service | Bottom | Bottom | Service | Service | Service |
| ¥ 4 | Not Applicable To Any Tanks | | | | | | | | | | | |
| 2 | NOT Apprende 10 Any 181965 | 1 | | | | | | | | | | |
| D D | DA GRANING LOSS (See NOW) | AG. | | | | | | | | | | |
| 52 | Working Loss (See Note) | - Age | | | | | | | | | | |
| | | λdΙ | | | | | | | | | | |
| 5.3 | Total Emissions (See Note) | T-LPG | | | | | | | | | | |
| | | ΤÞÝ | | | | | | | | | | |
| | NOTE: All tank emissions are included in Plant Summary Table of Section C of the Application | | | | | | | | | | | |
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| | | _ | _ | | _ | _ | | | | _ | | |

SECTION H TANK SUMMARY TABLE

| Reference | | Units | | | | | | |
|-----------|---|------------|--------------------------------------|--|--------------------------|--------------------------|-----------------------------------|-----------------------------|
| | Plant Reference Number | | GRN-30 | GRN-31 | GRN-32 | GRN-33 | GRN-34 | GRN-35 |
| | Emission Point Number | | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 |
| | Reference No. (Table 2.1) | | 33 | 31 | 32 | 33 | æ | 35 |
| | Name | | North Pertachlorophenol Equalization | South Pentachiorophenol Equalization | Pentachlorophenol Mix | Pentachlorophenol Mix | Pentaci lonophenol Concentrata | Stormwater |
| 2 | Construction Date | | 1983 | 1983 | 1970 | 1970 | 1960 | 1970 |
| 6 | Material Stored | | Water / Penta / Oll | Water / Penta / Oil Water / Penta / Oil | ON / Pertta | Oil / Penta | Pentachlorophenol Concentrate | Creosote / Penta / Water |
| 44 | True Vapor Pressure @ Storage Temperature | Bisq | | | | | | |
| 48 | Reid Vapor Pressure @ Storage Temperature | psia | | | | | | |
| | Storage Temperature | Degrees F | | 99 | 99 | 99 | 90 | 8 |
| Q Q | Density @ Storage Temperature | fb/gal | 80 | 8 | 7.75 | 7.75 | 9.55 | 8.34 |
| Q | Molecular Welgirt @ Storage Temperature | D/Dmole | | | | | | |
| 世 | Throughput | gallons/yr | 65,000 | 65,000 | 850,000 | 850,000 | 120,000 | 400.000 |
| 4 | Tank Capacity | gallons | 14,000 | 14,000 | 9,400 | 5,000 | 10,500 | 100,000 |
| ð | Tank Dismeter | feet | 10 | 10 | 6 | 5 | 13 | ଛ |
| Ŧ | Tank Height / Length | feet | 24 | 24 | 14 | 5 | 88 | 8 |
| 4 | Average Vapor Space Height | feet | - | 1 | - | - | - | - |
| 4 | Tank Orientation (Horizontal or Vertical) | | Vertical | Vertical | Vertical | Horizontal | Vertical | Vertical |
| Ą | Type of Roof (Dame or Cone) | | Corie | Cone | Fiet | | Fig | Flat |
| 4 | Vapor Recovery System? | yes or no | No | 2 | 2 | S | 2 | 2 |
| 414 | Type of Tank? | | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof |
| 4 V | Closest City | Memoris | Memphis | Memphis | Memphis | Memohis | Memphis | Memphis |
| Q | Tank Paint Color | | Black | Black | Black | Black | Aluminum | Concrete |
| 46 | Paint Condition (Good or Poor) | | Poor | Poor | Poor | Poor | , 2000 | |
| | Tank Loading (Splash Loading - Dedicated | | Splash Loading | Splash Loading | | Splash Loading | | Splash Loading |
| ç | Normal Service, Splash Loading - Dedicated | | Dedicated Normal | Dedicated Normal | | Dedicated Normal | ; | Dedicated Normal |
| 3 | Velyor balance Service, bollom) | | Service | Service | Bottom | Service | Bottom | Service |
| Ž, | Not Applicable To Any Tenks | | | | | | | |
| ą | NOT Applicable 10 Any Larks | | | | | | | |
| 5.1 | Breathing Loss (See Note) | apr. | | | | | | |
| | | ì | | | | | | |
| 5.2 | Working Loss (See Note) | ఠ | | | | | | |
| | | ΤPΥ | | | | | | |
| 5.3 | Total Emissions (See Note) | T-L/CI | | | | | | |
| | | TPY | | | | | | |
| | NOTE: All tank emissions are included in Plant Summary Table of Section C of the | | | | | | | |
| | Applicance . | | | | | | | |
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2.0 SOURCE DESCRIPTION:.

Koppers Industries, Inc. operates a 30,000 pound per hour Wellons wood waste boiler at their wood preserving facility in Grenada, Mississippi. The boiler provides steam for the timber treating processes and a turbine generator. Fuel is typically wood waste generated from the manufacture of treated wood products.

Heat input as calculated from the test data and an F-Factor was an average 48.53 MM Btu/hr.

The boiler exhausts to the atmosphere by way of a 34.5 inch diameter vertical stack. Two sample ports at 90° are provided at a location that is 432 inches (12.5 diameters) below the stack exit and 356 inches (10.3 diameters) above an upstream stack tapered section.

3.0 TEST PROCEDURES:

Test procedures used are those described in the Code of Federal Regulations, Title 40, Part 60, Appendix A. Specifically, Method 1 was used to determine the number of sample points and Method 5 to determine flow rates, moisture content, and particulate emissions. The sampling train was identical to that described in Method 5 except that the cyclone was omitted. Visible emissions were read in accordance with Method 9 concurrently with the emissions test

Heat input to the boilers was determined by continuously monitoring oxygen content of the flue gas as described in Method 3A and calculating heat input using an F-factor of 9400 scf per million Btu of heat input for the wood waste fuel.

Filters were recovered by rinsing the front half of the filter holder into the probe wash and securing the filters in glass petri dishes. Part of the sample filter often adheres to the filter gasket, and some of the adhering material is recovered into the probe wash. Therefore some of the filter weight is attributed to the probe wash weight.

Filters were heated in an oven for 2 hours at 105° C, desiccated at least 24 hours and weighed to constant weight. Probe wash samples in acetone were evaporated to dryness over low heat in tared beakers, desiccated for at least 24 hours and weighed to constant weight. Weighings are made at 6 hour or greater intervals (samples stored in desiccator). Final weights were considered valid and were recorded if there was no more than 0.5 milligrams difference from the previous weighing.

Grenada Count; AI 876

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Environmental Mar.

Loppes:

t No. 0960-00012

SECTION 2. EMISSION POINTS ... I JULIUN CONTROL DEVICES

| Emission Point | Description |
|----------------|---|
| AA-001 | Ref. No. 1, the 60.0 MMBTUH Wellons/Nebraska Woodwaste Boiler (firing treated and untreated wood) with multiclone collector |
| AA-002 | Ref. No. 26, the 28.5 MMBTUH fuel oil fired Murray Boiler |
| AA-003 | Ref. No. 5, Wood Treatment Facility consisting of five (5) treating cylinders, pumps, valves, blowers, and the following tanks: Ref. No. 6, the 30,000 gallon #5 Work Tank containing penta in oil Ref. No. 7, the 30,000 gallon #2 Work Tank containing creosote 60/40 Ref. No. 8, the 30,000 gallon #3 Work Tank containing creosote Ref. No. 9, the 22,420 gallon #4 Work Tank containing creosote #1 X Ref. No. 10, the 30,000 gallon 2nd Decant Tank containing creosote/water Ref. No. 11, the 4,200 gallon Measuring Tank containing creosote #1 X Ref. No. 12, the 100,000 gallon Creo Storage Tank containing creosote #1 Ref. No. 13, the 100,000 gallon Water Surge Tank containing process water Ref. No. 14, the 100,000 gallon Oil Storage Tank containing fuel oil Ref. No. 15, the 105,000 gallon Creo Storage Tank containing process water Ref. No. 16, the 300,000 gallon Process Water Surge Tank containing process water Ref. No. 17, the 250,000 gallon Storm Water Surge Tank containing storm water Ref. No. 18, the 2,700 gallon Coagulant Tank containing Dearfloc 4301 Ref. No. 20, the 8,000 gallon Creo Blowdown Tank containing water/creosote Ref. No. 21, the 6 ft. dia. x 60 ft. long Air Receiver containing compressed air |
| - } | Ref. No. 22, the 7 ft. dia. x 40 ft. long Air Receiver containing compressed air Ref. No. 23, the 8,000 gallon Penta Blowdown Tank containing water/penta/oil Ref. No. 26, the 150,000 gallon Aeration Tank containing waste water Ref. No. 27, the 25,000 gallon Clarifier Tank containing waste water Ref. No. 28, the 15,000 gallon Discharge Tank containing waste water Ref. No. 39, the 4,000 gallon Creosote Dehydrator Ref. No. 30, the 14,000 gallon N. Penta Equalization Tank containing water/oil/penta Ref. No. 31, the 14,000 gallon S. Penta Equalization Tank containing water/oil/penta Ref. No. 32, the 11,500 gallon Penta Mix Tank containing oil/penta Ref. No. 33, the 5,000 gallon Penta Mix Tank containing oil/penta Ref. No. 34, the 10,500 gallon Penta Concentrate Storage Tank containing penta concentrate |
| AA-004 | Ref. No. 27, the Tie Mill and Lumber Mill with cyclone |
| AA-005 | Ref. No. 33, the Boiler House natural gas fired space heater rated at 0.2 MMBTUH |
| AA-006 | Ref. No. 35, the natural gas fired steam cleaner rated at 0.44 MMBTUH |
| AA-007 | Ref. No. 36, the Wood Stove Shop Heater rated at 0.10 MMBTUH |
| AA-008 | Ref. No. 8, Treated Wood Storage |
| AA-009 | Ref. No. 31, the Pole Kiln |

Page 15 of 22 Permit No. 0960-00012

| Emission Point | Description |
|----------------|---|
| AA-010 | Ref. No. 32, the Pole Peeler |
| AA-011 | Ref. No. 34, Wood Fuel Preparation and Handling including grinding, conveying, and silo loading |
| AA-012 | Ref. No. 37, the two (2) Parts Cleaners/Degreasers |
| AA-013 | Ref. No. 24, the 1,000 gallon Gasoline Storage Tank |
| AA-014 | Ref. No. 25, the 20,000 gallon Diesel Storage Tank |
| AA-015 | Ref. No. 33, the Standby Boiler Room natural gas fired space heater rated at 0.1 MMBTUH |
| AA-016 | Ref. No. 33, the Fire Pump Building natural gas fired space heater rated at 0.02 MMBTUH |

HAGIT > New Tank.





Koppers Industries, Inc. P.O. Box 160 Tie Plant, MS 38960

> Telephone: (601) 226-4584 FAX: (601) 226-4588

October 28, 2002

CERTIFIED MAIL #7000 0520 0021 7551 9217

Ms. Melissa Collier Mississippi Department of Environmental Quality P.O. Box 10385 Jackson, MS 39289-0385

RE: Title V Operating Permit - #0960-00012 Koppers Industries Inc. - Grenada, Mississippi

Revisions to Renewal Application

Dear Ms. Collier,

On 11 March 1997, Koppers Industries, Inc. was issued the Title V Operating Permit No. 0960-00012 for its wood treating plant (the Plant) at Tie Plant MS. An application for renewal of the Title V permit was submitted on September 26, 2001, in conformance with MDSEQ requirements. Since that time decisions were made that require several changes to be made at the facility, some of which will affect air emissions described in the Title V Renewal Application.

The attached sheets provide revised and updated information and summarize changes in plant operations that will affect air emissions. Changes that will be made to the operation are discussed below, and forms and supplemental information for replacement of information submitted in the original Title V Renewal Application are attached.

Koppers began using only untreated wood fuel in the wood fired boiler in November 2001. In the future only untreated wood fuel will be used. In the September 2001 renewal application the boiler operation was subject to an alternative operating scenario. Both a baseline operating scenario and an alternative operating scenario were presented with the September 2001 renewal application. This submission eliminates the baseline operating scenario for the boiler (Source AA-001), including the provision to use untreated and treated wood fuel. The Alternative Operating Scenario presented in the renewal application, which describes emissions at the wood fired boiler based on the use of only untreated wood fuel, now becomes the base (and only) operating scenario presented in the application. Despite this change, the plant remains a major source for purposes of the Title V Operating Permit Program.

Production schedules for creosote products at the plant indicate a need to produce more cross ties and less utility poles in the future. This submission adjusts the production amounts for cross ties and poles. The total volume of creosote treated wood used in calculating PTE figures that were presented in the renewal application (3.5 million cubic feet) remains the same with this submission, however, with this submission the number of cross ties has been changed from 2.0 million cubic feet to 2.4 million cubic feet, and the number of poles has been changed from 1.5 million cubic feet to 1.1 million cubic feet. Changes to emission estimates due to production



V

schedule modifications are included on the attached tables. The emission factors presented in the attached tables are conservatively based on 2001 reporting year production information.

Information from the most recent Stack Emissions Test on the wood fired boiler is included, for replacement of test information provided with the original renewal application from the test conducted in the year 2000.

The attached sections contain information that was modified as a result of the changes described above. These sections should be used to replace sections of the renewal application submitted earlier. The following table serves as a guide for making these replacements.

| Attached Information | Replacement For: |
|-------------------------------|--|
| | (Sections in the original renewal application to be removed |
| | and replaced with the attached information) |
| Renewal Application Narrative | Narrative provided in former application (cover sheet and 12 |
| (cover sheet and 12 pages). | pages). |
| Section C, Emissions | 1. Section C, Emissions Summary for the Entire Facility, |
| Summary for the Entire | Normal Operating Scenario – Use of Treated and Untreated |
| Facility, including Emission | Wood Fuel, including Emission Inventory Calculation - |
| Inventory Calculation – PTE | PTE Basis (6 pages) |
| Basis (6 pages) | 2. Section C, Emissions Summary for the Entire Facility, |
| | Alternative Operating Scenario – Use of Untreated Wood |
| | Fuel Only, including Emission Inventory Calculation – PTE |
| | Basis (6 pages) |
| Section D, Fuel Burning | 1. Section D, Fuel Burning Equipment, Emission Point No. |
| Equipment, Emission Point | AA-001, Ref. No. 40 - Use of Treated and Untreated Wood |
| No. AA-001, Ref. No. 40 | Fuel (2 pages) |
| Wood Fired Boiler (2 pages) | 2. Section D, Fuel Burning Equipment, Emission Point No. |
| | AA-001 Ref. No. 40 - Alternative Operating Scenario Use |
| | of Untreated Wood Fuel (2 pages) |
| Section E, Manufacturing | Section E, Manufacturing Processes, Emission Point No. AA- |
| Processes, Emission Point No. | 003, Wood Preserving Process (2 pages) |
| AA-003, Wood Preserving | |
| Process (2 pages) | |
| Section E, Manufacturing | Section E, Manufacturing Processes, Emission Point No. AA- |
| Processes, Emission Point No. | 008, Ref. No. 46, Treated Wood Storage (2 Pages) |
| AA-008, Ref. No. 46, Treated | |
| Wood Storage (2 Pages) | |
| Section M5, including Stack | Section M5, including Stack Emissions Test, |
| Emissions Test, | September 29, 2000 (5 pages) |
| September 23, 2002 (6 pages) | |

If you have any questions or require additional information, please call me at (662) 226-4584 extension 11.

Sincerely,

Thomas L. Henderson

Plant Manager

Enc.

cc. Steve Spengler – Environmental Permits Division MSDEQ
Tim Basilone – KII, Pittsburgh

Renewal Application

Title V Operating Permit

No. 0960-00012

Koppers Industries, Inc.

Tie Plant, MS 38960

TABLE OF CONTENTS

| 1.0 | Introduction |
|-----|--|
| 2.0 | Changes in Plant Equipment and Operation |
| 3.0 | Exempt and Insignificant Activities |
| 4.0 | Alternate Operating Scenario |
| 5.0 | Monitoring, Recordkeeping & Reporting |
| 5.0 | MSDEO Application Forms |

1.0 Introduction.

On 11 March 1997, Koppers Industries, Inc. was issued the Title V Operating Permit No. 0960-00012 for its wood treating plant (the Plant) at Tie Plant MS. An application for renewal of the Title V permit was submitted on September 26, 2001, in conformance with MDSEQ requirements.

During the 5 years that the Title V permit has been in effect, the Grenada Plant has operated in compliance with the requirements of the permit. In addition, several changes have taken place. Some sources have been retired from service and some new sources have been added. Some equipment, originally used for one purpose has been switched to a different type of service. For some equipment, the Reference Numbers have been changed to provide consistency with other site permit and programmatic requirements.

The wood fired boiler operation was changed to include only the use of untreated wood fuel, instead of using both treated and untreated wood fuel as was done in the past. Koppers began using only untreated wood fuel in 2001, and has made the decision to only burn untreated wood fuel in the boiler in the future. Despite this change in wood fuel, the Plant remains a Major Source for purposes of the Title V Operating Permit Program.

The basic operations at the Plant are unchanged. The Plant continues to produce treated wood products such as railroad ties, utility poles and other timber products. During the past 5 years some of these operations have become more streamlined. Others have been replaced or eliminated. Several operations have undergone change in response to KII's pollution prevention efforts. For example, the formulation of KII's creosote has changed since the original application. The reformulated creosote is both easier to use in treating operations and results in lower VOC emissions to the atmosphere during the treating operations.

The remaining sections of this permit application document include all of the changes relevant to the Plant. In addition, the various MSDEQ Forms required for this renewal application are included.

2.0 Changes in Plant Equipment and Operations

Since the original Title V Permit has been in effect, there have been several changes in equipment and operations at the Plant. Some of these changes have been discussed previously in detail with the MSDEQ. Others correspond to exempt and/or insignificant changes. All of these changes are summarized below.

2.1 Changes in Equipment Reference Numbers

Several of these Reference Numbers have been changed to incorporate the numbering system used in the SPCC Plan for the Plant. Other Reference Numbers have been changed because the 1997 Title V Permit had duplicate Reference Numbers. For example, in the 1997 Title V Permit, both Emission Points AA-003 and AA-0010 had a Reference No. 32. By revising the Reference Number system used in this renewal application, this and other duplicate reference numbers have been avoided.

| Emission Point | Description (1997 Title V References) | Proposed Ref. No | Comments |
|-------------------|---|---------------------|---|
| AA-001 | Title V, Ref. No. 1 - the 60.0 MMBTUH Wellons/Nebraska Woodwaste Boiler | 40 | See also Section 4 |
| AA-002 | Title V, Ref. No. 26 - the 28.5 MMBTUH fuel oil fired Murray Boiler | 41 | |
| AA-003 | SPCC, Ref. No. 5 - the 34,000 gal treatment cylinder containing Penta in oil. | 1 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 2 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 3 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote | 4 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder containing Creosote. | 5 | Changed from Creosote to Penta us |
| | SPCC, Ref. No. 6 - the 29,7786 gal #1 Work Tank containing Penta in oil. | 6 | |
| | SPCC, Ref. No. 7 - the 29,786 gal #2 Work Tank containing Creosote | 7 | |
| | SPCC, Ref. No. 8 - the 29,786 gal #3 Work Tank containing Creosote | 8 | |
| | SPCC, Ref. No. 9 - the 22,419 gal #4 Work Tank containing Creosote | 9 | |
| | SPCC, Ref. No. 10 - the 29,786 gal #5 Work Tank containing Creosote/Water. | 10 | |
| | SPCC, Ref. No. 11 - the 4,200 gal Measuring Tank containing Creosote | 11 | |
| | SPCC, Ref. No. 12 - the 100,000 gal #1 Storage Tank containing Creosote | 12 | Changed from creosote storage to a storm water surge tank |
| | SPCC, Ref. No. 13 - the 100,000 gal #2 Surge Tank containing Process water | 13 | |
| | SPCC, Ref. No. 14 - the 100,000 gal #5 Storage Tank containing Diesel #2 fuel oil | 14 | |
| | SPCC, Ref. No. 15 - the 105,000 gal #6 Storage Tank containing creosote | 15 | |
| | SPCC, Ref. No. 16 - the 300,000 gal #10 Surge Tank containing process water | 16 | |
| | SPCC, Ref. No. 17 - the 250,000 gal Storm Water surge tank containing Storm Water | 17 | |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | Comments | |
|---------------------------------------|---|---------------------|---|--|
| | SPCC, Ref. No. 18 - the 1,500 gal Coagulant Tank containing water treatment system polymer additive | 18 | | |
| | SPCC, Ref. No. 19 - the 2,500 gal Decant Tank containing Creo/Oil/Water | 19 | | |
| | SPCC, Ref. No. 20 - the 8,000 gal Creosote Blowdown tank containing Creo/Water | 20 | | |
| | SPCC, Ref. No. 21 - the 6 ft. Dia. X 60 ft. long, Air Receiver containing compressed air | | Removed from list. Contains only compressed air | |
| | SPCC, Ref. No. 22 - the 7 ft. Dia. X 40 ft. long Air Receiver containing compressed air | | Removed from list. Contains only compressed air | |
| | SPCC, Ref. No. 23 - the 8,000 gal Penta Blowdown tank containing water/penta/oil | 23 | | |
| | SPCC, Ref. No. 26 - the 150,000 gal Aeration Tank containing waste water | 26 | | |
| Tr. | SPCC, Ref. No. 27 - the 25,000 gal Clarifier Tank containing waste water | 27 | | |
| | SPCC, Ref. No. 28 - the 15,000 gal Discharge Tank containing waste water | 28 | 9 | |
| | SPCC, Ref. No. 29 - the 8,000 gal Creosote Dehydrator | 29 | | |
| | SPCC, Ref. No. 30 - the 14,000 gal North Penta Equalization Tank containing water/penta/oil | 30 | | |
| · · · · · · · · · · · · · · · · · · · | SPCC, Ref. No. 31 - the 14,000 gal South Penta Equalization Tank containing water/penta/oil | 31 | | |
| | SPCC, Ref. No. 32 - the 9,400 gal Penta Mix Tank containing Oil/Penta | 32 | | |
| | SPCC, Ref. No. 33 - the 5,000 gal Penta Mix Tank containing Oil/Penta | 33 | | |
| i | SPCC, Ref. No. 34 - the 10,500 gal Penta Concentrate Tank containing 40% Pentachlorophenol Concentrate | 34 | | |
| | SPCC, Ref. No. 35 – the 100,000 gal Stormwater Tank | 35 | This Tank has been added. | |
| AA-004 | Title V, Ref. No. 27, the Tie Mill and Lumber Mill with cyclone | 42 | | |
| AA-005 | Title V, Ref. No. 33, the Boiler House natural gas fired space heater rated at 0.2 MMBTUH | 43 | Insignificant Activity per APC-S-6.I Three (3) space heaters each rated at 0.2mmbtu/hr. | |
| AA-006 | Title V, Ref. No. 35, the natural gas fired steam cleaner rated at 0.44 MMBTUH | 44 | Insignificant Activity per APC-S-6.I | |
| AA-007 | Title V, Ref. No. 36, the Wood Stove Shop Heater rated at 0.10 MMBTUH | | Source no longer exists. Has been removed from site. | |
| AA-008 | Title V, Ref. No. 8, the Treated Wood Storage Areas | 46 | | |
| AA-009 | Title V, Ref. No. 31, the Pole Kiln | 47 | | |
| AA-010 | Title V, Ref. No. 32, the Pole Peeler | 48 | | |
| AA-011 | Title V, Ref. No. 34, Wood Fuel Preparation and handling including grinding, conveying, and silo loading | 49 | _{je} la | |
| AA-012 | Title V, Ref. No. 37, the two (2) Parts cleaners- degreasers | 50 | | |
| AA-013 | SPCC, Ref. No. 24, the 1,250 gal Gasoline Storage tank containing Gasoline used by company vehicles | 51 | Insignificant Activity per APC-S-6.IV | |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | Comments |
|-------------------|---|---------------------|--|
| AA-014 | SPCC, Ref. No. 25, the 9,000 gal Diesel Storage tank used by company vehicles/Rolling Stock | 52 | Insignificant Activity per APC-S-6.IV. |
| AA-015 | Title V, Ref. No. 33, the Oil Fired Murray Standby boiler room Natural Gas fired Space Heater rated at 0.1 MMBTUH | 54 | Insignificant Activity per APC-S-6.IV. |
| AA-016 | Title V, Ref. No. 33, the Fire Pump building Natural Gas fired Space Heater rated at 0.02 MMBTUH | | Source no longer exists. Has been removed from site. |

2.2 Emission Factors and Emissions.

As noted above, KII has changed the formulation of creosote used for treating ties, poles and timber. This reformulation is a classic pollution prevention program since it made the treating operations easier and it reduced VOC emissions from the treating process as well. The reformulation resulted in an appreciable reduction in the vapor pressure of the creosote. One of the significant advantages to this reformulation was the elimination of certain HAPs from the creosote, which correspondingly reduced the HAP atmospheric emissions.

The PTE emissions for the Plant are included with the various MSDEQ Forms. However, a summary of the changes in the VOC emissions associated with creosote treatment is provided below.

Emissions from Creosote Treated Products

| Pollutant | Production Emissions (tpy) | Storage Yard Emission (tp | | |
|--------------|------------------------------|---------------------------|--|--|
| | 1996 Application/1997 Permit | | | |
| Total VOC | 26.25 | 12.88 | | |
| Napthalene | 4.46 | 3.88 | | |
| Benzene | 5.78 | 0.003 | | |
| Toluene | 6.83 | 0.15 | | |
| Dibenzofuran | 0.16 | n.a. | | |
| Quinoline | 0.39 | n.a. | | |
| Biphenyl | 0.04 | n.a. | | |
| Total HAPs | 19.33 | 4.03 | | |
| | 2002 Application | | | |
| Total VOC | 4.62 | 5.18 | | |
| Napthalene | 2.69 | 3.12 | | |
| Dibenzofuran | 0.00 | 0.00 | | |
| Quinoline | 0.10 | 0.09 | | |
| Biphenyl | 0.05 | 0.05 | | |
| Total HAPs | 2.85 | 3.27 | | |

NOTES:

All emissions based on 2,400,000 ft³ ties and 1,100,000 ft³ poles

n.a. = not analyzed or reported. All Emissions on a PTE basis.

The summary indicates that there is a substantial reduction in the emissions of VOC and certain organic HAPs from the production of creosote treated wood products. These emissions are included in the affected Forms required by MSDEQ in this reapplication.

2.3 Equipment Changes at the Plant

The equipment associated Emission Points AA-007, the Wood Stove Shop Heater, and AA-015, the Fire Pump Building natural gas fired space heater, have been removed from the site. A new storm water storage tank has been added. It has been included in AA-003 and has the Reference No. 35.

3.0 Insignificant and Exempt Activities and Equipment

The MSDEQ regulations at APC-S-6.VI include an extensive list of "Insignificant Activities and Emissions". Several of the operations and equipment at the Plant are listed as "Insignificant" in Sections APC-S-6-VI.A and VI.B. These are listed below and are included in Form C, as required by MSDEQ. In addition, the emissions from several, but not all, of these Insignificant Activities are included in the Plant-wide Emissions Summary, as required under APC-S-6.VI.C and VI.D. See the individual equipment and/or process Forms and the Emission Summary in Form C for the details.

| Emission Point | Description | Insignificant Activity | | |
|----------------|--|------------------------|--|--|
| AA-003 | Compressed Air Receivers (Ref. Nos. 21 & 22) | APC-S-6.VI.B.27 | | |
| AA-005 | Boiler House natural gas fired space heater | APC-S-6.VI.B.2.a. | | |
| AA-006 | Natural gas fired steam cleaner | APC-S-6.VI.B.2.a. | | |
| AA-013 | 1,000 gallon Gasoline Storage Tank | APC-S-6.VI.B.7 | | |
| AA-014 | 20,000 gallon Diesel fuel Storage Tank | APC-S-6.VI.B.7 | | |
| AA-015 | Standby boiler room natural gas fired Space Heater | APC-S-6.VI.B.2.a. | | |
| | Outdoor kerosene heaters (5 units) | APC-S-6.VI.A.17 | | |
| | Emergency Power Generators (3 units at 11 hp and 6000 watts; 3 units at 16 hp and 8000 watts) | APC-S-6.VI.B.9 | | |

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4.0 Change to Untreated Wood Fuel Only (Wood Fired Boiler)

The operation of the Wellons wood-fired boiler, Emission Point AA-001, was originally baselined using a mixture of used, treated wood and untreated wood as fuel. The emissions for the baseline operation were included in the original (1996) permit application. However, this baseline operation was changed in 2001, when Koppers began using only untreated wood fuel. Koppers has decided to continue burning only untreated wood in the wood fired boiler. Therefore the operation of the wood fired boiler represented in this application is based on use of untreated wood fuel only. Note that this operating scenario in no way affects the quantities or mix of treated wood products manufactured at the Plant.

Because, in general, untreated wood fuel has a lower thermal rating (btu/lb of wood) than does used treated wood fuel, the quantity of untreated wood that must be burned as fuel greatly exceeds that of used treated wood fuel. For example, for the Wellons boiler at the Plant, with a nameplate rating of 60,000,000 btu/hr (60mmbtu/hr), the baseline scenario included 37,580 tons of used treated wood fuel on a PTE basis. Correspondingly, the operating scenario using only untreated wood fuel requires 58,400 tons on a PTE basis.

Also, the emissions associated with untreated wood fuel differ somewhat from those associated with used treated wood fuel. The used treated wood fuel mixture contains some pentachlorophenol treated wood. For this reason, emissions of HCl are characteristic of this fuel component and are missing when only untreated wood fuel is used. Also, the untreated wood fuel contains less sulfur, which leads to lower SO₂ emissions than with the used treated wood fuel. The emission factors for the untreated wood fuel operating scenario presented in this application are taken from AP-42 and are summarized below:

Potential To Emit Basis for Title V Application - Alternative Operating Scenario

| AA-001-BOILER, WOOD | tn/yr | Sulfur | Chlorine | (lb/hr): |
|-------------------------|--------|--------|----------|----------|
| FIRED | | | | |
| Total Wood Burned: | 58,403 | 0.01% | 0.04% | 13333 |
| Creo Wood Burned: | 0 | 0.25% | 0.04% | |
| Penta Wood Burned: | 0 | 0.25% | 0.25% | |
| Untreated Wood Burned: | 58,403 | 0.01% | 0.04% | |
| Removal Efficiency (1): | | 70.00% | 45.00% | |

| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
|------------------|--------------------|----------------|-----------|-------------------|----------------------|
| Particulate | 4.2 | lb/tn | AP-42 | 122.65 | 28.00 |
| SO2 | 0.08 | lb/tn | AP-42 | 2.19 | 0.50 |
| NOX (2) | 1.60 | lb/tn | 1994 Test | 46.72 | 10.67 |
| CO | 6.6 | lb/tn | AP-42 | 192.73 | 44.00 |
| VOC | 0.18 | lb/tn | AP-42 | 5.26 | 1.20 |
| HCl | 1.538 | lb/tn PCP fuel | 2/96 Test | 0.00 | 0.00 |
| Arsenic | 8.8E-05 | lb/tn | AP-42 | 0.0026 | 0.001 |
| Cadmium | 1.7E-05 | lb/tn | AP-42 | 0.0005 | 0.000 |
| Chromium | 1.3E-04 | lb/tn | AP-42 | 0.0038 | 0.001 |
| Lead | 3.1E-04 | lb/tn | AP-42 | 0.0091 | 0.002 |
| Manganese | 8.9E-03 | lb/tn | AP-42 | 0.2599 | 0.059 |
| Nickel | 5.6E-04 | lb/tn | AP-42 | 0.0164 | 0.004 |
| Selenium | 1.8E-05 | lb/tn | AP-42 | 0.0005 | 0.000 |
| Mercury | 6.5E-06 | lb/tn | AP-42 | 0.0002 | 0.000 |
| Total HAP Metals | | | | 0.29 | 0.067 |

⁽¹⁾ Removal efficiencies based on 2/96 stack test.

The Grenada Plant meets the criteria for a Major Source under the Title V program using untreated wood fuel in the Wellons boiler.

The emissions for the Wellons boiler (AA-001) are summarized in Section D of the MSDEQ Forms. The plant-wide summary is included in Section C of the MSDEQ Forms.

For this revised operating scenario using only intreated wood fuel in the wood fired boiler, some of the emission limitations and monitoring & recordkeeping provisions of the existing Title V permit for the Baseline Scenario are no longer appropriate. It is requested that the following changes be made in the new Title V permit:

- a. In Section 3.B, there is a temperature limitation in effect when treated wood fuel is used. Since treated wood will not be used for the Alternative Operating Scenario, this limitation should be removed.
- b. In Section 3.B, there is a limitation on the hourly feed rate of 9375 lb/hour for the used treated wood fuel. This limitation was established in the Construction Permit. For the

^{(2) 1994} Stack Test

proposed operating scenario using only untreated wood, this limitation must be revised upwards to account for the lower btu/lb heating value of the untreated wood fuel. It is requested that this limitation be set at 15,000 lb/hour for untreated wood fuel. This limitation provides some small margin on the fuel use rate corresponding to the PTE basis in the Emission Summary. This small margin will allow for some variation in the heating value of the untreated wood fuel. The Emission Summary is based on a heating value of 4500 btu/lb. If some fuel contains greater moisture or is lower quality, in general, the actual heating value will be below the value used in the emissions summary.

- c. In Section 5.B, there is a recordkeeping requirement to provide for continuous recording of the boiler temperature and to note the time periods when untreated wood fuel is fed to the boiler. For the proposed operating scenario, used treated wood fuel will not be used at any time and it is requested that this monitoring and record keeping requirement be eliminated.
- d. In Section 5.B, there is a monitoring/record keeping requirement for CO. The CO requirement was originally included in the permit as a means of indirectly measuring the completeness of combustion, a consideration that is only important if treated wood is being burned. For the proposed operating scenario, used treated wood fuel will not be used at any time and it is requested that this monitoring and record keeping requirement be eliminated.
- e. In Section 5.B, there is a monitoring/record keeping requirement for Opacity. The opacity requirement included in the permit requires monitoring and documentation with record keeping of the in stack opacity on a continuous basis. For the proposed operating scenario, it is requested that this monitoring and record keeping requirement be changed to visual methods of opacity monitoring at the stack, with appropriate record keeping.

5.0 Monitoring, Recordkeeping & Reporting Requirements.

Section 5 of the existing Title V Permit contains several monitoring, recordkeeping and reporting (MRKR) requirements. Based on KII's experience operating in compliance with these requirements, some changes are recommended for the new Permit. These are focused on elimination of duplicative reporting requirements and on removing ambiguity from the existing language. The following changes are recommended:

Existing 5.A.4 – "Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E."

Suggestions for Modification of Section 5.A.4:

It is recommended that this is where all of the deviations should be reported and not under Condition 5.A.5. It is felt that semi-annual reporting is timely and that the 5-day reporting requirement in Condition 5.A.5 is burdensome. By eliminating the 5-day reporting requirement, duplicative reporting would be avoided. In addition, it is recommended that the language in the new permit be amended to include an explicit list of those deviations that must be reported and what information for each deviation must be reported in the semi-annual reports.

Existing 5.A.5 – "Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken within five (5) days of the time the deviation began."

Suggestions for Modification of Section 5.A.5:

It is recommended that the language in the new permit be amended to include an explicit list of those deviations that must be reported in the semi-annual reports. In addition, we would like the language of the permit to explain in explicit detail what information must be reported. Also we would like the 5-day reporting period to be eliminated and the Semi-Annual Air Report required under Section 5.A.4 be the only reporting schedule.

The existing Permit provides deviation reporting exemptions for the following conditions:

- a. Startups Opacity may exceed 40% for 15 minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- b. Soot Blowing emissions from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

It is recommended that the following items be listed as exemptions for purposes of reporting deviations:

- 1. A longer duration allowance for soot blowing such as 15 minutes or more, since this is preventative maintenance that occurs 3 times a day on a normal operating day.
- 2. An opacity allowance for pulling ash. This is also a routine preventative maintenance measure that occurs at least twice daily. This practice is especially disruptive to the system in terms of opacity due to the behavior of "fly ash" that is removed from the ash box and the ash collector.
- 3. An opacity allowance for fuel cell clean out. This is preventative maintenance that occurs 4 times per day and is also disruptive to the system in terms of opacity.
- 4. An opacity allowance for fuel feed adjustment. The condition of our fuel is constantly changing. A variety of factors in fuel conditions play a significant role in the combustion efficiency rate at which the fuel is burned. One fuel feed rate may work perfectly for the type of fuel that was fed into the boiler on one day, but then that rate may be too high or too low for the fuel fed into the boiler on the next day. Sometimes the difference can be observed between fuels in consecutive hours.

6.0 MSDEQ Forms

The remainder of this Section includes the Forms that are required for this Renewal Application. Forms B and C are signed by the Plant Manager, who is the Responsible Official for this Renewal Application.

SECTION C EMISSIONS SUMMARY for the ENTIRE FACILITY

List below the total emissions for each pollutant from the entire facility in accordance with Operating Permit Application Requirements, pp. 3-5. For stack emissions, use the maximum annual allowable (potential) emissions. For fugitive emissions, use the annual emissions calculated using the maximum operating conditions.

| POLLUTANT | ANNUAL | EMISSION RATE |
|------------------------------------|--------|---------------|
| Footnote 1 | lb/hr | tons/yr |
| PARTICULATE (LESS FUGITIVE) | | 130.79 |
| SO2 | | 65.63 |
| NOX | | 65.07 |
| со | | 197.36 |
| VOC (LESS FUGITIVE) | | 75.71 |
| VOC (INCLUDING FUGITIVE) | | 100.83 |
| HAPS (ORGANICS/VOC) | | 6.13 |
| NAPHTHALENE | | 5.82 |
| HAP METALS | | 0.29 |
| HCL | | 0.00 |
| TOTAL HAPS | | 6.42 |
| | | |
| SEE PTE TABLES (FOLLOWING 5 PAGES) | | |
| 2 | | |

^{1.} All regulated air pollutants, including hazardous air pollutants emitted from the entire facility should be listed. A list of regulated air pollutants has been provided in Section A.

With the exception of the emissions resulting from insignificant activities and emissions as defined in Regulation APC-S-6, Section VII, the pollutants listed above are all regulated air pollutants reasonably expected to be emitted from the facility.

SIGNATURE (must match signature on page 17)

BASIS

EMISSION INVENTORY CALCULATION KOPPERS INDUSTRIES, INC. - GRENADA, MS Potential To Emit Basis for Production Study

| AA-001-BOILER, WOOD FIRED | tn/yr | Sulfur | Chlorine |
|---------------------------|--------|--------|----------|
| Total Wood Burned: | 58,403 | 0.01% | 0.04% |
| Creo Wood Burned: | 0 | 0.25% | 0.04% |
| Penta Wood Burned: | . 0 | 0.25% | 0.25% |
| Untreated Wood Burned: | 58,403 | 0.01% | 0.04% |
| Removal Efficiency (1): | 1920 | 70.00% | 45.00% |

(lb/hr): 13333

Emission Estimated **Emissions** Pollutant Factor Units **Basis** (tn/yr) (lb/hr) Particulate 4.2 lb/tn 122.65 AP-42 28.00 SO2 0.08 lb/tn **AP-42** 2.19 0.50 NOX 1.6|lb/tn 1994 Test 46.72 10.67 CO 6.6 lb/tn AP-42 192.73 44.00 VOC 0.18 lb/tn AP-42 5.26 1.20 HCI 1.538 lb/tn PCP fuel 2/96 Test 0.00 0.00 Arsenic 8.8E-05 |lb/tn AP-42 0.0026 0.001 Cadmium 1.7E-05 |lb/tn AP-42 0.0005 0.000 Chromium 1.3E-04 | lb/tn AP-42 0.0038 0.001 Lead 3.1E-04 | lb/tn AP-42 0.0091 0.002 Manganese 8.9E-03 lb/tn **AP-42** 0.2599 0.059 Nickel 5.6E-04 |lb/tn AP-42 0.0164 0.004 Selenium 1.8E-05 lb/tn AP-42 0.0005 0.000 Mercury 6.5E-06 |lb/tn AP-42 0.0002 0.000 Total HAP Metals 0.29 0.067

⁽¹⁾ Removal efficiencies based on 2/96 stack test.

| AA-002-BOILER, FUEL OIL | | Fuel Use Rate(MGal/hr): | | | |
|-------------------------------------|----------------------|-------------------------|-------|-------------------|----------------------|
| Oil Burned(MGal/yr): | 1787 Sulfur Content: | | 0.500 | 0.204 | |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 2 | lb/MGal | AP-42 | 1.79 | 0.41 |
| SO2 | 71 | lb/MGal | AP-42 | 63.44 | 14.48 |
| NOX | 20 | lb/MGal | AP-42 | 17.87 | 4.08 |
| CO | 5 | lb/MGal | AP-42 | 4.47 | 1.02 |
| VOC | 0.2 | lb/MGal | AP-42 | 0.18 | 0.04 |
| Number of days boiler assumed to or | perate is | 36 | 55 | | |

AA-003-WOOD PRESERVING PROCESSES

 Creosote Ties
 2,400,000
 C. F.

 Creosote Poles
 1,100,000
 C. F.

 Total Creosote Wood
 3,500,000
 C. F.

 Oil/Penta Poles
 3,500,000
 C. F.

| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
|-----------------------------|--------------------|-------|---------------------|-------------------|----------------------|
| Creosote (VOC) | 2.641E-03 | lb/cf | Form R | 4.62 | 1.06 |
| HAPs contained in creosote: | | | | | |
| Naphthalene | 1.54E-03 | lb/cf | Form R, Calculation | 2.69 | 0.61 |
| Quinoline | 5.68E-05 | lb/cf | Form R, Calculation | 0.10 | 0.02 |
| Biphenyl | 3.09E-05 | lb/cf | Form R, Calculation | 0.05 | 0.01 |
| Dibenzofuran | 2.59E-06 | lb/cf | Form R, Calculation | 0.00 | 0.00 |
| TOTAL CREO. HAP | | | | 2.85 | 0.65 |
| Pentachlorophenol (VOC) | 3.73E-06 | lb/cf | Form R | 0.01 | 0.00 |
| #6 Oil (VOC) | 1.4E-02 | lb/cf | Engr. Est. | 24.75 | 5.65 |
| TOTAL VOC | | | | 29.37 | 6.71 |

AA-008-PRESERVATIVE TREATED WOOD STORAGE FUGITIVES

| | Emission | | | Estimated | Emissions |
|-------------------------|----------------------|-------|---------------------|-----------|-----------|
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Creosote Ties | | | | | |
| Creosote (VOC) | 2.69E-03 | lb/cf | FR Test & Creo Data | 3.23 | 0.74 |
| Naphthalene | 1.62E-03 | lb/cf | FR Test & Creo Data | 1.95 | 0.44 |
| Quinoline | 4.90E-05 | lb/cf | FR Test & Creo Data | 0.06 | 0.01 |
| Biphenyl | 1.67E-05 | lb/cf | FR Test & Creo Data | 0.02 | 0.00 |
| Dibenzofuran | 1.26E-06 | lb/cf | FR Test & Creo Data | 0.00 | 0.00 |
| Creosote Poles | | | | | |
| Creosote (VOC) | 3.55E-03 | lb/cf | FR Test & Creo Data | 1.95 | 0.45 |
| Naphthalene | 2.14E-03 | lb/cf | FR Test & Creo Data | 1.18 | 0.27 |
| Quinoline | 6.46E-05 | lb/cf | FR Test & Creo Data | 0.04 | 0.01 |
| Biphenyl | 2.20E-05 | lb/cf | FR Test & Creo Data | 0.03 | 0.01 |
| Dibenzofuran | 1.66E-06 | lb/cf | FR Test & Creo Data | 0.00 | 0.00 |
| Penta Poles | | | | | |
| Oil (VOC, est. as creo) | 1.15E-02 | lb/cf | FR Test | 20.13 | 4.59 |
| Pentachlorophenol | 1.9E ₌ 06 | lb/cf | Engr. Est. | 0.00 | 0.00 |
| Totals | - | | | | |
| VOC | | | | 25.31 | 5.77 |
| Naphthalene | | | | 3.12 | 0.71 |
| Quinoline | | | | 0.09 | 0.02 |
| Biphenyl | | | | 0.05 | 0.01 |
| Dibenzofuran | | | | 0.00 | 0.00 |
| Pentachlorophenol | | | | 0.00 | 0.00 |
| HAP Organics (Total) | | | | 3.27 | 0.75 |

| AA-009 | DRY KILNS | | Batch size (cf): | | | 13000 | |
|-------------|-----------|----------|------------------|---------|-------------------|-----------|--|
| Poles Dried | | 1,600,0 | 1,600,000 C. F. | | Batch time (hrs): | | |
| | | Emission | Fr. Te | | Estimated | Emissions | |
| 11.00 | Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) | |
| VOC | | 0 | .05 lb/cf | Alabama | 40.00 | 9.03 | |

AA-004-CYCLONES FOR WOOD MILLING

Number of Cyclones: Ave. Hours/Day: Ave Days/Yr Each:

300

Total Hours: 2400

| | Emission | | 4 | Estimated | Emissions |
|-------------|----------|-------|-------|-----------|-----------|
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Particulate | 2 | lb/hr | AP-42 | 2.40 | 2 |

AA-010-POLE PEELER

Poles Peeled= 1,000,000 CF/yr 440 CF/hr
Pole Density= 45 lb/CF
Pole Amount Peeled= 22,500 tn/yr 9.9 tn/hr

| | Emission | | | Estimated | Emissions |
|-------------|----------|--------|-------|-----------|-----------|
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Particulate | 0.350 | lb/ton | AP-42 | 3.94 | 3.465 |

SPACE HEATERS, NATURAL GAS

Hr/Yr MMCF/Yr Location BTU/Hr BTU/CF CF/Hr AA-005-Boiler House 1000 600 8,760 600000 5.256 AA-015-Standby Boiler Room 100000 1000 100 8,760 0.876 AA-016-Fire Pump Building No longer exists. **TOTAL** 700000 700 6.132

| | Emission | 77. | 78 - 7 | Estimated | Emissions | |
|-------------|----------|---------|--------|-----------|-----------|--|
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) | |
| Particulate | 0.18 | lb/MMCF | AP-42 | 0.00 | 0.00 | |
| SO2 | 0.6 | lb/MMCF | AP-42 | 0.00 | 0.00 | |
| NOX | 94 | lb/MMCF | AP-42 | 0.29 | 0.07 | |
| CO | 40 | lb/MMCF | AP-42 | 0.12 | 0.03 | |
| VOC | 11 | lb/MMCF | AP-42 | 0.03 | 0.01 | |

AA-011-WOOD FUEL PREPARATION & HANDLING (Fugitive)

| Wood Fuel Processed | 58,4 | 03 Tn/Yr | | 12 tn/hr | |
|---------------------|----------|-----------|------------|-----------|-----------|
| | Emission | | | Estimated | Emissions |
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Particulate | 0 | .25 lb/tn | Engr. Est. | 7.30 | 3.00 |

| AA-006-STEAM CLEANER | Fuel Use Rat | е | | | |
|----------------------|--------------------|----------|-------|-------------------|----------------------|
| Annual Usage | 8760 | hours/yr | | 440 | CF/hr |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 12 | lb/MMCF | AP-42 | 0.02 | 0.01 |
| SO2 | 0.6 | lb/MMCF | AP-42 | 0.00 | 0.00 |
| NOX | 100 | lb/MMCF | AP-42 | 0.19 | 0.04 |
| CO | 21 | lb/MMCF | AP-42 | 0.04 | 0.01 |
| VOC | 5.8 | lb/MMCF | AP-42 | 0.01 | 0.00 |

| AA-007-WOOD STOVE HE | ATER, SHOP | NO LON | GER EXISTS | Fuel Use Rat | e |
|----------------------|------------|---------|------------|--------------|-----------|
| Annual Usage | 0 | 0 tn/yr | | 0 | tn/hr |
| | Emission | N TO BE | | Estimated | Emissions |
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Particulate | 30.6 | lb/tn | AP-42 | 0.00 | 0.00 |
| SO2 | 0.4 | lb/tn | AP-42 | 0.00 | 0.00 |
| NOX | 2.8 | lb/tn | AP-42 | 0.00 | 0.00 |
| CO | 230.8 | lb/tn | AP-42 | 0.00 | 0.00 |
| VOC | 43.8 | lb/tn | AP-42 | 0.00 | 0.00 |

AA-012-PARTS CLEANERS, DEGREASERS

| Number of units operating: | 2 | | | |
|----------------------------|-----------------|-------|-----------|-----------|
| | Emission | | Estimated | Emissions |
| Pollutant | Factor Units | Basis | (tn/yr) | (lb/hr) |
| VOC | 0.33 tn/unit/yr | AP-42 | 0.66 | 0.00 |

TOTAL PLANT EMISSIONS

| Pollutant | Estimated (tn/yr) | Emissions (1) (lb/hr) |
|-----------------------------|-------------------|--------------------------|
| Particulate (less fugitive) | 130.79 | 29.86 |
| SO2 (2) | 65.63 | 14.98 |
| NOX | 65.07 | 14.86 |
| CO | 197.36 | 45.06 |
| VOC(less fugitive) | 75.51 | 17.24 |
| VOC(including fugitive) | 100.83 | 23.02 |
| HAPs(Organics/VOC) | 6.13 | 1.40 |
| Naphthalene | 5.82 | 1.33 |
| HAP Metals | 0.29 | 0.07 |
| HCI | 0.00 | 0.00 |
| Total HAPs | 6.42 | 1.47 |

⁽¹⁾ Average hourly emission rate; not instantaneous maximum emission rate.

⁽²⁾ Assumes backup boiler operating at same time as primary for number of days shown.

| FU. | EL BURNI | NG EQUIPM | IENT (page | 1 of 2) | | SECTION D |
|------|----------------------------------|--|--------------------------------|-----------------|--|---------------------------|
| 1. | Emission Poi | int No. / Name: | AA-001, RE | F. NO. 40, W | OOD FIRED BOILER | \ |
| 2. | Equipment D | Description: ATION POWER U | | CELL COM | BUSTION SYSTEM | , BOILER, AND |
| | COGENERA | ATION FOWER U | INII | | | |
| 3. | | constructed or mo give date and expla | | st 7, 1977? | Ye | es X No |
| 4. | Capacity: | 60.0 | MMBTU/hr | 5. Type | of burner: | FUEL CELL |
| 6. | Usage Type (| (i.e. Space Heat, Pr | ocess, etc.): | | PROCESS | |
| 7. | Complete the content, hour | e following table, ic ly usage, and yearl | lentifying each ty y usage. | pe of fuel an | d the amount used. Sp | pecify the units for hea |
| | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUM HOURLY USAGE | ACTUAL YEARLY USAGE |
| l wc | TREATED OOD AND RK RESIDUE | 4,000 BTU/LB | 0.01 | 0.5 | 8,760 HRS/YR | |
| | | | | | | |
| | | | | | | |
| 8. | Please list any | fuel components t | hat are hazardous | s air pollutant | ts and the percentage is | n the fuel. |
| | | | | | | |
| 9. | Operating Sch weeks/year | nedule: (Optional) | 24 hou | rs/day | 7 days/week | 52 |
| 10. | Stack Data: | | * | | | |
| | A. Height B. Insid | ht: e diameter: | 80 FT 3 FT | | Exit gas velocity: Exit gas temperature: | 70 FT/SEC 471° F |

C.

East

11.

UTM Coordinates: A. Zone

B.

North

SECTION D

3-5. FUEL BURNING EQUIPMENT (page 2 of 2)

12. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data

| | The following of the first of t | TO TO TO | | חכ מוומכחכת ח | i accordance | with Operatir | ig Permit Appl | Ication Re | quirements, pp |
|-----------------------|--|-------------|--------|----------------------------------|--|----------------------|-------------------|---|--------------------|
| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accord Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | V RATE ing Permit | PROPOS EMISSIC | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE Optional) |
| | | * yes/no | effic. | note 2 | lb/hr | tn/yr | note 2 | ТР/БТ | ta/yr |
| AA-001 | PARTICULATE | YES | | | | | 0.3 GR/DSCF | 28.0 32.55 | 122.65 |
| | SO2 | ON | | | | | | 0.50 | 2.19 |
| | NOX ' | ON | | | | | | 10.67 | 46.72 |
| | . 00 | ON | | | | | | 44.0 | 192.73 |
| | VOC | NO | | | | | | 1.20 | 5.26 |
| | HCL | ON | | | | | | 0.00 | 0.00 |
| | TOTAL HAP METALS | NO | | | | | | 0.067 | 0.29 |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

If yes, attach appropriate Air Pollution Control Data Sheet from Section L or manufacturers specifications if other.

| MANUFACTURI | NG PROCESSES (| (page 1 of 2) | SECTION E |
|--|------------------------|--|--------------------|
| Emission Point No | o./ Name: A | A-003, WOOD PRESERVIN | G PROCESS |
| Process Description PENTACHLORO | | EATMENT OF UTIL AND RAILROAD CROSST | |
| Was this unit cons | | gust 7, 1977? ye: | 3 <u>X</u> no |
| Capacity (tons/hr |): 7,000,000 | CF WOOD PRODUCTS PEF | R YEAR |
| Raw Material Inpu | at: | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| WOOD | 342 CF | 800CF | UP TO 7,000,000 CF |
| | | | |
| Product Output: | 333 | | |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| TREATED WOOD | 342 CF | 800 CF | UP TO 7,000,000 CF |
| | | | |
| Stack Data: A. Height: B. Inside dia | | C. Exit gas veloc D. Exit gas temp | |
| UTM Coordinates: A. Zone | B. North | C. 1 | East |

MANUFACTURING PROCESSES (page 2 of 2)

13. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements,

| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accord | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ting.Permit s, pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE Optional) |
|-----------------------|-----------------------|-------------|--------|---------------------|--|--------------------------------------|--------|--|--------------------|
| | | * yes/no | effic. | note 2 | lb/hr | tn/yr | note 2 | 16/1нг | tn/yr |
| AA-003 | NOC | ON | | | | | | 6.71 | 29.37 |
| | NAPHTHALENE | ON | | | | | | 0.61 | 2.69 |
| | QUINOLINE ' | ON | | | | | | 0.02 | 0.10 |
| | BIPHENYL | ON | | | | | | 0.01 | 0.05 |
| | DIBENZOFURAN | ON | | | | | | 0.00 | 0.00 |
| | PENTACHLOROPHENOL | ON | | | | | | 00.00 | 0.01 |
| | | | | | | | | | |
| - | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every

pollutant from an emission point.

If yes, attach appropriate Air Pollution Control Data Sheet from Section L or manufacturers specifications if other.

| MANUFACTURIN | G PROCESSES (p | age 1 of 2) | SECTION E |
|---|---|--------------------------------------|--------------------|
| . Emission Point No./ | Name: AA-008, REI | F. NO. 46, TREATED WO | OD STORAGE |
| Process Description: FOLLOWING TRE. | STORAGE AND H | ANDLING OF TREATE SHIPMENT | D WOOD PRODUCTS |
| 3. Was this unit constru If yes please give da | ucted or modified after Augu te and explain. | st 7, 1977? yes | |
| 4. Capacity (tons/hr): | NA | | |
| 5. Raw Material Input: | | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| B. | | | |
| | | | |
| 6. Product Output: | | | |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| TREATED POLES | ±6 | | UP TO 4,600,000 CF |
| TREATED TIES | | | 2,400,000 CF |
| TOTAL TREATED WOOD | _ • | | UP TO 7,000,000 CF |
| | | 8 | 2 ³ * |
| 7. Stack Data: A. Height: B. Inside diam | NA neter: NA | C. Exit gas velo D. Exit gas temp | |
| UTM Coordinates: A. Zone | B. North | C. 1 | East |

MANUFACTURING PROCESSES (page 2 of 2)

13. POLLUTANT EMISSIONS:

3-5. Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requir

| EMISSION POLLUTANT (note 1) CONTROL (in accordance with Operating Permit EQUIPMENT (in accordance with Operating Permit Application Requirements, pp. 3-5) PROPOSITION Requirements, pp. 3-5) PROPOSITION Requirements, pp. 3-5) PROPOSITION Requirements, pp. 3-5) PROPOSITION REQUIREMENTS NO NO PROPOSITION REQUIREMENTS NO PROTACHLOROPHENOL PROTACHLOROPHENOL NO PROTACHLOROPHE | 100 | TO STATE OF THE PARTY OF THE PA | STANDARD THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NAMED IN COLUMN TRANSPORT NAMED | | , control of the cont | Common Common | ILL Operaum | g remiii App | ilcation Re | quirements, p |
|--|-------------------|--|--|-------------|--|---|-------------------------------------|--------------|--|---------------|
| Yes/ho | | POLLUTANT (note 1) | CON | ROL MENT | ACTUA (in accords Applicati | L EMISSION ance with Operat on Requirements | V RATE ing Permit i, pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | Optional) |
| THALENE NO | WHEN ME IN BUTTON | | * Yes/no | effic. | note 2 | лц/q1 | tn/yr | note 2 | lb/hr | th/yr |
| ON ON ON ON | li · | VOC | NO | | | | | | 5.77 | 25.31 |
| ON ON ON | | NAPHTHALENE | ON | | | | | | 0.71 | 3.12 |
| ON ON ON | | QUINOLINE | NO | | | | | | 0.02 | 0.09 |
| O _N O _N | X.140.43C-877 | BIPHENYL | ON | | | | | | 0.01 | 0.05 |
| | William States | DIBENZOFURAN | ON | | | | | | 0.00 | 0.00 |
| | | PENTACHLOROPHENOL | ON | | | | | | 00.0 | 0.00 |
| | | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

If yes, attach appropriate Air Pollution Control Data Sheet from Section L or manufacturers specifications if other.

SECTION M5 COMPLIANCE DEMONSTRATION BY STACK TESTING

Compliance demonstration by stack testing will be carried out in accordance with EPA approved reference methods and the stack test report must be attached.

| 1. | Emission Point No./Name: AA-001, REF. NO. 40, WOOD FIRED BOILER |
|----|--|
| 2. | Pollutant being tested for: PARTICULATE AND VISIBLE EMISSIONS |
| 3. | Test Method: SEE STACK TEST REPORT (FOLLOWING PAGES) |
| 4. | Compliance shall be demonstrated: |
| | Daily Weekly Monthly Other (specify): BIENNIAL (ONCE EVERY 2 YEARS) |
| 5. | Any measured emission rate that exceeds an emission limit established by the permi must be reported as an excess emission. |
| 6. | Is this an existing method of demonstrating compliance: Yes X No |
| 7. | Backup system (attach other compliance demonstration forms if needed): |
| | |

REPORT OF PARTICULATE AND VISIBLE EMISSIONS TESTING FOR KOPPERS INDUSTRIES GRENADA PLANT WOOD WASTE BOILER

Grenada, Mississippi September 23, 2002

FACILITY NO. 0960-00012

EMISSION POINT NO. AA-001

Koppers Industries
P.O. Box 160
Tie Plant, MS 38960

Contact: Haley Biddy ph: 662/226-4584

Prepared By:
Environmental Monitoring Laboratories
Ridgeland, Mississippi

601/856-3092 **

ENVIRONMENTAL MONITORING LABORATORIES, INC.

P.O. Box 655 © 624 Ridgewood Road Ridgeland, Mississippi 39158 phone: 601/856-3092

fux : 601/853-2151

September 29, 2000

Subject:

Koppers Industries - Grenada, Mississippi

Wood Waste Boiler - Stack Emissions Test

Facility No. 0960-00012

On September 23, 2002, Environmental Monitoring Laboratories performed air emissions testing for Koppers Industries in the Tie Plant community near Grenada, Mississippi. Testing was done to measure particulate and visible emissions from the wood waste boiler in accordance with requirements of the Mississippi Department of Environmental Quality.

Results of emissions testing are shown below.

| PAR | TICULATE EMISS | IONS | VISIBLE EMISSIONS |
|-------|----------------|----------|---------------------|
| #/hr | gr/dscf | #/MM Btu | High SMA, % opacity |
| 26.80 | 0.181 | 0.551 | 8.96 |

Mr. Haley Biddy of Koppers coordinated the testing project. Otis Rayburn of Environmental Monitoring Laboratories was responsible for collection and analysis of particulate samples. Sample custody was limited to Mr. Rayburn.

Following is a report of the test.

REPORT OF PARTICULATE EMISSIONS TESTS FOR KOPPERS INDUSTRIES, INC. GRENADA PLANT WOOD WASTE BOILER

Grenada, Mississippi September 23, 2002

CONTENTS

| 1.0 | TEST RESULTS | page | 1 |
|-----|---------------------------------|------|---|
| 2.0 | SOURCE DESCRIPTION | | 2 |
| 3.0 | TEST PROCEDURES | | 2 |
| 4.0 | DATA REDUCTION | | 3 |
| 5.0 | NOMENCLATURE | | 6 |
| 6.0 | CALIBRATION | | 7 |
| 7.0 | APPENDICES: | | 8 |
| | A. Field and Laboratory Data | | |
| | B. Calibrations | | |
| | C. Visible Emissions Record | | |
| | D. Boiler Steam Chart (Koppers) | | |

REPORT CERTIFICATION

I certify that I have examined the information submitted herein, and based upon inquires of those responsible for obtaining the data or upon my direct acquisition of data, I believe the submitted information is true, accurate and complete.

Signed Signed

Daniel G. Russell

1.0 Test Results:

. Wellons Wood Waste Boiler

| Wellons wood waste bo | | 1 | 2 | 3 | AVG. |
|-----------------------|--------------|----------|---------------|----------|-------|
| Run No | | 1 | 2 09/23/02 | 09/23/02 | AVG. |
| Date | | 09/23/02 | | 1432 | |
| Time Start | | 1205 | 1320 | | |
| Time End | | 1306 | 1421 | 1533 | |
| PARTICULATE EMISSIONS | #/hr | 34.51 | 21.24 | 24.66 | 26.80 |
| PARTICULATE EMISSIONS | gr/dscf | 0.236 | 0.143 | 0.163 | 0.181 |
| PARTICULATE EMISSIONS | #/MM Btu | 0.702 | 0.454 | 0.497 | 0.551 |
| VISIBLE EMISSIONS | high SMA, % | 8.96 | 5.83 | 5.83 | 8.96 |
| HEAT INPUT | MM Btu/hr | 49.20 | 46.75 | 49.65 | 48.53 |
| VOLUMETRIC FLOWRATE | acfm | 30977 | 31452 | 30796 | 31075 |
| VOLUMETRIC FLOWRATE | dscfm | 16991 | 17292 | 17600 | 17294 |
| VELOCITY | ft./sec. | 79.5 | 80.7 | 79.1 | 79.8 |
| STACK TEMPERATURE | °F | 365 | 365 | 366 | 366 |
| MOISTURE | % | 14.0 | 13.8 | 10.3 | 12.7 |
| SAMPLE RATE | % isokinetic | 94 | 99 | 95 | 96 |

2.0 SOURCE DESCRIPTION:.

Koppers Industries, Inc. operates a 30,000 pound per hour Wellons wood waste boiler at their wood preserving facility in Grenada, Mississippi. The boiler provides steam for the timber treating processes and a turbine generator. Fuel is typically wood waste generated from the manufacture of treated wood products.

Heat input as calculated from the test data and an F-Factor was an average 48.53 MM Btu/hr.

The boiler exhausts to the atmosphere by way of a 34.5 inch diameter vertical stack. Two sample ports at 90° are provided at a location that is 432 inches (12.5 diameters) below the stack exit and 356 inches (10.3 diameters) above an upstream stack tapered section.

3.0 TEST PROCEDURES:

Test procedures used are those described in the Code of Federal Regulations, Title 40, Part 60, Appendix A. Specifically, Method 1 was used to determine the number of sample points and Method 5 to determine flow rates, moisture content, and particulate emissions. The sampling train was identical to that described in Method 5 except that the cyclone was omitted. Visible emissions were read in accordance with Method 9 concurrently with the emissions test

Heat input to the boilers was determined by continuously monitoring oxygen content of the flue gas as described in Method 3A and calculating heat input using an F-factor of 9400 scf per million Btu of heat input for the wood waste fuel.

Filters were recovered by rinsing the front half of the filter holder into the probe wash and securing the filters in glass petri dishes. Part of the sample filter often adheres to the filter gasket, and some of the adhering material is recovered into the probe wash. Therefore some of the filter weight is attributed to the probe wash weight.

Filters were heated in an oven for 2 hours at 105° C, desiccated at least 24 hours and weighed to constant weight. Probe wash samples in acetone were evaporated to dryness over low heat in tared beakers, desiccated for at least 24 hours and weighed to constant weight. Weighings are made at 6 hour or greater intervals (samples stored in desiccator). Final weights were considered valid and were recorded if there was no more than 0.5 milligrams difference from the previous weighing.

Renewal Application

Title V Operating Permit

No. 0960-00012

Koppers Industries, Inc.

Tie Plant, MS 38960

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| 1.0 | Introduction |
|-----|---|
| 2.0 | Changes in Plant Equipment and Operations |
| 3.0 | Exempt and Insignificant Activities |
| 1.0 | Alternate Operating Scenario |
| 5.0 | Monitoring, Recordkeeping & Reporting |
| 5.0 | MSDEQ Application Forms |

1.0 Introduction.

On 11 March 1997, Koppers Industries, Inc. was issued the Title V Operating Permit No. 0960-00012 for its wood treating plant (the Plant) at Tie Plant MS. This application for renewal of the Title V permit is submitted 6 months in advance of that expiration date, in conformance with MDSEQ requirements.

During the 5 years that the Title V permit has been in effect, the Grenada Plant has operated in compliance with the requirements of the permit. In addition, several changes have taken place. Some sources have been retired from service and some new sources have been added. Some equipment, originally used for one purpose has been switched to a different type of service. For some equipment, the Reference Numbers have been changed to provide consistency with other site permit and programmatic requirements. Importantly, some operations need to be accomplished in a different way and are the basis for an Alternative Operating Scenario not included in the original permit. For both the baseline operations and the Alternative Operating Scenario, the Plant remains a Major Source for purposes of the Title V Operating Permit Program.

The basic operations at the Plant are unchanged. The Plant continues to produce treated wood products such as railroad ties, utility poles and other timber products. During the past 5 years some of these operations have become more streamlined. Others have been replaced or eliminated. Several operations have undergone change in response to KII's pollution prevention efforts. For example, the formulation of KII's creosote has changed since the original application. The reformulated creosote is both easier to use in treating operations and results in lower VOC emissions to the atmosphere during the treating operations.

The remaining sections of this permit application document include all of the changes relevant to the Plant. In addition, the various MSDEQ Forms required for this renewal application are included.

2.0 Changes in Plant Equipment and Operations

Since the original Title V Permit has been in effect, there have been several changes in equipment and operations at the Plant. Some of these changes have been discussed previously in detail with the MSDEQ. Others correspond to exempt and/or insignificant changes. All of these changes are summarized below.

2.1 Changes in Equipment Reference Numbers

Several of these Reference Numbers have been changed to incorporate the numbering system used in the SPCC Plan for the Plant. Other Reference Numbers have been changed because the 1997 Title V Permit had duplicate Reference Numbers. For example, in the 1997 Title V Permit, both Emission Points AA-003 and AA-0010 had a Reference No. 32. By revising the Reference Number system used in this renewal application, this and other duplicate reference numbers have been avoided.

| Emission Point | Description (1997 Title V References) | Proposed Ref. No | Comments |
|-------------------|--|---------------------|---------------------------------|
| AA-001 | Title V, Ref. No. 1 - the 60.0 MMBTUH | 40 | So-al- S di A Al- |
| | Wellons/Nebraska Woodwaste Boiler | 40 | See also Section 4, Alternative |
| AA-002 | Title V, Ref. No. 26 - the 28.5 MMBTUH fuel oil | 41 | Operating Scenario |
| | fired Murray Boiler | 41 | |
| AA-003 | SPCC, Ref. No. 5 - the 34,000 gal treatment cylinder | 1 | |
| | containing Penta in oil. | 1 . | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 2 | |
| | containing Creosote | - | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 3 | |
| | containing Creosote | , | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 4 | |
| | containing Creosote | 7 | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 5 | |
| | containing Creosote | , | |
| | SPCC, Ref. No. 6 - the 29,7786 gal #1 Work Tank | 6 | |
| | containing Penta in oil. | | |
| | SPCC, Ref. No. 7 - the 29,786 gal #2 Work Tank | 7 | |
| | containing Creosote | ′ | |
| | SPCC, Ref. No. 8 - the 29,786 gal #3 Work Tank | 8 | |
| | containing Creosote | ١ | |
| | SPCC, Ref. No. 9 - the 22,419 gal #4 Work Tank | 9 | |
| | containing Creosote | 1 | |
| | SPCC, Ref. No. 10 - the 29,786 gal #5 Work Tank | 10 | |
| | containing Creosote/Water. | 10 | |
| | SPCC, Ref. No. 11 - the 4,200 gal Measuring Tank | | |
| | containing Creosote | 11 | |
| | SPCC, Ref. No. 12 - the 100,000 gal #1 Storage Tank | | |
| | containing Creosote | 12 | |
| | SPCC, Ref. No. 13 - the 100,000 gal #2 Surge Tank | | |
| | containing Process water | 13 | |
| | SPCC, Ref. No. 14 - the 100,000 gal #5 Storage Tank | | |
| | containing Diesel #2 fuel oil | 14 | |
| | SPCC, Ref. No. 15 - the 105,000 gal #6 Storage Tank | | |
| [] | containing creosote | 15 | |
| | SPCC, Ref. No. 16 - the 300,000 gal #10 Surge Tank | | |
| | containing process water | 16 | |
| | SPCC, Ref. No. 17 - the 250,000 gal Storm Water | | |
| l. | surge tank containing Storm Water | 17 | |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | |
|-------------------|--|---------------------|--|
| | SPCC, Ref. No. 18 - the 1,500 gal Coagulant Tank containing water treatment system polymer additive | 18 | |
| | SPCC, Ref. No. 19 - the 2,500 gal Decant Tank containing Creo/Oil/Water | 19 | |
| | SPCC, Ref. No. 20 - the 8,000 gal Creosote Blowdown tank containing Creo/Water | 20 | |
| | SPCC, Ref. No. 21 - the 6 ft. Dia. X 60 ft. long, Air Receiver containing compressed air | | Removed from list. Contains only compressed air |
| | SPCC, Ref. No. 22 - the 7 ft. Dia. X 40 ft. long Air Receiver containing compressed air | | Removed from list. Contains only compressed air |
| | SPCC, Ref. No. 23 - the 8,000 gal Penta Blowdown tank containing water/penta/oil | 23 | |
| | SPCC, Ref. No. 26 - the 150,000 gal Aeration Tank containing waste water | 26 | |
| | SPCC, Ref. No. 27 - the 25,000 gal Clarifier Tank containing waste water | 27 | |
| - | SPCC, Ref. No. 28 - the 15,000 gal Discharge Tank containing waste water | 28 | |
| <u> </u> | SPCC, Ref. No. 29 - the 8,000 gal Creosote Dehydrator | 29 | |
| | SPCC, Ref. No. 30 - the 14,000 gal North Penta Equalization Tank containing water/penta/oil SPCC, Ref. No. 31 - the 14,000 gal South Penta | 30 | |
| | Equalization Tank containing water/penta/oil SPCC, Ref. No. 32 - the 9,400 gal Penta Mix Tank | 31 | |
| · | containing Oil/Penta SPCC, Ref. No. 33 - the 5,000 gal Penta Mix Tank | 32 | |
| | containing Oil/Penta SPCC, Ref. No. 34 - the 10,500 gal Penta Concentrate | 34 | |
| | Tank containing 40% Pentachlorophenol Concentrate SPCC, Ref. No. 35 – the 100,000 gal Stormwater Tank | 35 | This Tank has been added. |
| AA-004 | Title V, Ref. No. 27, the Tie Mill and Lumber Mill | 42 | Talik lias been added. |
| AA-005 | with cyclone Title V, Ref. No. 33, the Boiler House natural gas fired | 43 | Insignificant Activity per APC-S-6.IV |
| A A 000 | space heater rated at 0.2 MMBTUH | | Three (3) space heaters each rated at 0.2mmbtu/hr. |
| AA-006 AA-007 | Title V, Ref. No. 35, the natural gas fired steam cleaner rated at 0.44 MMBTUH | | Insignificant Activity per APC-S-6.IV |
| AA-007 | Title V, Ref. No. 36, the Wood Stove Shop Heater rated at 0.10 MMBTUH | | Source no longer exists. Has been removed from site. |
| AA-009 | Title V, Ref. No. 8, the Treated Wood Storage Areas Title V, Ref. No. 31, the Pole Kiln | 46 | |
| AA-010 | Title V, Ref. No. 32, the Pole Peeler | 47 | |
| AA-011 | Title V, Ref. No. 34, Wood Fuel Preparation and | 48 | |
| | handling including grinding, conveying, and silo loading | 77 | |
| AA-012 | Title V, Ref. No. 37, the two (2) Parts cleaners-degreasers | 50 | |
| AA-013 | SPCC, Ref. No. 24, the 1,250 gal Gasoline Storage tank containing Gasoline used by company vehicles | 51 I | nsignificant Activity per APC-S-6.IV |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | Comments |
|-------------------|---|---------------------|--|
| AA-014 | SPCC, Ref. No. 25, the 9,000 gal Diesel Storage tank used by company vehicles/Rolling Stock | 52 | Insignificant Activity per APC-S-6.IV |
| AA-015 | Title V, Ref. No. 33, the Oil Fired Murray Standby boiler room Natural Gas fired Space Heater rated at 0.1 MMBTUH | 54 | Insignificant Activity per APC-S-6.IV. |
| AA-016 | Title V, Ref. No. 33, the Fire Pump building Natural Gas fired Space Heater rated at 0.02 MMBTUH | | Source no longer exists. Has been removed from site. |

2.2 Emission Factors and Emissions.

As noted above, KII has changed the formulation of creosote used for treating ties, poles and timber. This reformulation is a classic pollution prevention program since it made the treating operations easier and it reduced VOC emissions from the treating process as well. The reformulation resulted in an appreciable reduction in the vapor pressure of the creosote. One of the significant advantages to this reformulation was the elimination of certain HAPs from the creosote, which correspondingly reduced the HAP atmospheric emissions.

The PTE emissions for the Plant are included with the various MSDEQ Forms. However, a summary of the changes in the VOC emissions associated with creosote treatment is provided below.

Emissions from Creosote Treated Products

| Pollutant | Production Emissions (tpy) | Storage Yard Emission (tpy) |
|--------------|----------------------------|-----------------------------|
| | | on/1997 Permit |
| Total VOC | 26.25 | 12.88 |
| Napthalene | 4.46 | 3.88 |
| Benzene | 5.78 | 0.003 |
| Toluene | 6.83 | 0.15 |
| Dibenzofuran | 0.16 | n.a. |
| Quinoline | 0.39 | n.a. |
| Biphenyl | 0.04 | n.a. |
| Total HAPs | 19.33 | 4.03 |
| | 2001 Ap | plication |
| Total VOC | 3.43 | 7.50 |
| Napthalene | 1.77 | 3.88 |
| Dibenzofuran | 0.15 | 0.33 |
| Quinoline | 0.08 | 0.17 |
| Biphenyl | 0.06 | 0.57 |
| Total HAPs | 2.06 | 4.95 |

NOTES:

All emissions based on 2,000,000 ft³ ties and 1,500,000 ft³ poles

n.a. = not analyzed or reported.

All Emissions on a PTE basis.

The summary indicates that there is a substantial reduction in the emissions of VOC and certain organic HAPs from the production of creosote treated wood products. These emissions are included in the affected Forms required by MSDEQ in this reapplication.

2.3 Equipment Changes at the Plant

The equipment associated Emission Points AA-007, the Wood Stove Shop Heater, and AA-015, the Fire Pump Building natural gas fired space heater, have been removed from the site. A new stormwater storage tank has been added. It has been included in AA-003 and has the Reference No. 35.

3.0 Insignificant and Exempt Activities and Equipment

The MSDEQ regulations at APC-S-6.VI includes an extensive list of "Insignificant Activities and Emissions". Several of the operations and equipment at the Plant are listed as "Insignificant" in Sections APC-S-6-VI.A and VI.B. These are listed below and are included in Form C, as required by MSDEQ. In addition, the emissions from several, but not all, of these Insignificant Activities are included in the Plant-wide Emissions Summary, as required under APC-S-6.VI.C and VI.D. See the individual equipment and/or process Forms and the Emission Summary in Form C for the details.

| Emission Point | Description | Insignificant Activity |
|----------------|--|------------------------|
| AA-003 | Compressed Air Receivers (Ref. Nos. 21 & 22) | APC-S-6.VI.B.27 |
| AA-005 | Boiler House natural gas fired space heater | APC-S-6.VI.B.2.a. |
| AA-006 | Natural gas fired steam cleaner | APC-S-6.VI.B.2.a. |
| AA-013 | 1,000 gallon Gasoline Storage Tank | APC-S-6.VI.B.7 |
| AA-014 | 20,000 gallon Diesel fuel Storage Tank | APC-S-6.VI.B.7 |
| AA-015 | Standby boiler room natural gas fired Space Heater | APC-S-6.VI.B.2.a. |
| | Outdoor kerosene heaters (5 units) | APC-S-6.VI.A.17 |
| | Emergency Power Generators (3 units at 11 hp and 6000 watts; 3 units at 16 hp and 8000 watts) | APC-S-6.VI.B.9 |

4.0 Alternative Operating Scenario

In the MSDEQ Title V Permit Program, an applicant has the opportunity to define an Alternative Operating Scenario for inclusion in the Permit. The Alternative Operating Scenario described below is provided in accordance with the requirements given in APC-S-6.II.C.7 and II.D.

The operation of the Wellons wood-fired boiler, Emission Point AA-001, is baselined on using a mixture of used, treated wood and untreated wood as the fuel. The emissions for the baseline operation were included in the original (1996) permit application and are included here as well. However, to be able to assure operation of the Wellons wood-fired boiler in the face of increasingly uncertain supplies of used treated wood products, KII is defining an Alternative Operating Scenario as the full power operation of the Wellons boiler using only untreated wood fuel. Inclusion of this Alternative Operating Scenario will provide KII the flexibility to operate the Plant in the face of fuel supply uncertainties. Note that this Alternative Operating Scenario in no way affects the quantities or mix of treated wood products manufactured at the Plant.

Because, in general, untreated wood fuel has a lower thermal rating (btu/lb of wood) than does used treated wood fuel, the quantity of untreated wood that must be burned as fuel greatly exceeds that of used treated wood fuel. For example, for the Wellons boiler at the Plant, with a nameplate rating of 60,000,000 btu/hr (60mmbtu/hr), the baseline scenario includes 37,580 tons of used treated wood fuel on a PTE basis. Correspondingly, the Alternative Operating Scenario requires 58,400 tons of untreated wood fuel on a PTE basis.

Also, the emissions associated with untreated wood fuel differs somewhat from those associated with used treated wood fuel. The used treated wood fuel mixture contains some pentachlorophenol treated wood. For this reason, emissions of HCl are characteristic of this fuel component and are missing when only untreated wood fuel is used. Also, the untreated wood fuel contains less sulfur which leads to lower SO₂ emissions than with the used treated wood fuel. The emission factors for the Alternative Operating Scenario are taken from AP-42 and are summarized below:

Potential To Emit Basis for Title V Application - Alternative Operating Scenario

| AA-001-BOILER, WOOD FIRED | tn/yr | Sulfur | Chlorine | (lb/hr): |
|------------------------------|--------|--------|----------|----------|
| Total Wood Burned: | 58,403 | 0.01% | 0.04% | 13333 |
| Creo Wood Burned: | 0 | 0.25% | 0.04% | |
| Penta Wood Burned: | 0 | 0.25% | 0.25% | |
| Untreated Wood Burned: | 58,403 | 0.01% | 0.04% | |
| Removal Efficiency (1): | | 70.00% | 45.00% | |

| STREET, AND AND DESCRIPTION OF TAXABLE PARTY AND ADDRESS OF TAXABLE PARTY. | | | 15.00 | 701 | |
|--|--------------------|----------------|-----------|-------------------|-------------------|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 4.2 | lb/tn | AP-42 | 122.65 | |
| SO2 | 0.08 | lb/tn | AP-42 | 2.19 | |
| NOX (2) | 1.60 | lb/tn | 1994 Test | 46.72 | 10.67 |
| CO | 6.6 | lb/tn | AP-42 | 192.73 | 44.00 |
| VOC | 0.18 | lb/tn | AP-42 | 5.26 | |
| HCl | 1.538 | lb/tn PCP fuel | | 0.00 | 0.00 |
| Arsenic | 8.8E-05 | | AP-42 | 0.0026 | 0.001 |
| Cadmium | 1.7E-05 | lb/tn | AP-42 | 0.0025 | 0.000 |
| Chromium | 1.3E-04 | | AP-42 | 0.0038 | |
| Lead | 3.1E-04 | | AP-42 | 0.0038 | 0.001 |
| Manganese | 8.9E-03 | | AP-42 | 0.2599 | 0.002 |
| Nickel | 5.6E-04 | | AP-42 | | 0.059 |
| Selenium | 1.8E-05 | | AP-42 | 0.0164 | 0.004 |
| Mercury | 6.5E-06 | | AP-42 | 0.0005 | 0.000 |
| Total HAP Metals | 0.515-00 | 10/111 | AF-42 | 0.0002 | 0.000 |
| (1) Damas-1 - CC : 1 | | | | 0.29 | 0.067 |

⁽¹⁾ Removal efficiencies based on 2/96 stack test.

The Grenada Plant meets the criteria for a Major Source under the Title V program whether untreated wood or used treated wood fuel is used in the Wellons boiler.

The emissions for the Wellons boiler (AA-001) are summarized in Section D of the MSDEQ Forms for each Scenario. The plant-wide summaries for both Scenarios are included in Section C of the MSDEQ Forms.

For this Alternative Operating Scenario, some of the emission limitations and monitoring & recordkeeping provisions of the existing Title V permit for the Baseline Scenario are no longer appropriate. It is requested that the following changes be made in the new Title V permit for the Alternative Operating Scenario:

a. In Section 3.B, for the Baseline Scenario, there is a temperature limitation in effect when treated wood fuel is used. Since treated wood will not be used for the Alternative Operating Scenario, this limitation should be removed.

8

^{(2) 1994} Stack Test

- b. In Section 3.B, for the Baseline Scenario, there is a limitation on the hourly feed rate of 9375 lb/hour for the used treated wood fuel. This limitation was established in the Construction Permit. For the Alternative Operating Scenario, this limitation must be revised upwards to account for the lower btu/lb heating value of the untreated wood fuel. It is requested that this limitation be set at 15,000 lb/hour for untreated wood fuel. This limitation provides some small margin on the fuel use rate corresponding to the PTE basis in the Emission Summary. This small margin will allow for some variation in the heating value of the untreated wood fuel. The Emission Summary is based on a heating value of 4500 btu/lb. If some fuel contains greater moisture or is lower quality, in general, the actual heating value will be below the value used in the emissions summary.
- c. In Section 5.B, for the Baseline Scenario, there is a recordkeeping requirement to provide for continuous recording of the boiler temperature and to note the time periods when untreated wood fuel is fed to the boiler. For the Alternative Operating Scenario, used treated wood fuel will not be used at any time and it is requested that this monitoring & recordkeeping requirement be eliminated.

5.0 Monitoring, Recordkeeping & Reporting Requirements.

Section 5 of the existing Title V Permit contains several monitoring, recordkeeping and reporting (MRKR) requirements. Based on KII's experience operating in compliance with these requirements, some changes are recommended for the new Permit. These are focused on elimination of duplicative reporting requirements and on removing ambiguity from the existing language. The following changes are recommended:

Existing 5.A.4 – "Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E."

Suggestions for Modification of Section 5.A.4:

It is recommended that this is where all of the deviations should be reported and not under Condition 5.A.5. It is felt that semi-annual reporting is timely and that the 5-day reporting requirement in Condition 5.A.5 is burdensome. By eliminating the 5-day reporting requirement, duplicative reporting would be avoided. In addition, it is recommended that the language in the new permit be amended to include an explicit list of those deviations must be reported and what information for each deviation must be reported in the semi-annual reports.

Existing 5.A.5 – "Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken within five (5) days of the time the deviation began."

Suggestions for Modification of Section 5.A.5:

It is recommended that the language in the new permit be amended to include an explicit list of those deviations which must be reported in the semi-annual reports. In addition, we would like the language of the permit to explain in explicit detail what information must be reported. Also we would like the 5-day reporting period to be eliminated and the Semi-Annual Air Report required under Section 5.A.4 be the only reporting schedule.

The existing Permit provides deviation reporting exemptions for the following conditions:

- a. Startups Opacity may exceed 40% for 15 minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- b. Soot Blowing emissions from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

It is recommended that the following items be listed as exemptions for purposes of reporting deviations:

- 1. A longer duration allowance for soot blowing such as 15 minutes or more, since this is preventative maintenance that occurs 3 times a day on a normal operating day.
- 2. An opacity allowance for pulling ash. This is also a routine preventative maintenance measure that occurs at least twice daily. This practice is especially disruptive to the system in terms of opacity due to the behavior of "fly ash" that is removed from the ash box and the ash collector.
- 3. An opacity allowance for fuel cell clean-out. This is preventative maintenance that occurs 4 times per day and is also disruptive to the system in terms of opacity.
- 4. An opacity allowance for fuel feed adjustment. The condition of our fuel is constantly changing. A variety of factors in fuel conditions play a significant role in the combustion efficiency rate at which the fuel is burned. One fuel feed rate may work perfectly for the type of fuel that was fed into the boiler on one day, but then that rate may be too high or too low for the fuel fed into the boiler on the next day. Sometimes the difference can be observed between fuels in consecutive hours.
- 5. A time/temperature allowance for monitoring system performance checks during combustion of treated wood fuel. At least once per month it is necessary to perform internal system checks and tests of the CEM and process control systems. At least once a quarter (conservatively), tests will need to be run on the fuel feed system to ensure its accuracy. The fuel feed system may have to be switched manually from untreated to treated fuel to ensure the effectiveness of the switchover setpoints installed in our computer system. The switchover setpoint is put into the monitoring computer that automatically switches from treated wood fuel to untreated wood fuel in the event of a temperature drop that falls below 1200° Fahrenheit.

6.0 MSDEQ Forms

The remainder of this Section includes the Forms that are required for this Renewal Application. The majority of these Forms are applicable both to the Baseline Scenario and the Alternative Operating Scenario. The exceptions are the Forms for the Wellons Boiler (Emission Point AA-001). There are individual Form C submittals for the two Scenarios. Also, for Form C, individual emission summaries are included for the two Scenarios. Forms B and C are signed by the Plant Manager, who is the Responsible Official for this Renewal Application.



APPLICATION RECEIPT DATE:

APPLICATION NO.:

FOR MODIFICATION : MINOR: SIGNIFICANT:

STATE OF MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF POLLUTION CONTROL AIR DIVISION P.O. BOX 10385 JACKSON, MS. 39289-0385 PHONE NO.: (601) 961 - 5171

APPLICATION FOR TITLE V AIR POLLUTION CONTROL PERMIT TO OPERATE AIR EMISSIONS EQUIPMENT

| PERMITTIN | G ACTIVITY | : | | |
|----------------------|--|--------------|---|--|
| | NITIAL APPLION MODIFICATION RENEWAL OF O | | Г | |
| NAME: CITY: | TIE PLAN | | | |
| COUNTY: FACILITY No. | GRENAD (if known): | A 0960-00012 | | |

APPLICATION FOR TITLE V PERMIT TO OPERATE AIR EMISSIONS EQUIPMENT

CONTENTS OF THIS RENEWAL APPLICATION

| DESCRIPTION | SECTION |
|---|----------------|
| Owners Information | . В |
| Emissions Summary / Facility Summary | . C |
| Emission Point Data: | |
| Fuel Burning Equipment | D |
| Manufacturing Processes | E |
| Coating, Solvent Usage and/or Degreasing Operations | F |
| Tank Summary | Н |
| Control Equipment | L |
| Compliance Demonstration | M |
| Current Emissions Status | N |
| Compliance Certification | 0 |

Section B Owners Information

| 1. | Nam | e, Address & Contact for the Owner/Applicant |
|----|---------|--|
| | A. | Company Name: KOPPERS INDUSTRIES INC. |
| | B. | Mailing Address: |
| | | 1. Street Address or P.O. Box: 436 SEVENTH AVENUE 2. City: PITTSBURGH 3. State: PA 4. Zip Code: 15219-1800 5. Telephone No.: (412) 227-2114 |
| | C. | Contact: |
| | | 1. Name: TIMOTHY R. BASILONE 2. Title: ENVIRONMENTAL MANAGER |
| 2. | Name | , Address, Location and Contact for the Facility: |
| | A. | Name: KOPPERS INDUSTRIES INC. |
| | В. | Mailing Address: 1. Street Address or P.O. Box: P.O. BOX 160 2. City: TIE PLANT 3. State: MS 4. Zip Code: 38960 5. Telephone No.: (662) 226-4584 |
| | C. | Site Location: 1. Street: 1 KOPPERS DRIVE 2. City: TIE PLANT 3. State: MS 4. County: GRENADA 5. Zip Code: 38960 6. Telephone No.: (662) 226-4584 Note: If the facility is located outside of the City limits, please attach a sketch or description to this application showing the approximate location of the site. |
| | D. | Contact: |
| | | 1. Name: THOMAS L. HENDERSON 2. Title: PLANT MANAGER |
| 3. | SIC Co | ode(s)(including any associated with alternate operating scenarios): 2491 |
| 4. | Numbe | er of Employees: 65 |
| 5. | Princip | al Product(s): UTILITY POLES AND RAILROAD CROSSTIES |

| | 6. | Principal Raw Materials: WOOL PENTA | POLES, CROSSTIES, LUMBER ACHLOROPHENOL, DIESEL FU | R, CREOSOTE, EL | |
|------|---|--|--|------------------------|--|
| 7. | | Principal Process(es): WOOD | PRESERVING | | |
| 8. | | Maximum amount of principal product produced or raw material consumed per day: 20,000 CUBIC FEET | | | |
| 9. | | Facility Operating Schedule (Optional | 1): | | |
| | | A. Specify maximum hours per d | lay the operation will occur: | 24 HOURS | |
| | | B. Specify maximum days per w | eek the operation will occur: | 7 DAYS | |
| | | C. Specify maximum weeks per | year the operation will occur: | 52 WEEKS | |
| | | D. Specify the months the operation | ion will occur: ALL | | |
| 10. | | Is this facility a small business as defi | ned by the Small Business Act? (O | ptional) NO | |
| 11. | | EACH APPLICATION MUST BE | SIGNED BY THE APPLICANT | • | |
| | | The application must be signed by APC-S-6, Section I.A.26. | y a responsible official as define | ed in Regulation | |
| | I certify that to the best of my knowledge and belief formed after reasonable inquiry, the statements and information in this application are true, complete, and accurate, and that, as a responsible official, my signature shall constitute an agreement that the applicant assumes the responsibility for any alteration, additions, or changes in operation that may | | | | |
| | Yo | be necessary to achieve and main Regulations. | tain compliance with all applic | able Rules and | |
| | THOMAS L. HENDERSON Printed Name of Responsible Official PLANT MANAGER Title | | | | |
| Date | 9- Aj | 26-0/ oplication Signed | Thomas L. Honderson Signature of Applicants Res | n ponsible Official | |

SECTION C EMISSIONS SUMMARY for the ENTIRE FACILITY

List below the total emissions for each pollutant from the entire facility in accordance with Operating Permit Application Requirements, pp. 3-5. For stack emissions, use the maximum annual allowable (potential) emissions. For fugitive emissions, use the annual emissions calculated using the maximum operating conditions.

NORMAL OPERATING SCENARIO – USE OF TREATED AND UNTREATED WOOD FUEL

| POLLUTANT Footnote 1 | ANNUAL EMISSION RATE | |
|------------------------------------|----------------------|---------|
| | lb/hr | tons/yr |
| PARTICULATE (LESS FUGITIVE) | | 54.56 |
| SO2 | | 116.10 |
| NOX | | 80.32 |
| СО | | 160.57 |
| VOC (LESS FUGITIVE) | | 72.44 |
| VOC (INCLUDING FUGITIVE) | | 100.07 |
| HAPS (ORGANICS/VOC) | | 7.02 |
| NAPHTHALENE | | 5.64 |
| HAP METALS | | 0.19 |
| HCL | | 11.54 |
| TOTAL HAPS | | 18.74 |
| SEE PTE TABLES (FOLLOWING 5 PAGES) | | |
| | | |

^{1.} All regulated air pollutants, including hazardous air pollutants emitted from the entire facility should be listed.

A list of regulated air pollutants has been provided in Section A.

With the exception of the emissions resulting from insignificant activities and emissions as defined in Regulation APC-S-6, Section VII, the pollutants listed above are all regulated air pollutants reasonably expected to be emitted from the facility.

SIGNATURE (must match signature on page 17)

| AA-001-BOILER, WOOD FIRED | tn/yr | Sulfur | Chlorine | (lb/hr): |
|---------------------------|--------|--------|----------|----------|
| Total Wood Burned: | 37,580 | 0.23% | 0.12% | 8580 |
| Creo Wood Burned: | 20,000 | 0.25% | 0.04% | |
| Penta Wood Burned: | 15,000 | 0.25% | 0.25% | |
| Untreated Wood Burned: | 2,580 | 0.01% | 0.04% | |
| Removal Efficiency (1): | | 70.00% | 45.00% | |

| Tromoval Efficiency (1). | 70.009 | <u>6) 45.009</u> | 0 | | |
|--------------------------|--------------------|------------------|-------------|-------------------|----------------------|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 2.47 | lb/tn | 9/2000 Test | 46.41 | 10.60 |
| SO2 | 2.80 | lb/tn | Mass Calc | 52.65 | 12.02 |
| NOX (3) | 3.3 | lb/tn | 2/96 test | 62.01 | 14.16 |
| CO (2) | 8.3 | lb/tn | CEM | 155.96 | 35.61 |
| VOC | 0.18 | lb/tn | AP-42 | 3.38 | 0.77 |
| HCI | 1.538 | ib/tn PCP fuel | 2/96 Test | 11.54 | 6.60 |
| Arsenic | 8.8E-05 | lb/tn | AP-42 | 0.0017 | 0.000 |
| Cadmium | 1.7E-05 | lb/tn | AP-42 | 0.0003 | 0.000 |
| Chromium | 1.3E-04 | lb/tn | AP-42 | 0.0024 | 0.001 |
| Lead | 3.1E-04 | lb/tn | AP-42 | 0.0058 | 0.001 |
| Manganese | 8.9E-03 | ib/tn | AP-42 | 0.1672 | 0.038 |
| Nickel | 5.6E-04 | lb/tn | AP-42 | 0.0105 | 0.002 |
| Selenium | 1.8E-05 | lb/tn | AP-42 | 0.0003 | 0.000 |
| Mercury | 6.5E-06 | lb/tn | AP-42 | 0.0001 | 0.000 |
| Total HAP Metals | | | | 0.19 | 0.043 |

⁽¹⁾ Removal efficiencies based on 2/96 stack test.

⁽³⁾ NOX factor is 3.3 for high fire, treated wood. Use 1.6 for untreated wood.

| AA-002 BOILER, FUEL OIL | | _ | Fuel Use R | Rate(MGal/hr): | 0.204 |
|------------------------------------|--------------------|------------|------------|-------------------|----------------------|
| Oil Burned(MGal/yr): | 1787 | Sulfur Cor | ntent: | 0.500 | % |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 2 | lb/MGal | AP-42 | 1,79 | 0.41 |
| SO2 | 71 | lb/MGal | AP-42 | 63.44 | 14.48 |
| NOX | 20 | lb/MGai | AP-42 | 17.87 | 4.08 |
| CO | 5 | lb/MGal | AP-42 | 4.47 | 1.02 |
| VOC | 0.2 | lb/MGal | AP-42 | 0.18 | 0.04 |
| Number of days boiler assumed to o | perate is | 365 | 5 | | |

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⁽²⁾ CO factor is 8.3 for 600 ppm fired on untreated fuel, 2.1 for 150 ppm fired on treated fuel.

AA-003-WOOD PRESERVING PROCESSES

 Creosote Ties
 2,000,000
 C. F.

 Creosote Poles
 1,500,000
 C. F.

 Total Creosote Wood
 3,500,000
 C. F.

 Oil/Penta Poles
 3,500,000
 C. F.

| | 1,000,000 | | | | | |
|-----------------------------|-----------------|------------|-------------|-------------------|----------------------|--|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) | |
| Creosote (VOC) | 1.96E-03 | lb/cf | Form R | 3,43 | 0.78 | |
| HAPs contained in creosote: | | | | 5.10 | 0.70 | |
| Biphenyl | 1.72 | % in vapor | Calculation | 0.06 | 0.01 | |
| Dibenzofurans | | % in vapor | Calculation | 0.15 | 0.03 | |
| Naphthalene | | % in vapor | Calculation | 1.77 | 0.40 | |
| Quinoline | | % in vapor | Calculation | 0.08 | 0.02 | |
| TOTAL CREO. HAP | 60.09 | % in vapor | | 2.06 | 0.47 | |
| Pentachlorophenol (VOC) | 3.73E-06 | | Form R | 0.01 | 0.00 | |
| #6 Oil (VOC) | 1.4E-02 | lb/cf | Engr. Est. | 24.75 | 5.65 | |
| TOTAL VOC | | | | 28.18 | 6.43 | |

AA-008-PRESERVATIVE TREATED WOOD STORAGE FUGITIVES

| Pollutant | Emission Factor | Units | Basis | Estimated | Emissions |
|-------------------------|--------------------|--------|---------------------|-----------|-----------|
| Creosote Ties | 1 4010 | Office | Dasis | (tn/yr) | (lb/hr) |
| Creosote (VOC) | 2.65E-03 | lb/cf | FR Test & Creo Data | 2.65 | 0.61 |
| Naphthalene | 1.37E-03 | lb/cf | FR Test & Creo Data | 1.37 | 0.31 |
| Quinoline | 6.15E-05 | lb/cf | FR Test & Creo Data | 0.06 | |
| Biphenyl | | lb/cf | FR Test & Cree Date | 0.46 | |
| Dibenzofuran | 1.18E-04 | lb/cf | FR Test & Creo Data | 0.12 | 0.03 |
| Creosote Poles | | | | 0.12 | 0.00 |
| Creosote (VOC) | 6.47E-03 | lb/cf | FR Test & Creo Data | 4.85 | 1.11 |
| Naphthalene | 3.34E-03 | lb/cf | FR Test & Creo Data | 2.51 | 0.57 |
| Quinoline | 1.50E-04 | lb/cf | FR Test & Creo Data | 0.11 | 0.03 |
| Biphenyl | 1.11E-04 | lb/cf | FR Test & Creo Data | 0.11 | 0.03 |
| Dibenzofuran | 2.87E-04 | lb/cf | FR Test & Creo Data | 0.21 | 0.05 |
| Penta Poles | 12 (1) 12 (1) | | | | 0.00 |
| Oil (VOC, est. as creo) | 1.15E-02 | lb/cf | FR Test | 20.13 | 4.59 |
| Pentachlorophenol | 1.9E-06 | lb/cf | Engr. Est. | 0.00 | 0.00 |
| Totals | | | | 3,00 | 0.00 |
| VOC | | | | 27.63 | 6.30 |
| Naphthalene | | | | 3.88 | 0.88 |
| Quinoline | | | | 0.17 | 0.04 |
| Biphenyl | | | | 0.57 | 0.13 |
| Dibenzofuran | | | | 0.33 | 0.08 |
| Pentachlorophenol | | | | 0.00 | 0.00 |
| HAP Organics (Total) | | | | 4.95 | 1.13 |

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| A-009-DRY KILNS Batch size (c | | Batch size (cf): | | 13000 | |
|-------------------------------|--------------------|------------------|---------|-----------|-----------|
| Poles Dried | 1,600,00 | 00 C. F. | | | 72 |
| Pollutant | Emission Factor | Units | Basis | Estimated | Emissions |
| VOC | | | | (tn/yr) | (lb/hr) |
| VUC | 0. | 05 lb/cf | Alabama | 40.00 | 9.03 |

AA-004-CYCLONES FOR WOOD MILLING

 Number of Cyclones:
 1

 Ave. Hours/Day:
 8

 Ave Days/Yr Each:
 300

 Total Hours:
 2400

| | Emission | | | Estimated | Emissions |
|-------------|----------|---------|-------|-----------|-----------|
| Pollutant | Factor | Units | Basis | (tn/vr) | (lb/hr) |
| Particulate | | 2 lb/hr | AP-42 | 2.40 | |

AA-010-POLE PEELER

| | Poles Peeled= | 1,000,000 | CF/yr | | 440 CF/hr | |
|---------------|--------------------|-----------------|--------|-------|-------------------|----------------------|
| | Pole Density= | | lb/CF | | | |
| Р | ole Amount Peeled= | | tn/yr | | 9.9 tn/hr | |
| CEATION SHEET | | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | | 0.350 | lb/ton | AP-42 | 3.94 | 3.465 |

SPACE HEATERS, NATURAL GAS

Location
AA-005-Boiler House
AA-015-Standby Boiler Room
AA-016-Fire Pump Building
TOTAL

| BTU/Hr | BTU/CF | CF/Hr | | Hr/Yr | MMCF/Yr |
|----------------|--------|-------|-----|-------|---------|
| 600000 | 1000 | | 600 | 8760 | 5.256 |
| 100000 | 1000 | | 100 | 8760 | |
| No longer exis | sts | | | | |
| 700000 | | | 700 | | 6.132 |

EMISSION INVENTORY CALCULATION KOPPERS INDUSTRIES, INC. - GRENADA, MS

0.01

Potential To Emit Basis for Title V Application **Emission Estimated Emissions Pollutant** Factor Units Basis (tn/yr) (lb/hr) Particulate 0.18 lb/MMCF AP-42 0.00 0.00 SO2 0.6 lb/MMCF **AP-42** 0.00 0.00 NOX 94 lb/MMCF AP-42 0.29 0.07 CO 40 lb/MMCF AP-42 0.12 0.03 VOC 11 lb/MMCF AP-42 0.03

AA-011-WOOD FUEL PREPARATION & HANDLING (Fugitive)

| Wood Fuel Processed | 37,580 Tn/Yr | | | 12 tn/hr | | |
|---------------------|--------------------|---------|------------|-------------------|----------------------|--|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) | |
| Particulate | 0.2 | 5 lb/tn | Engr. Est. | 4.70 | | |

| AA-006-STEAM CLEANER, I Annual Usage Pollutant | | FIRED hours/yr | Fuel Use Rate 440 CF/hr | | |
|--|--------------------|-------------------|----------------------------|-------------------|----------------------|
| | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 12 | Ib/MMCF | AP-42 | 0.02 | 0.01 |
| SO2 | | Ib/MMCF | AP-42 | 0.00 | 0.00 |
| NOX | | lb/MMCF | AP-42 | 0.19 | 0.04 |
| CO | | lb/MMCF | AP-42 | 0.19 | 0.01 |
| VOC | | lb/MMCF | AP-42 | 0.04 | 0.00 |

| ATER, SHOP | | | | Fuel Use Rate | | |
|--------------------|--|--|---|----------------------|--|--|
| Emission Factor | Units | Basis | Estimated | Emissions (lb/hr) | | |
| 30.6 | lb/tn | AP-42 | | 0.00 | | |
| | | | | 0.00 | | |
| | | | | 0.00 | | |
| | | | | 0.00 | | |
| | | | | 0.00 | | |
| | 0 Emission Factor 30.6 0.4 2.8 230.8 | 0 tn/yr Emission Factor Units 30.6 lb/tn 0.4 lb/tn 2.8 lb/tn 230.8 lb/tn | 0 tn/yr Emission Factor Units Basis 30.6 lb/tn AP-42 0.4 lb/tn AP-42 2.8 lb/tn AP-42 230.8 lb/tn AP-42 | 0 tn/yr | | |

AA-012-PARTS CLEANERS, DEGREASERS Number of units operating:

| rtaribor of dista operating. | | 4 | | | |
|------------------------------|-----------------|--------------|-------|-------------------|----------------------|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| VOC | 0.3 | 3 tn/unit/yr | AP-42 | 0.66 | 0.00 |
| | | | 1 | 0.00 | |

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FOTAL PLANT EMISSIONS

| Pollutant | | Estimated (tn/yr) | Emissions(1) (lb/hr) |
|-----------------------------|---|-------------------|-------------------------|
| Particulate (less fugitive) | | 54.56 | 12.46 |
| SO2 (2) | *************************************** | 116.10 | 26.51 |
| NOX | | 80.36 | 18.35 |
| CO | | 160.59 | 36.66 |
| VOC(less fugitive) | | 72.45 | 16.54 |
| VOC(including fugitive) | | 100.08 | 22.85 |
| HAPs(Organics/VOC) | | 7.02 | 1.60 |
| Naphthalene | | 5.64 | 1.29 |
| HAP Metals | | 0.19 | 0.04 |
| HCI | | 11.54 | 2.63 |
| Total HAPs | | 18.74 | 4.28 |

⁽¹⁾ Average hourly emission rate; not instantaneous maximum emission rate.

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SECTION C EMISSIONS SUMMARY for the ENTIRE FACILITY

List below the total emissions for each pollutant from the entire facility in accordance with Operating Permit Application Requirements, pp. 3-5. For stack emissions, use the maximum annual allowable (potential) emissions. For fugitive emissions, use the annual emissions calculated using the maximum operating conditions.

ALTERNATIVE OPERATING SCENARIO – USE OF UNTREATED WOOD FUEL ONLY

| POLLUTANT | ANNUAL EMISSION RATE | | |
|------------------------------------|----------------------|---------|--|
| Footnote 1 | lb/hr | tons/yr | |
| PARTICULATE (LESS FUGITIVE) | | 130.79 | |
| SO2 | | 65.63 | |
| NOX | | 65.04 | |
| СО | | 197.35 | |
| VOC (LESS FUGITIVE) | | 74.32 | |
| VOC (INCLUDING FUGITIVE) | | 101.95 | |
| HAPS (ORGANICS/VOC) | | 7.02 | |
| NAPHTHALENE | | 5.64 | |
| HAP METALS | | 0.29 | |
| HCL | | 0.00 | |
| TOTAL HAPS | | 7.31 | |
| SEE PTE TABLES (FOLLOWING 5 PAGES) | | | |
| | | | |

1. All regulated air pollutants, including hazardous air pollutants emitted from the entire facility should be listed.

A list of regulated air pollutants has been provided in Section A.

With the exception of the emissions resulting from insignificant activities and emissions as defined in Regulation APC-S-6, Section VII, the pollutants listed above are all regulated air pollutants reasonably expected to be emitted from the facility.

SIGNATURE (must match signature on page 17)

AA-001-BOILER, WOOD FIRED tn/yr Sulfur Chlorine Total Wood Burned: 58,403 0.01% 0.04% Creo Wood Burned: 0 0.25% 0.04% Penta Wood Burned: 0 0.25% 0.25% **Untreated Wood Burned:** 58,403 0.01% 0.04% Removal Efficiency (1): 70.00% 45.00%

(lb/hr): 13333

0.18

| | | 10.0070 | | / /0 | |
|------------------|--------------------|----------------|-----------|-------------------|----------------------|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 4.2 | lb/tn | AP-42 | 122.65 | 28.00 |
| SO2 | 0.08 | lb/tn | AP-42 | 2.19 | 0.50 |
| NOX | 1.6 | lb/tn | 1994 Test | 46.72 | 10.67 |
| CO | 6.6 | lb/tn | AP-42 | 192.73 | 44.00 |
| VOC | 0.18 | lb/tn | AP-42 | 5.26 | 1.20 |
| HCI | 1.538 | lb/tn PCP fuel | 2/96 Test | 0.00 | 0.00 |
| Arsenic | 8.8E-05 | lb/tn | AP-42 | 0.0026 | 0.001 |
| Cadmium | 1.7E-05 | lb/tn | AP-42 | 0.0005 | 0.000 |
| Chromium | 1.3E-04 | lb/tn | AP-42 | 0.0038 | 0.001 |
| Lead | 3.1E-04 | lb/tn | AP-42 | 0.0091 | 0.002 |
| Manganese | 8.9E-03 | lb/tn | AP-42 | 0.2599 | 0.059 |
| Nickel | 5.6E-04 | lb/tn | AP-42 | 0.0164 | 0.004 |
| Selenium | 1.8E-05 | | AP-42 | 0.0005 | 0.000 |
| Mercury | 6.5E-06 | | AP-42 | 0.0002 | 0.000 |
| Total HAP Metals | | | | 0.29 | 0.067 |

⁽¹⁾ Removal efficiencies based on 2/96 stack test.

VOC

| AA-002-BOILER, FUEL OIL | | _ | Fuel Use F | Rate(MGal/hr): | 0.204 |
|-------------------------|----------------------|---------|------------|-------------------|----------------------|
| Oil Burned(MGal/yr): | 1787 Sulfur Content: | | | 0.500 | % |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 2 | lb/MGal | AP-42 | 1.79 | 0.41 |
| SO2 | 71 | lb/MGal | AP-42 | 63.44 | 14.48 |
| NOX | 20 | lb/MGal | AP-42 | 17.87 | 4.08 |
| CO | 5 | lb/MGal | AP-42 | 4.47 | 1.02 |
| 1/00 | | | | 7,71 | |

0.2 lb/MGal

Number of days boiler assumed to operate is 365

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AP-42

AA-003-WOOD PRESERVING PROCESSES

 Creosote Ties
 2,000,000
 C. F.

 Creosote Poles
 1,500,000
 C. F.

 Total Creosote Wood
 3,500,000
 C. F.

 Oil/Penta Poles
 3,500,000
 C. F.

| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
|-----------------------------|--------------------|------------|-------------|-------------------|----------------------|
| Creosote (VOC) | 1.96E-03 | lb/cf | Form R | 3.43 | 0.78 |
| HAPs contained in creosote: | | | | 0.10 | 0.70 |
| Biphenyl | 1.72 | % in vapor | Calculation | 0.06 | 0.01 |
| Dibenzofurans | | % in vapor | Calculation | 0.15 | 0.03 |
| Naphthalene | | % in vapor | Calculation | 1.77 | 0.40 |
| Quinoline | | % in vapor | Calculation | 0.08 | 0.02 |
| TOTAL CREO. HAP | 60.09 | % in vapor | | 2.06 | 0.47 |
| Pentachlorophenol (VOC) | 3.73E-06 | | Form R | 0.01 | 0.00 |
| #6 Oil (VOC) | 1.4E-02 | lb/cf | Engr. Est. | 24.75 | 5.65 |
| TOTAL VOC | | | | 28.18 | 6.43 |

AA-008-PRESERVATIVE TREATED WOOD STORAGE FUGITIVES

| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
|-------------------------|--------------------|-------|---------------------|-------------------|----------------------|
| Creosote Ties | (48)T | | | (, | (137111) |
| Creosote (VOC) | 2.65E-03 | lb/cf | FR Test & Creo Data | 2.65 | 0.61 |
| Naphthalene | 1.37E-03 | lb/cf | FR Test & Creo Data | 1.37 | 0.31 |
| Quinoline | 6.15E-05 | lb/cf | FR Test & Creo Data | 0.06 | |
| Biphenyl | | lb/cf | FR Test & Creo Data | 0.46 | 0.10 |
| Dibenzofuran | 1.18E-04 | lb/cf | FR Test & Creo Data | 0.12 | 0.10 |
| Creosote Poles | 201 | | | 0.12 | 0.00 |
| Creosote (VOC) | 6.47E-03 | lb/cf | FR Test & Creo Data | 4.85 | 1.11 |
| Naphthalene | 3.34E-03 | lb/cf | FR Test & Creo Data | 2.51 | 0.57 |
| Quinoline | 1.50E-04 | lb/cf | FR Test & Creo Data | 0.11 | 0.03 |
| Biphenyl | 1.11E-04 | lb/cf | FR Test & Creo Data | 0.11 | 0.03 |
| Dibenzofuran | 2.87E-04 | lb/cf | FR Test & Creo Data | 0.21 | 0.05 |
| Penta Poles | | | | | 0.00 |
| Oil (VOC, est. as creo) | 1.15E-02 | lb/cf | FR Test | 20.13 | 4.59 |
| Pentachlorophenol | 1.9E-06 | lb/cf | Engr. Est. | 0.00 | 0.00 |
| Totals | E | | | 0.00 | 0.00 |
| VOC | | | | 27.63 | 6.30 |
| Naphthalene | | - | | 3.88 | 0.88 |
| Quinoline | | | | 0.17 | 0.04 |
| Biphenyl | | · | | 0.57 | 0.13 |
| Dibenzofuran | | · | | 0.33 | 0.08 |
| Pentachlorophenol | | | | 0.00 | 0.00 |
| HAP Organics (Total) | | | | 4.95 | 1.13 |

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| AA-009-DRY KILNS | | Batch size (cf): | | | |
|------------------|-----------------|-------------------|-----------|-----------|--|
| Poles Dried | 1,600,000 C. F. | Batch time (hrs): | | 13000 | |
| | Emission | | Estimated | Emissions | |
| Pollutant | Factor Units | Basis | (tn/yr) | (lb/hr) | |
| VOC | 0.05 lb/cf | Alabama | 40.00 | 9.03 | |

AA-004-CYCLONES FOR WOOD MILLING

 Number of Cyclones:
 1

 Ave. Hours/Day:
 8

 Ave Days/Yr Each:
 300

 Total Hours:
 2400

| | Emission | | | Estimated | Emissions |
|-------------|----------|---------|-------|-----------|-----------|
| Pollutant | Factor | Units | Basis | (tn/yr) | (lb/hr) |
| Particulate | | 2 lb/hr | AP-42 | 2.40 | |

AA-010-POLE PEELER

| Poles Pee | led= 1,000,00 | 00 CF/yr | | 440 CF/hr | |
|-----------------|-----------------|----------|-----------|-------------------|----------------------|
| Pole Dens | sity= | 45 lb/CF | | | |
| Pole Amount Pee | led= 22,50 | 00 tn/yr | 9.9 tn/hr | | |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 0.35 | 0 lb/ton | AP-42 | 3.94 | 3 465 |

SPACE HEATERS, NATURAL GAS

Location
AA-005-Boiler House
AA-015-Standby Boiler Room
AA-016-Fire Pump Building
TOTAL

| BTU/Hr | BTU/CF | CF/Hr | Hr | /Yr | MMCF/Yr |
|----------------|--------|-------|-----|-------|---------|
| 600000 | 1000 | | 600 | 8,760 | 5.256 |
| 100000 | | | 100 | 8,760 | 0.876 |
| No longer exis | sts. | | | | |
| 700000 | | | 700 | | 6.132 |

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EMISSION INVENTORY CALCULATION KOPPERS INDUSTRIES, INC. - GRENADA, MS

Potential To Emit Basis for Title V Application **Emission** Estimated **Emissions** Pollutant Factor Units Basis (tn/yr) (lb/hr) Particulate 0.18 lb/MMCF **AP-42** 0.00 0.00 SO2 0.6 lb/MMCF AP-42 0.00 0.00 NOX 94 lb/MMCF **AP-42** 0.29 0.07 CO 40 lb/MMCF AP-42 0.12 0.03 VOC 11 lb/MMCF AP-42 0.03 0.01

AA-011-WOOD FUEL PREPARATION & HANDLING (Fugitive)

| Wood Fuel Processed | 58,403 Tn/Yr | | 12 tn/hr | | |
|---------------------|-----------------------|------------|-------------------|----------------------|--|
| Pollutant | Emission Factor Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) | |
| Particulate | 0.25 lb/tn | Engr. Est. | 7.30 | | |

| AA-006-STEAM CLEANER | | | | Fuel Use Rat | e |
|----------------------|-----------------|----------|-------|-------------------|----------------------|
| Annual Usage | 8760 | hours/yr | | 440 | CF/hr |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| Particulate | 12 | lb/MMCF | AP-42 | 0.02 | 0.01 |
| SO2 | 0.6 | lb/MMCF | AP-42 | 0.00 | 0.00 |
| NOX | 100 | lb/MMCF | AP-42 | 0.19 | 0.04 |
| CO | 21 | lb/MMCF | AP-42 | 0.04 | 0.01 |
| VOC | 5.8 | lb/MMCF | AP-42 | 0.01 | 0.00 |

| AA-007-WOOD STOVE HE | | | GER EXISTS | Fuel Use Rat | е | |
|----------------------|-----------------|-------|------------|-------------------|----------------------|--|
| Annual Usage | | tn/yr | | 0 | tn/hr | |
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) | |
| Particulate | 30.6 | lb/tn | AP-42 | 0.00 | 0.00 | |
| SO2 | 0.4 | lb/tn | AP-42 | 0.00 | 0.00 | |
| NOX | 2.8 | lb/tn | AP-42 | 0.00 | 0.00 | |
| CO | 230.8 | lb/tn | AP-42 | 0.00 | 0.00 | |
| VOC | 43.8 | | AP-42 | 0.00 | 0.00 | |

AA-012-PARTS CLEANERS, DEGREASERS Number of units operating: 2

| riambor of arms operating. | | _ 4 | | | |
|----------------------------|-----------------|----------------|-------|-------------------|----------------------|
| Pollutant | Emission Factor | Units | Basis | Estimated (tn/yr) | Emissions (lb/hr) |
| VOC | 0. | .33 tn/unit/yr | AP-42 | 0.66 | 0.00 |
| | | | | 0.00 | |

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TOTAL PLANT EMISSIONS

| Pollutant | | Estimated (tn/yr) | Emissions (1) (lb/hr) |
|-----------------------------|---|-------------------|--------------------------|
| Particulate (less fugitive) | | 130.79 | 29.86 |
| SO2 (2) | *************************************** | 65.63 | 14.98 |
| NOX | | 65.07 | 14.86 |
| CO | | 197.36 | 45.06 |
| VOC(less fugitive) | | 74.32 | 16.97 |
| VOC(including fugitive) | | 101.95 | 23.28 |
| HAPs(Organics/VOC) | *************************************** | 7.02 | 1.60 |
| Naphthalene | | 5.64 | 1.29 |
| HAP Metals | | 0.29 | 0.07 |
| HCI | | 0.00 | 0.00 |
| Total HAPs | | 7.31 | 1.67 |

⁽¹⁾ Average hourly emission rate; not instantaneous maximum emission rate.

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⁽²⁾ Assumes backup boiler operating at same time as primary for number of days shown.

SECTION C

| For the sections listed b | elow indicate the number that have | been completed for each section as part of this applica | tion. |
|---------------------------------|--|---|---------|
| Section B 1 | Section L1 | Section M1 1 | |
| Section C 2 | Section L2 2 | Section M2 | |
| Section D 6 | Section L3 | Section M35_ | |
| Section E 6 | Section L4 | Section M4 | |
| Section F 1 | Section L5 | Section M51_ | |
| Section G | Section L6 | Section M6 4 | |
| Section H 1 | Section L7 | Section M7 | |
| Section I | | Section M8 | |
| Section J | | Section N 1 | |
| Section K | | Section O 2 | |
| | | pleted for the application to be considered complete | e. — |
| Please list below all insig | gnificant activities required by APC | C-S-6, Section VII.B that apply to your facility. | |
| (1) EMISSION POI PER APC-S. | NT AA-003, REF. NOS. 21 A VI.B.27 | ND 22, COMPRESSED AIR RECEIVERS, | |
| (2) EMISSION PC | The second secon | GAS SPACE HEATERS (3), RATED AT | r |
| (3) EMISSION POIN PER APC-S- | NT AA-006, NATURAL GAS | S FIRED STEAM CLEANER, | |
| | | DRAGE TANK, PER APC-S-6.IV.B.7 | |
| (5) EMISSION PON | T AA-014, DIESEL STORA | GE TANK, PER APC-S-6.IV.B.7 | _ |
| (6) EMISSION POI MMBTU/HR | NT AA-015, NATURAL Ĉ , PER APC-S-6.IV.B.2.A | GAS SPACE HEATER (1), RATED AT (|).1 |
| 7) OUTDOOR KER | OSENE HEATERS (5 UNIT | S), PER APC-S-6.IV.A.17 | _ |
| 8) EMERGENCY P 16 HP AND 8 | OWER GENERATORS, (3) 3,000 WATTS, PER APC-S-6 | AT 11 HP AND 6,000 WATTS, AND (3) AT 5.IV.B.9 | Γ |
| | | | |

SECTION C RISK MANAGEMENT PLANS

If the source is required to develop and register a risk management plan pursuant to Section 112(r) of the Title III of the Clean Air Act, the permittee need only specify that it will comply with the requirement to register such a plan. The content of the risk management plan need not itself be incorporated as a permit term.

Please answer the following questions:

| I. | Are you required to develop and register a risk management plan pursuant to Section 112(r)? |
|-----------|--|
| | Yes <u>X</u> No |
| Only if " | yes", answer questions II., III., and/or IV. |
| П | Have you submitted the risk management plan to the appropriate agency (i.e. Mississippi Emergency Management Agency (MEMA), Federal Emergency Management Agency (FEMA), etc.)? |
| | Yes No |
| III | If yes, give agency name and date submitted. |
| | |
| IV | If no, provide a schedule for developing and submitting the risk management plan to the appropriate agency and providing our agency with certification that this submittal was made. |
| | |
| | |
| | |

| FU. | EL BURNI | NG EQUIPM | | | | | | SECTION I |
|------------|--------------------------------|------------------------------------|-----------------------|------------------|------------------------|--------|------------------------------------|----------------------------------|
| l . | Emission Poi | int No. / Name: | | | | | UNTREATED WOOD FIRED BOILE | |
| <u>.</u> | Equipment D COGENERA | escription: ATION POWER U | WEL NIT | LONS 2 | CELL C | ОМІ | BUSTION SYSTEM | M, BOILER, AND |
| 3. | Was this unit If yes please | constructed or mo | dified afte | er Augus | st 7, 1977' | ? | У | ves X No |
| | Capacity: | 60.0 | MME | BTU/hr | 5. Ty | pe of | burner: | FUEL CELL |
| | Usage Type (| i.e. Space Heat, Pro | ocess, etc |) : | PROC | FSS | 1 | - |
| I | FUEL TYPE | y usage, and yearly HEAT CONTENT | y usage. % SUI | | % AS | | MAXIMUM HOURLY | ACTUAL YEARLY |
| | | | | | | | USAGE | USAGE |
| | EATED WOOD SIDUE | 4,000-6,000 BTU/LB | 0.25 | | 5.0 | | 8,760 HRS/YR | 8,424 HRS/YR |
| | | | | | | | | |
| | Please list any (APPROXIMA | fuel components that I AMOUNTS) | hat are ha 1% PENT | zardous ACHLO | air polluta DROPHEI | ants a | and the percentage in 15% CREOSOTE | in the fuel. : 2% NAPHTHALENE |
| | Operating Sche | edule: (Optional) | 24 | hour | s/day | 7 | days/week | |
| | Stack Data: A. Heigh | | 80 FT | | C. | | it gas velocity: | 60 FT/SEC |
| | B. Inside | diameter: | 3 FT | | D. | Ex | it gas temperature: | 471° F |
| | UTM Coordina | | | | | | | |

12. POLLUTANT EMISSIONS: USE OF TREATED AND UNTREATED WOOD FUEL

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements.

| | Consider the secondaries with Operating Fermin Application Requirements, pp. 3-3. | | | | COLUMNIC WIL | u Opciating r | cimi Applican | on Keduire | ments, pp. 3-5 |
|-----------------------|---|-------------|-------------|-----------------------------------|--|----------------------------------|----------------|--|--------------------|
| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL MENT | ACTUA (in accorda Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | V RATE ing Permit pp. 3-5) | PROPOS | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE Optional) |
| | | * yes/no | effic. | note 2 | lb/br | tn/yr | note 2 | lb/hr | th/yr |
| AA-001 | PARTICULATE | YES | | | | | 0.3 GR/DSCF | 10.60 | 46.41 |
| | SO2 | ON | | | | | | 12.02 | 52.65 |
| | NOX | NO | | | | | | 14.16 | 62.01 |
| | 00 | ON | | | | | | 35.61 | 155.96 |
| | voc | ON | | | | | | 0.77 | 3.38 |
| | нст | ON | | | | | | 09:9 | 11.54 |
| | TOTAL HAP METALS | ON | | | | | | 0.043 | 0.19 |
| | | | | | | | | | |
| 1 All rous | All warmington air and interest in 1 3: 1 | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| F U | | | MENT (page | | | SECTION D |
|------------|---------------------------------|---------------------------------|---------------------------------|----------------|-------------------------------|---------------------------|
| l. | | FERNATIVE OP int No. / Name: | | | OF UNTREATED OOD FIRED BOILER | WOOD FUEL ONLY |
| | Equipment I | escription: ATION POWER U | WELLONS 2 JNIT | CELL COM | BUSTION SYSTEM, | BOILER, AND |
| 3. | | constructed or mo | odified after Augus ain. | st 7, 1977? | Ye | s <u>X</u> No |
| | Capacity: | 60.0 | MMBTU/hr | 5. Type o | f burner: | FUEL CELL |
| 5. | Usage Type (| i.e. Space Heat, Pr | rocess, etc.): | I | PROCESS | |
| 1. | Complete the content, hour | following table, in | dentifying each ty ly usage. | pe of fuel and | the amount used. Sp | ecify the units for hea |
| I | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUM HOURLY USAGE | ACTUAL YEARLY USAGE |
| WO | IREATED OD AND RK RESIDUE | 4,000 BTU/LB | 0.01 | 0.5 | 8,760 HRS/YR | |
| | | | *** | | | |
| | | | | | | |
| •8 | Please list any | fuel components | that are hazardous | air pollutants | and the percentage in | the fuel. |
| | Operating Sch | edule: (Optional) | 24 hou | rs/day 7 | days/week | 52 weeks/year |
|) . | Stack Data: | · | | - | - | |
| | A. Heig | | 80 FT | | xit gas velocity: | 70 FT/SEC |
| | | e diameter: | 3 FT | D. E | xit gas temperature: | 471° F |
| l. | UTM Coordin | nton. | | | | |

12. POLLUTANT EMISSIONS:

ALTERNATIVE OPERATING SCENARIO – BURNING UNTREATED WOOD ONLY

5. Example emission rate calculations, monitoring data, or stack test data must be attached in

| p. 3-5 | PERGRAMA | and an experience | | | | | | _ | | |
|---|--|-------------------|----------------|------|-------|--------|------|------|------------------|--|
| quirements, p | WABLE Optional) | tn/yr | 122.65 | 2.19 | 46.72 | 192.73 | 5.26 | 0.00 | 0.29 | |
| ication Re | PROPOSED ALLOWABLE EMISSION RATE (Optional) | lb/hr | 28.0 | 0.50 | 10.67 | 44.0 | 1.20 | 0.00 | 0.067 | |
| ng Permit Appl | PROPOS | note 2 | 0.3 GR/DSCF | | | | | | | |
| with Operation | V RATE ing Permit ipp. 3-5) | tn/yr | | | | | | | | |
| accordance v | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | lb/hr | | | | | | | | |
| be attached in | ACTUAI (in accordar Applicatio | note 2 | | | | | | | | |
| data must | CONTROL | effic. | | | | | | | | |
| OI STACK ICS | CONTROL | * yes/no | YES | ON | ON | ON | ON | ON | ON | |
| 1. Stack less data must be attached in accordance with Operating Permit Application Requirements, pp. 3-5 | POLLUTANT (note 1) | | PARTICULATE | 502 | NOX | 00 | voc | HCL | TOTAL HAP METALS | |
| 生活を応じるがはない。 | EMISSION POINT NO. | | AA-001 | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| FU. | EL BURNI | NG EQUIPN | IENT (page | 1 of 2) | | SECTION D |
|------------|------------------------------|---|--------------------|----------------|---|---------------------------|
| l . | Emission Po | int No. / Name: | AA- | 002, REF. NO | . 41, OIL FIRED BO | DILER |
| 2. | Equipment I | Description: | BACKUP SE | RVICE BOIL | ER | |
| | | t constructed or mo | _ | | Ye | es X No |
| • | Capacity: | 28.5 | MMBTU/hr | 5. Type o | f burner: | ATOMIZING OIL |
| | Usage Type | (i.e. Space Heat, P | rocess, etc.): | I | PROCESS | |
| · SWEET | | e following table, rly usage, and year | | ype of fuel an | d the amount used. | Specify the units for he |
| | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUM HOURLY USAGE | ACTUAL YEARLY USAGE |
| #2 (| OIL | 140,000 BTU/GAL | 0.50 | 1.6 | 204 GAL/HR | 100,000 GAL |
| | | | | | | |
| | | | | | | |
| | Please list an | y fuel components NONE | that are hazardous | air pollutants | and the percentage is | n the fuel. |
| | Operating Sci | hedule: (Optional) | 24 hour | rs/day 7 | days/week | weeks/year |
|). | Stack Data: A. Heig B. Insid | ght: le diameter: | 36 FT 2.5 FT | | xit gas velocity: xit gas temperature: | 32 FT/SEC 570° F |
| ĺ. | UTM Coordin | | B. North | ſ | C. East | |

12. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements, pp. 3-5.

| EMISSION POINT NO. | POLLUTANT (note 1) | CON | CONTROL | ACTUA (in accord | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | V RATE ing Permit pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | CONTROL ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) |
|-------------------------------|--|-------------|----------|---------------------|--|----------------------------|--------|--|--|
| | | * yes/no | effic. | note 2 | лц/qI | tn/yr | note 2 | lb/hr | tn/yr |
| AA-002 (SEE NOTE BELOW) | PARTICULATE | ON | | | | | | 0.41 | 1.79 |
| | 802 | ON | | | | | | 14.48 | 63.44 |
| | NOX | ON | | | | | | 4.08 | 17.87 |
| | 00 | ON | | | | | | 1.02 | 4.47 |
| | VOC | ON | | | | | | 0.04 | 0.18 |
| | | | | | | | | | |
| | | | | | | | | | |
| NOTE: THIS B | NOTE: THIS BOILER WILL NOT OPERATE AT THE SAME TIME AS SOURCE AS AND MOOD EIDED BOTH ED. | T THE SA | MR. TIME | ASSOTIBE | 7 A A_001 CW | radia doo | | TOT STITE | THE STATE OF STREET |

THE SAME TIME AS SOURCE AA-001 (WOOD FIRED BOILER). THIS BOILER IS FOR BACKUP SERVICE ONLY.

- All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.
 - Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

SECTION D

| 1. | Emission Po | int No. / Name: | AA | -005, REF. N | IO. 43, NATURA | L GAS SPACE HEATER |
|-----|------------------------------|--|----------------------------|----------------|---|-------------------------------|
| 2. | Equipment I LOCATED | Description: IN BOILER HOUSE | | ATERS US | ED IN PLANT | BUILDINGS. (3) UNITS |
| 3. | | t constructed or modi give date and explain | _ | st 7, 1977? | | Yes X No |
| 4. | Capacity: | 0.20 | MMBTU/hr | 5. Type | of burner: | NATURAL GAS |
| 6. | Usage Type | (i.e. Space Heat, Prod | cess, etc.): | | SPACE | HEAT |
| 7. | Complete the | e following table, ide | ntifying each ty usage. | pe of fuel ar | nd the amount used | d. Specify the units for heat |
| | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUI HOURLY USAGE | |
| NA | TURAL GAS | 1,000 BTU/CF | | | 320 CF/HR | 645 MCF |
| | | | | | | |
| | | | | | | |
| 8. | Please list an | y fuel components th NE | at are hazardou | s air pollutan | ts and the percent | age in the fuel. |
| 9. | Operating Sci | hedule: (Optional) | 24 hou | rs/day | 7 days/w | eek 12 weeks/year |
| 10. | Stack Data: A. Heig B. Insid | tht: le diameter: | NA NA | C. D. | Exit gas velocity: Exit gas temperat | |
| 11. | UTM Coordin A. Zone | | B. Nort | h | C. | East |

12. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements, pp. 3-5.

| AA-005 PM yes/no * effic. note 2 lb/hr AA-005 PM < | POLLUTANT CONTROL (note 1) EQUIPMENT | ACTUA (in accord Applicat | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ing Permit pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | OL ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) EMISSION RATE (Optional) |
|--|--------------------------------------|---------------------------------|--|----------------------------------|--------|--|---|
| | | note 2 | lb/br | tn/yr | note 2 | lb/hr | tn/yr |
| SO2 NOX CO VOC | | | 9 | | | 00:00 | 0.00 |
| CO VOC | | | | | | 0.00 | 0.00 |
| 00 x | | | | | | 90.0 | 0.25 |
| voc | | | | | | 0.02 | 0.10 |
| | | | | | | 0.01 | 0.03 |
| | | | | | | | |
| | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

7

SECTION D

| 1. | Emission Po | int No. / Name: | AA-006, REI | F. NO. 44, NA | TURAL GAS FIR | ED STEAM CLEANER |
|-----|------------------------------------|---|------------------------------------|------------------|---|--|
| 2. | Equipment I CLEANING | | ATER HEATER | FOR STEAM | CLEANER US | ED FOR EQUIPMENT |
| 3. | | | nodified after Augu plain. 1992 | | х | Yes No |
| 4. | Capacity: | 0.4 | 4 MMBTU/hr | 5. Type o | f burner: | NATURAL GAS |
| 6. | Usage Type | (i.e. Space Heat, l | Process, etc.): | PROCES | S | |
| 7. | | e following table, ly usage, and yea | | pe of fuel and | the amount used. | Specify the units for hear |
| I | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUM HOURLY USAGE | ACTUAL YEARLY USAGE |
| NAT | TURAL GAS | 1,000 BTU/CF | 0.0 | 0.0 | 8,760 HR/YR | 2,000 HR/YR |
| | | | | | | |
| | | | | | | ALLE STREET, THE PROPERTY OF T |
| 8. | Please list an | | s that are hazardous | s air pollutants | and the percentag | e in the fuel. |
| 9. | Operating Sci | hedule: (Optional |) 8 hou | rs/day 5 | days/wee | k 50 weeks/year |
| 10. | Stack Data: A. Heig B. Insid | tht: le diameter: | NA NA | | xit gas velocity: xit gas temperatur | e: <u>NA</u> |
| 11. | UTM Coordin A. Zone | | B. Nort | h | C. E | ast |

12. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements, pp. 3-5.

| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accords Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | V RATE ing Permit pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | ISSION RATE th Operating Permit EMISSION RATE (Optional) |
|-----------------------|--------------------|-------------|--------|-----------------------------------|--|----------------------------------|--------|--|--|
| | | * yes/no | effic. | note 2 | lb/hr | ту/ш | note 2 | Ib/hr | tn/yr |
| AA-006 | PM | | | | | | | 0.01 | 0.02 |
| i e | SO2 | | | | | | | 0.00 | 0.00 |
| | NOX | | | | | | | 0.04 | 0.19 |
| | 00 | | | | | | | 0.01 | 0.04 |
| | voc | | | | | | | 00.0 | 0.01 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| . 01 | <u>EL BURNI</u> | | <u> </u> | | | SECTION |
|------|----------------------------|-----------------------|--------------------------------|----------------|----------------------------|---------------------------|
| | Emission Po | int No. / Name: | AA- | 015, REF. NO | . 53, NATURAL GA | AS SPACE HEATE |
| • | Equipment I | Description: | SPACE HEA | TER USED IN | N PLANT BUILDIN | GS (1) UNIT |
| | | - | | | | |
| ic | | t constructed or mo | | st 7, 1977? | Y | es X No |
| | Capacity: | 0.1 | MMBTU/hr | 5. Type of | f burner: | NATURAL G |
| • | Usage Type | (i.e. Space Heat, Pr | rocess, etc.): | S | PACE HEAT | |
| | Complete the content, hour | e following table, ic | dentifying each ty y usage. | pe of fuel and | the amount used. S | pecify the units for h |
| | FUEL TYPE | HEAT CONTENT | % SULFUR | % ASH | MAXIMUM HOURLY USAGE | ACTUAL YEARLY USAGE |
| NA' | TURAL GAS | 1,000 BTU/CF | 0.0 | 0.0 | 107 CF/HR | 215 MCF |
| | | | | | - | |
| | | | | | | |
| | Please list any | | that are hazardous | air pollutants | and the percentage i | n the fuel. |
| | NON | | | air pollutants | and the percentage i | n the fuel. |

B.

North

11.

UTM Coordinates:

Zone

A.

C.

East

12. POLLUTANT EMISSIONS:

Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requir

| L | | | STATE STATE OF THE | | TA CONTINUE AL | II Operating r | cum Applica | non Kedune | y control of the cont |
|-----|--------------------|-------------|--|----------------------------------|--|------------------------------------|-------------|---|--|
| PO | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accord Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ing Permit , pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE Optional) |
| | | * yes/no | effic. | note 2 | Ib/hr | tn/yr | note 2 | lb/hr | ta/yr |
| PM | | | | | | | | 0.00 | 0.00 |
| S02 | | | | | | | | 0.00 | 0.00 |
| NOX | | | | | | | | 0.00 | 0.01 |
| 8 | | | | | | | | 0.00 | 0.01 |
| voc | | | | | | | | 0.00 | 0.00 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| MANUFAC | FURING PROCESSES | (page 1 of 2) | SECTION E |
|---------------------|--|---|---------------------------------------|
| Emission | Point No./ Name: | AA-003, WOOD PRESERVI | NG PROCESS |
| Process D PENTAC | escription: PRESSURE THLOROPHENOL OR CREOSOT | REATMENT OF UTII E, AND RAILROAD CROSS | LITY POLES WITH TIES WITH CREOSOTE |
| Was this u | unit constructed or modified after A | August 7, 1977? ye | es <u>X</u> no |
| Capacity | (tons/hr): 7,000,00 | 0 CF WOOD PRODUCTS PE | R YEAR |
| Raw Mate | rial Input: | | |
| MATERIA | L QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| WOOD | 342 CF | 800CF | UP TO 7,000,000 CF |
| Product Ou PRODUCT | or QUANTITY/HR | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| REATED WOO! | | 800 CF | UP TO 7,000,000 CF |
| Stack Data: | | | |
| A. He | eight: NA side diameter: NA | C. Exit gas veloc D. Exit gas temp | erature: <u>NA</u> |

13. POLLUTANT EMISSIONS:

| EMISSION POLLUTANT CONTROL ACTUAL EMISSION RATE PROPOSED ALLOWABLE (in accordance with Operating Permit Application Requirements, pp. 3-5) | POLLUTANT (note 1) | CON | CONTROL EQUIPMENT | ACTUA (in accord Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ing Permit i, pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE Optional) |
|--|--------------------|-------------|----------------------|----------------------------------|--|-------------------------------------|--------|--|--------------------|
| | | * yes/no | effic. | note 2 | Ъ/ћг | ту/ш | note 2 | lb/hr | tz/xt |
| AA-003 | VOC | ON | | | | | | 6.58 | 28.18 |
| | NAPHTHALENE | ON | | | | | | 0.40 | 1.77 |
| | QUINOLINE | ON | | | | | | 0.02 | 0.08 |
| | BIPHENYL | ON | | | | | | 0.01 | 0.06 |
| | DIBENZOFURAN | ON | | | | | | 0.03 | 0.15 |
| | PENTACHLOROPHENOL | ON ON | | | | | | 0.00 | 0.01 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point.

| MANUFACTURIN | G PROCESSES (| page 1 of 2) | SECTION E |
|---|--|--|--------------------|
| 1. Emission Point No./ MILLING | Name: AA | A-004, REF. NO. 42, C | YCLONES FOR WOOD |
| Process Description: | DUST COLLECTIO | ON FROM UNTREATED | WOOD MILLING AND |
| 3. Was this unit constru If yes please give dat | cted or modified after Augree and explain. | ust 7, 1977? ye | sXno |
| Capacity (tons/hr): | | | |
| Raw Material Input: | | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| ROUGH CUT WOOD PRODUCTS | | | 2,000,000 CF |
| . Product Output: | | | |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| TRIMMED AND SHAPED UNTREATED WOOD PRODUCTS | | | 2,000,000 CF |
| Stack Data: | | | |
| A. Height: B. Inside diamet UTM Coordinates: A. Zone | ter: NA B. North | C. Exit gas veloc D. Exit gas tempo C. F. | erature: <u>NA</u> |

13. POLLUTANT EMISSIONS:

3-5. -Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Per

| 사 | | 11 | -ri- | | | _ | |
|---|-------------|-------------|------|--|------|---|------|
| WABLE Optional) | tn/yr | 2.40 | | | | | |
| PROPOSED ALLOWABLE EMISSION RATE (Optional) | lb/hr | 0.55 | | | | | |
| PROPO: EMISSIC | note 2 | | | | | | |
| RATE ng Permit pp. 3-5) | tn/yr | | | | | | |
| ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | lb/br | | | | | | |
| ACTUA] (in accordar Applicatio | note 2 | | | | | | |
| ROL | effic. | | | | | | |
| CONTROL | * yes/no | YES | | | | | |
| ION POLLUTANT CONTROL ACTUAL EMISSION RATE (PROPOSED ALLOWABLE Application Requirements, pp. 3-5) ROUTHOL Application Requirements, pp. 3-5) | | PARTICULATE | | | | | |
| EMISSION POINT NO. | | AA-004 | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| MANUFACTURI | NG PROCESSES (| page 1 of 2) | SECTION E |
|---------------------------------------|--|-------------------------------------|----------------------------------|
| . Emission Point No | o./ Name: <u>AA-008, RI</u> | EF. NO. 46, TREATED W | OOD STORAGE |
| Process Description FOLLOWING TR | n: STORAGE AND I EA <u>TMENT AND PRIOR TO</u> | HANDLING OF TREAT SHIPMENT | ED WOOD PRODUCTS |
| . Was this unit const | tructed or modified after Augilate and explain. | ust 7, 1977? ye | |
| Capacity (tons/hr) | : NA | | |
| . Raw Material Inpu | t: | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAI |
| | | | |
| Product Output: | PER CONTROL PROPERTY AND ADDRESS OF | TWIST RAW THE DAY ONLY POPULA | Mary Management of Burney (1997) |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| REATED POLES | | | UP TO 5,000,000 CF |
| TREATED TIES | | | 2,000,000 CF |
| OTAL TREATED | | | UP TO 7,000,000 CF |
| | | | |
| Stack Data: A. Height: B. Inside diam | NA eter: NA | C. Exit gas veloc D. Exit gas tempe | |
| UTM Coordinates: A. Zone | B. North | C. E | East |

13. POLLUTANT EMISSIONS:

3-5. è Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Applie

| | standard in the second of the | OI SHACK IUSI | data must i | אב מוומכוובת ווו | accordance v | vim Operating | rermit App | ication Kec | urrements, pp. |
|-----------------------|---|---------------|-------------|---|--|-------------------------------------|------------|--|---------------------|
| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | TROL | ACTUA (in accorda Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ing Permit 5, pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE (Optional) |
| | | * Yes/no | effic. | note 2 | ıh/dı | т/ш | note 2 | lb/hr | tn/yr |
| AA-008 | voc | ON | | | | | | 6.30 | 27.63 |
| | NAPHTHALENE | ON | | | | | | 0.88 | 3.88 |
| | QUINOLINE | ON | | | | | | 0.04 | 0.17 |
| | BIPHENYL | ON | | | | | | 0.13 | 0.57 |
| | DIBENZOFURAN | ON | | | | | | 0.08 | 0.33 |
| | PENTACHLOROPHENOL | NO | | | | | | 00.00 | 0.00 |
| | | | | | | | | | |
| 1. All regu | All regulated air nollintants including hazare | lone air no | Intente ami | hazardons air nollutants emitted from this some charles La listed | To occur | 13 % 15 4 3 5 | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an

emission point.

7

| MANUFACTURING | G PROCESSES (p | page 1 of 2) | SECTION E |
|---|------------------------|---------------------------------------|---------------|
| Emission Point No./ | Name: AA | -009, REF. NO. 47, POLE | KILN |
| Process Description: | DRY WOOD POLES | S PRIOR TO TREATMENT | <u> </u> |
| Was this unit constru If yes please give dat | 1 1 | ust 7, 1977?yes | |
| Capacity (tons/hr): | 13,000 CF P | ER BATCH | |
| Raw Material Input: | | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| GREEN WOOD POLES | | | 1,600,000 CF |
| | | | |
| | | | |
| Product Output: | | | |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| DRY WOOD POLES | | | 1,600,000 CF |
| | | | |
| Stack Data: A. Height: B. Inside diame | NA ter: NA | C. Exit gas veloc D. Exit gas temp | |
| UTM Coordinates: A. Zone | B. North | C. 1 | East |

13. POLLUTANT EMISSIONS:

3-5 Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirements.

| のの対象を変数の対象の対象の | | Section (speciment) | | | accordante v | ILLI Operaturi | ddw mms r | ication Re | , control of the cont |
|-----------------------|--------------------|---------------------|--------|----------------------------------|--|-------------------------------------|-------------------|---|--|
| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accord Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | N RATE ing Permit 5. pp. 3-5) | PROPO: EMISSIC | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE (Optional) |
| | | * yes/no | effic. | note 2 | lb/hr | ту/ш | note 2 | lb/hr | tn/yr |
| AA-009 | voc | ON | | | | | | 9.03 | 40.00 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

| MANUFACTURII | NG PROCESSES | (page 1 of 2) | SECTION E |
|--|---|--------------------------|-------------------|
| . Emission Point No | o./ Name: A | A-010, REF. NO. 48, POLE | PEELER |
| Process Description PRODUCE WHIT | | AND CAMBIUM LAYER | FROM PINE LOGS TO |
| . Was this unit cons If yes please give o | tructed or modified after Audate and explain. | gust 7, 1977? ye | s <u>X</u> no |
| Capacity (tons/hr) | 9.9 | | |
| Raw Material Inpu | it: | | |
| MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| BARKED LOGS | 22 PIECES | 22 PIECES | 22,500 PIECES |
| Product Output: | | | |
| PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| WHITE POLES | 22 PIECES | 22 PIECES | 22,500 PIECES |
| BARKED AND WOOD CHIPS | 5.5 TONS/HR | 5.5 TONS/HR | 5,000 TONS/YR |
| Stack Data: A. Height: | NA | C. Exit gas veloc | city: NA |

B. North

C. East

UTM Coordinates: A. Zone

8.

13. POLLUTANT EMISSIONS:

3-5. Example emission rate calculations, monitoring data, or stack test data must be attached in accordance with Operating Permit Application Requirem

| THE REAL PROPERTY AND INCIDENT AND INCIDENT | | | | | , commence of the contract of | THE COLUMN | ST CHILLIAND | ICALIOII INC | ducinents, pp |
|---|--------------------|-------------|--------|----------------------------------|---|------------------------------------|--------------|--|---------------------|
| EMISSION POINT NO. | POLLUTANT (note 1) | CONTROL | ROL | ACTUA (in accord Applicati | ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | V RATE ing Permit , pp. 3-5) | PROPO | PROPOSED ALLOWABLE EMISSION RATE (Optional) | WABLE (Optional) |
| | | * yes/no | effic. | note 2 | lb/tur | ta/yr | note 2 | Љ/ш | tn/yr |
| AA-010 | PARTICULATE | NO | | | | | | 3.47 | 3.94 |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | _ | | | _ | _ | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A. Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an

SECTION E

| 1. | Emission Point No | | A-011, REF. NO. 49, WOO | D FUEL PREPARATION |
|----|--|--|--|--------------------|
| 2. | Process Description GRINDING, HAN | on: PREPARATION (NDL <u>ING, AND LOADING I</u> | OF WOOD FUEL FOR NTO SILO ON CONVEYOR | BOILER, INCLUDING |
| 3. | Was this unit cons | | gust 7, 1977? yes | s <u>X</u> no |
| 4. | Capacity (tons/hr |): 12 | | |
| 5. | Raw Material Inpu | ıt: | | |
| | MATERIAL | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| wo | OOD RESIDUE | 8 TONS | 12 TONS | 58,403 TONS |
| 6. | Product Output: | | | |
| | PRODUCT or BY-PRODUCT | QUANTITY/HR AVERAGE | QUANTITY/HR MAXIMUM | QUANTITY/YEAR |
| | OD CHIPS AND WDUST | 8 TONS | 12 TONS | 58,403 TONS |
| | | | | |
| 7. | Stack Data: A. Height: B. Inside dia | NA meter: NA | C. Exit gas veloc D. Exit gas temp | |
| 8. | UTM Coordinates: A. Zone | B. North | C. 1 | East |

MANUFACTURING PROCESSES (page 2 of 2)

13. POLLUTANT EMISSIONS:

٠. Example emission rate calculations, monitoring data, or stack test data must be attached in accordar

| on J | | | | | | |
|--|-------------|-------------|------|-----|------|--|
| WABLE Optional) | tn/yr | 7.30 | | | | |
| PROPOSED ALLOWABLE EMISSION RATE (Optional) | lb/hr | 3.00 | | | | |
| PROPO: EMISSIC | note 2 | | | | | |
| RATE ing Permit pp. 3-5) | th/yr | | | | | |
| ACTUAL EMISSION RATE (in accordance with Operating Permit Application Requirements, pp. 3-5) | lb/hr | | | | | |
| ACTUA (in accorda Applicatio | note 2 | | | | | |
| ROL | effic. | | | | | |
| CONTROL | * yes/no | ON | | | | |
| EMISSION POLLUTANT CONTROL (in accordance with Operating Permit Application Requirements, pp. 3-5 EQUIPMENT (in accordance with Operating Permit Application Requirements, pp. 3-5) | | PARTICULATE | | 000 | | |
| EMISSION POINT NO. | | AA-011 | | | | |

All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with Operating Permit Application

Requirements, pp. 3-5. A list of regulated air pollutants has been provided in Section A.

Provide emission rate in units of applicable emission standard, e.g. lb/MMbtu, gr/dscf, etc. This may not apply to every emission point or every pollutant from an emission point.

If yes, attach appropriate Air Pollution Control Data Sheet from Section L or manufacturers specifications if other.

SECTION F COATING, SOLVENT USAGE, and/or DEGREASING (page 1 of 5)

NOTE: For emission sources of volatile organic compounds (VOC's) including spray booths, painting, degreasing, finishing, gluing and solvent usage.

| Emis | sion Point No./ Name: | AA-012, REF. N | O. 50, (2) PARTS CL | EANER/DEGREASER'S | |
|----------------|--|--|--------------------------|-------------------------------|---------------------|
| Proce TAN | ess Description (INDIC | CATE NO. OF IDENTI | CAL PROCESSES-B | OOTHS, DIP TANKS, DEGR | EASING |
| 2 EA | CH, SAFETY KLEEN | INC. PARTS CLEAN | ERS | | |
| Were If yes | any of these units con please give date and e | structed or modified af | ter August 7, 1977? _ | yesno | |
| COAT | ΓING: NA | | | | |
| A. | Describe Articles | Coated: | | | |
| B. | Operating Sched | ule (Optional) | | | |
| | 1. Maxir 2. Avera | | | Days/Week Days/Week | Weeks/Yea Weeks/Yea |
| C. | Bake ovens: | Type of oven: | | For direct fired | ovens: |
| | Number of Ovens: | () Steam () direction () Electric () Oth | | Heat input MMBTU/hr_Fuel type | |
| SPRA | Y BOOTHS: NA | | | | |
| A. | Width Depth | (ft) (ft) | Height No. Open Sides | (ft) | |
| B. | Operating Schedu | le | | | |
| | Maxim Average | | | Days/Week Days/Week | Weeks/Year |
| C. | Method of Spray: () Airless Overspray | () Air Atomize | () Electrostatic | () Other: | |
| D. | Exhaust Fan Data | : | | | |
| | No. of Fans | Total H | orsepower | Total Volume (cfm) | |

SECTION F COATING, SOLVENT USAGE, and/or DEGREASING (page 2 of 5)

| | E. | Exhaust | Control: | | Control | l Efficiency: | : | | Exhaust | Stack Data | ı: | | |
|----------|------------|-----------|--|-------------|--------------------------------------|---------------|--------------|--|------------|-----------------------|----------|------------|--|
| | | | erwash orption neration les Filter | | articulate lydrocarbo | on | % % | Diameter Height Flow | | (FT) (FT) (CFM) | | | |
| 6. | DEGRE | ASING: | 111 | | | | *** | 3 43 | | | | - ∜ | |
| | A | square fe | et per year | (ft²/yr). | | | parts degrea | sed in square | e feet per | hour (ft²/h | r) and | <u>.</u> | |
| | В. | Type of o | degreasing: | | | | | | · | | <u> </u> | - | |
| | | 1. | Cold Solv | vent | x | | No. of Ur | nits | 2 | | | | |
| | | 2. | Vap <u>or</u> | | | | | | | | | | |
| | | | 1. 2. 3. 4. | Conveyo | conveyor rized non- rized vapo | boiling | | No. of Uni No. of Uni No. of Uni | ts | | | | |
| | C. | Tank Dir | nensions (ft |): | | | | | | | | | |
| | | Width | | 2 (ft) | | Height | | 1 (ft) | | Length | _3 | (ft) | |
| | D. | Operating | Schedule (| (Optional) | | | | | | | | | |
| Weeks/Ye | ar | 1. | Maximun | n: | Hours/l | Day | 2 | 7 Days/We | ek | | 52 | | |
| 18414 | | 2. | Average: | | 1 Hours | /Day | | 4 Days/We | ek | 40 | Weeks | Year . | |
| 7. UTM (| Coordinate | s: | | | 000 | | | | | | | | |
| | A. | Zone | | | В. | North | | (| C. | East | | | |

COATING, SOLVENT USAGE, and/or DEGREASING (page 3 of 5) SECTION F

List all Volatile Organic Compounds (coatings, thinners, lacquers, solvents, degreasers, etc.) as used in accordance with Operating Permit Application Requirements, pp. 3-5: 12.

| PERCENT RETURNED* AVG. MAX (0 100 90-100 24 50 0.2 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 6 100 | | DENSITY | | AMOUNT RECT ATMED | PRODUCT USAGE | r USAGE | MAXIN | MAXIMUM VOC |
|--|--------------------------|-------------|-----|----------------------|---------------|--------------|----------|-------------|
| 100 90-100 24 50 0.2 | PRODUCT | | | RETURNED* | | | LIMIDON | ON KAIES |
| 100 90-100 24 50 0.20 GAL/YR GAL/YR | | (lbs/gallon | # | (gallons/yr) | AVG. | MAX | (lbs/hr) | (tons/yr) |
| | SAFETY KLEEN INC SOLVENT | 9.9 | 100 | 90-100 | 24 GAL/YR | 50 GAL/YR | 0.20 | 99.0 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |

USE SEPARATE SHEET(S) IF NEEDED.

^{*} SEE ITEM 15 ON PAGE 5 OF THIS SECTION FOR RECLAMATION CREDIT AND DOCUMENTATION REQUIRED. ** PRODUCT USAGE SHOULD NOT INCLUDE THOSE AMOUNTS RETURNED TO THE SUPPLIER, RECYCLED, OR REUSED.

SECTION F COATING, SOLVENT USAGE, and/or DEGREASING (page 4 of 5)

13. List all Hazardous Air Pollutants (HAP'S) found in each product:

| Villy with kequir | 0.00 0.66 | | | | | | |
|--------------------------------|---------------------------|-----------------------|--|--|--|--|--|
| (in a | | | | | | | |
| MAXIMUM PRODUCT USAGE ** | 0.20 | | | | | | |
| CAS | 644742-47-8 | | | | | | |
| HAZARDOUS AIR POLLITTANT | voc | | | | | | |
| PRODUCT NAME | SAFETY KLEEN PETROLEUM | DISTILLATE SOLVENT | | | | | |

USE SEPARATE SHEET(S) IF NEEDED.

^{**} PRODUCT USAGE SHOULD NOT INCLUDE THOSE AMOUNTS RETURNED TO THE SUPPLIER, RECYCLED, OR REUSED.

SECTION F COATING, SOLVENT USAGE, and/or DEGREASING (page 5 of 5)

| | SOLVENT RECEIVED IN CLOSED BACK TO MANUFACTURER | | |
|--------|--|---|----------------------------|
| | | | |
| 21 | | | |
| · · | | (100 (110 (110 (110 (110 (110 (110 (110 | - |
| 17 | | | |
| | | | |
| 15. | List reclaimed material: MATERIAL 7 DEGREASERS, LACQUERS, ETC. | TYPES INCLUDE COATING | S, THINNERS, SOLVEN |
| | DEGREASERS, LACQUERS, ETC. | QUANTITY | QUANTITY |
| מת | ODUCT/MATERIAL TYPE | USED | RECLAIMED |
| rk | NO ON SITE RECLAMATION | (GAL/YR) | (GAL/YR) |
| | | | |
| | | | |
| | | | • |
| | | | - |
| | | | |
| | | | |
| | | | |
| | | | |
| Descr | ibe methods that the products listed above | are reclaimed, including how | they are captured and reus |
| | ed. | | • |
| return | | | |
| return | | | |
| return | | | 77 72/2 |
| return | | | |

^{*} PLEASE NOTE THAT MATERIAL RECLAIMED WILL ONLY BE CREDITED IF PROPERLY DOCUMENTED.

SECTION H TANK SUMMARY (page 1 of 2)

| 1. SUM | | nission Point No./Name: AA-003, ALL RELATED TA Y DATA SPREADSHEET (FOLLOWING PAGES) | NK DATA INCLU | DED IN TANK |
|-----------|-----------------|---|----------------------|--------------|
| | | | | _ |
| 2. | Was : If yes | as this tank constructed or modified after August 7, 1977?yes please give date and explain. | yes | no |
| 3. | Produ | oduct Stored: | | |
| | If mo | nore than one product is stored, provide the information in 4.A- | E for each product | • |
| 4. | Tank | nk Data: | | |
| | A. | True Vapor Pressure at storage temperature: | | psia/°F |
| | B. | Reid Vapor Pressure at storage temperature: | | psia/°F |
| | C. | Density of product at storage temperature: | | lb/gal |
| | D. | Molecular Weight of product vapor at storage temperature | | lb/lbmol |
| | E. | Throughput for most recent calendar year: | | gal/yr |
| | F. | Tank Capacity: | | gal |
| | G. | Tank Diameter: | | feet |
| | H. | Tank Height / Length: | | feet |
| | I. | Average Vapor Space Height: | | feet |
| | J. | Tank Orientation: Ve | ertical or Horizonta | 1 |
| | K. | Type of Roof: | Dome or Co | ne |
| | L. | Is the Tank Equipped with a Vapor Recovery System? | Yes | No |
| | | If Yes, describe on separate sheet of paper and a | ttach. Indicate eff | ficiency. |
| | M. | Check the Type of Tank: | | |
| | | Fixed Roof External Flo | | |
| | | Pressure Internal Floa | ting Roof | |
| | | Variable Vapor Space | | |
| | N. | Other, describe: | · | |
| | 14. | Check the Closest City: Jackson, MS Birmingham | A T | |
| | | | | |
| | | | | |
| | 0 | New Orleans, LA Check the Tank Paint Color: Baton Rouge | , LA | |
| | • | Aluminum Specular Gray Light | | |
| | | Aluminum Diffuse Gray Medium | m | |
| | | Red White | .11 | |
| | | Other, describe: | | |
| | P. | Tank Paint Condition: Good or Poo | | |
| | Q. | Check Type of Tank Loading | • | |
| | | 1. Trucks and Rail Cars | | |
| | | Submerged Loading of clean cargo tank | : | |
| | | Submerged Loading: Dedicated Norma | | |
| | | Submerged Loading: Dedicated Vapor | | |
| | | Splash Loading of clean cargo tank | | |
| | | Splash Loading: Dedicated Normal Se | rvice | |
| | | Splash Loading: Dedicated Vapor Bala | ince Service | |
| | | 2. Marine Vessels | | |
| | | Submerged Loading: Ships | | |
| | | Submerged Loading: Barges | | |

SECTION H TANK SUMMARY (page 2 of 2)

5.

6.

| R. | For | External Floating Roof Tanks | | |
|---------|--------------|---------------------------------|----------------------|---------|
| | 1. | Check the Type of Tank Seal: | | |
| | | Mechanical Shoe | | |
| | | Primary Seal C | only | |
| | | With Shoe-Mo | unted Secondary Seal | |
| | | With Rim-Mou | inted Secondary Seal | |
| | | Liquid Mounted Resilien | t Seal | |
| | | Primary Seal C | nly | |
| | | With Shoe-Mo | unted Secondary Seal | |
| | | With Rim-Mou | inted Secondary Seal | |
| | | Vapor Mounted Resilient | Seal | |
| | | Primary Seal O | nly | |
| | | With Shoe-Mo | unted Secondary Seal | |
| | | With Rim-Mou | nted Secondary Seal | |
| | 2. | Type of External Floating Roof: | Pontoon | |
| | | | Double-Deck | |
| S. | For I | nternal Floating Roof Tanks | | |
| ٥. | 1. | Check the Type of Tank Seal: | | |
| | | Liquid Mounted Resilient | Seal | |
| | | Primary Seal O | | |
| | | | nted Secondary Seal | |
| | | Vapor Mounted Resilient | | |
| | | Primary Seal O | | |
| | | | nted Secondary Seal | |
| | 2. | Number of Roof Columns: | _ | |
| | 3. | Length of Deck Seam | | feet: |
| | 4. | Area of Deck: | | - feet² |
| | 5. | Effective Column Diameter: | | _ feet |
| | 6. | Check the Type of Tank: | | _ 1001 |
| | | | umn Supported Roof | |
| | | | olumn Supported Roof | |
| | | | f-Supported Roof | |
| | | | lf-Supported Roof | |
| Fmice | ions Sur | nmary | | |
| ~11TI22 | 10.113 .5ui. | Breathing Loss: | lb/hr | TPY |
| | 2. | Working Loss: | lb/hr | TPY |
| | 3. | Total Emissions: | lb/hr | |
| JTM | Coordin | | 10/Ш | |
| A. Zoi | | B. North | C. East | |
| | | | J. 240t | |

| AA-003 AA-003 AI 10 10 Crecsote 1830 1850 Pertachlorophenol Creosote Cr 775 8.86 8.500,000 740,000 |
|---|
| ## Work Tank #5 Work Tank Measuring Tank 1850 (1830 1850 1850 Crecisole Crec |
| ## Work Tank #\$ Work Tank Measuring Tank 1950 1850 1850 1850 1850 200 150 200 200 150 200 200 200 200 200 200 200 200 200 2 |
| ## Work Tank #5 Work Tank Measuring Tank 51 1850 1850 1850 1850 1850 Creosote Pertactionophenol Creosote Cr Cr 200 150 200 200 8.550,000 7.75 8.95 8.95 |
| 1950 1930 1950 |
| Pertactionophenol Creosole Cr Cr Cr Cr Cr Cr Cr C |
| Peritachlorophenol Creosote Cr Cr 150 200 7.75 8.65 8.65 8.65 7.75 8.65 740,000 |
| 150 200 1.75 8.85 8.50,000 740,000 |
| 150 200 7.75 8.65 8.500,000 740,000 |
| 7.75 8.85 8.85 8.500,000 740,000 |
| 8,500,000 740,000 740,000 |
| 8,500,000 740,000 |
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| 30 20 24 |
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| Sertion II | | | | | | | | | | | | | |
|--|--|------------|--|-------------------|---------------------|------------------|------------------|------------|--|------------------|------------------|------------------|------------------|
| Reference | Hem | Units | | | | | | | | | | | |
| _ | Mant Reference Number | | GRN-17 | GRN-18 | 5000 | | | | | | | | |
| | Emission Point Number | | AA-003 | AA.0m | SI-NAS | GRN-20 | GRN-23 | GRN-24 | GRN-25 | GRN.26 | CON 92 | | |
| | Kererence No. (Table 2.1) | | - 4 | Ę | STORY OF THE PERSON | AA-OG | AA-003 | AA-013 | AA-014 | AAAM | SA OCT | CKN-ZB | GRN-29 |
| | | | | | | R | 23 | 24 | 23 | 88 | 27 | AA-003 | AA-003 |
| | Name | | | | | Creosote | Pentachlomohemal | | | | | 85 | 8 |
| _ | Construction Date | | 1989 | Coagulant 1987 | Decanting | Blowdown | Blowdown | ٥ | Diesel | Aeration | Clarifie | 1 | Creosote |
| _ | | | | | | 2005 | 1983 | 1975 | 1930 | 1988 | 1986 | Joseph | Dehydrator |
| _ | Material Stored | | Shorn Wester | | కీ | | Pent | - | | | | | 200 |
| | Тепрегация | 150 | E STORE STOR | CONGUNANT PONTIES | Water | Creosote / Water | _ | Gasoffne | #2 Diseal | Process waste | Process Waste | Process Waste | |
| _ | Temperature | 1 E | | | | | | | DESIGNATION OF THE PERSON OF T | MARIE | Water | Water | Creosote / Water |
| - | Storage Temperature | Degrees F | 98 | ş | ļ | | | | | | | | |
| - | Density @ Storage Temperature | lb/gai | | N N | 3 | 35 | ĝ | 98 | 8 | æ | 8 | | |
| Ť | Molecular Weight @ Storage Temperature | Mbmole | | | 3 | 8.34 | 8,34 | 6.5 | - | 28 | 8 2 | 28 | ß |
| • | Tort | gallons/yr | Ц | 9.000 | 230000 | 200 000 | | | | | 100 | 200 | ę |
| - | Tert Direct | gallons | 250,000 | 1.500 | 2 500 | 000'786 | 483,000 | 10,000 | 000'08 | 5.000,000 | 5 000 000 | E 000 000 | |
| + | Took Livery ! | feet | 38 | 9 | | O'O'O | 8,000 | 1,250 | 000'6 | 150,000 | 25.000 | 2,000,000 | 200,000 |
| - | Average Veses Sees Usi 1: | feet | 36 | ₽ | - | 2 | 2 | * | 9 | \$ | 35 | 4 | |
| | Tank Orleanishes (Lo. | feet | | - | - | • | 4 | 12 | 32 | ĸ | = | 2 0 | 2 |
| ÷ | Type of Boot (Demon C. C. | | Vertical | Vertical | Vertical | Variant | | - | - | - | - | • | \$ |
| _ | Vanor Remueo, Sustano | | None | Dome | a de | S S | Veraca | Hortzontai | Hortzontal | Vertical | Vertical | Vertical | - Andrewsky |
| | Type of Tank? | yes or no | | ž | 2 | 3 | | | | None | None | No. | Monte |
| | Cheset Chy | | O | Fixed Roof | Flxed Roof | Fived Boof | 2 | 2 | S | S. | 2 | 2 | No. |
| | Tank Daint Color | Memphis | Memphis | Memohis | Memoris | Marrable | Lixed Koor | Fixed Roof | Fixed Roof | Open | Soc O | 2 | 2 |
| | Paint Condition (Cond. or D | | Blue | Beine | EST | Hotel | Membris | Memoris | Memphis | Memphis | Memoris | Memorie | Marriella |
| | Suit Collegion (GOOD of POOL) | | 900 | S | | CORCA | žen Žena | Aluminum | Aluminum | White | S S | MONEY | Membris |
| | lank Loading (Splash Loading - Dedicated | | Splash Loading | Solash Loading | Colorh Lander | io. | Poor | Good | Good | Good | South | | Glack |
| | Normal Service; Splash Loading - Dedicated | | Dedicated Normal | Dedicated Normal | Dedicated Normal | Pedicated Nome | Splash Loading | | | Splash Loading | Splash Loading | Splach Loading | 790r |
| | Not Applicable To Any Table | | Service | Service | Service | _ | Dedicated Normal | 1 | : | Dedicated Normal | Dedicated Normal | Dedicated Normal | |
| | Not Applicable To Any Tanks | | | | | | 200 | DOMONI | Bottom | Service | Service | Service | Bottom |
| | Breathing Loss (See Note) | 1 | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Working Loss (See Note) | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Total Emissions (See Note) | Ž | | | | | | | | | | | |
| | | À | | | | | | | | | | | |
| 4 | NOTE: All tank emissions are included in | | | | | | | | | | | | |
| ٠ ــــــــــــــــــــــــــــــــــــ | Plant Summary Table of Section C of the | | | | | | | | | | | | |
| - 1 | Application. | | | | | _ | | | | | | - | |
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| | | | | | | | | | | | | | |
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| | | 1 | | | | | | | | | | | |
| | | | | | | | | | | | | | |

SECTION H TANK SUMMARY TABLE

| eference | _ | Hull | | | | | | |
|----------|--|------------|---------------------|---|------------|--|-------------------|--------------------|
| | Plant Reference Number | | CDN.3n | 70 1100 | | | | |
| - | Emission Point Number | | 200 | CKN-3) | GRN-32 | GRN-33 | GRN-34 | JE NOS |
| | Reference No. (Table 2-1) | | 300 | AA-003 | AA-003 | AA-003 | AA OM | 200 |
| | | | 8 | <u>ہ</u> | 28 | 5 | 30.50 | 37 |
| | | | ¥ar¥ | South | | | 5 | 8 |
| | Name | | Pentachlorophenol | 2 | | Pentachlorophenol Pentachlorophenol | Pentachiomoboon | _ |
| ~ | Construction Date | | Equalization | Equalization | A A | * | | Daniel |
| | | | 1963 | 1983 | 1970 | 1970 | 1960 | 4070 |
| | | | | | | | | |
| ا | Material Stored | | Water / Penta / Oil | Water / Penta / Oli Water / Penta / Oli | - C | Š | Pentachlorophenol | Creosote / Penta / |
| \$ | Тетрегацие | BSPa | | | | Oil / Penta | Concentrate | Water |
| 48 | Тетрегацие | ejso | | | | | | |
| , | Storage Temperature | Degrees F | 8 | æ | 8 | | | |
| إد | Density @ Storage Temperature | bload | | 3 0 | 3 | 8 | 8 | 8 |
| Ş | Molecular Weight @ Storage Temperature | [b/lbmole | | , | 2 | 7.75 | 9.55 | 8.34 |
| Ų | Throughput | oallons/vr | 65,000 | AE AND | | | | |
| ÷ | Tank Capacity | allons | 14 000 | | O CO | 850,000 | 120,000 | 400,000 |
| ş | Tank Diameter | ğ | 40 | AN C | 9,400 | 2,000 | 10,500 | 100,000 |
| ŧ | Tank Height / Length | j | 2 2 | 2 | 8 | 10 | 13 | Ş |
| 41 | Average Vapor Space Height | 100 | ** | 74 | 7 | 15 | S | 3 8 |
| 2 | Tank Orientation / Hodgoods or Vestigati | B | | | | - | | 2, |
| ¥ | Type of Roof (Dome or Cons) | | Vertical | Vertical | Vertical | Honzontal | Voolleen | |
| ٤ | Vanc Ramen Sepana | | S | S | Ē | | 110 | Vertical |
| 3 | Tune of Tento | Ves ov no | Ş | Se Se | 2 | 2 | | ia i |
| Z | Cheerton | : | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | No. | 2 |
| | Tank Balas Calas | Memoris | Memoras | Memohis | Memohia | Monthle | LUCEU NOO! | - Doct Roof |
| واو | Dalat Condition (C. 1 | | Black | Black | T. | The state of the s | MENTONIS | Memphis |
| | THE CANADICAL GOOD OF POOT) | | Poor | Poor | à | Cleary | Attument | Concrete |
| | Park Loading (Splash Loading - Dedicated | | Splash Loading | Solash Loading | | 1 | 000 | |
| 9 | Normal Service; Splash Loading - Dedicated | | Dedicated Normal | Dedicated Normal | | Sprash Loading | | Splash Loading |
| 10 | Value Service, Bottom) | | Service | Service | Rotton | Confessor Norman | : | Dedicated Normal |
| واع | workplande to Any Lanks | | | | | SCINICS | Bottom | Service |
| 2 | Not Applicable 10 Any Lanks | | | | | | | |
| | Dreaming Loss (See Note) | 역 | | | | | | |
| | | ₹d⊥ | | | | | | |
| 7 | Working Loss (See Note) | 2 | | | | | | |
| | | À | | | | | | |
| 5.3 | Total Emissions (See Note) | 판 | | | | | | |
| Ī | | À | | | | | | |
| | NOTE: All tank emissions are included in | | | | | | | |
| | Plant Summary Table of Section C of the | | | | | - | | |
| | Application. | | | | | | | |
| 1 | | İ | | | | | | |
| 1 | | T | | | | | | |
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| | | 1 | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

SECTION L2 CYCLONES

| 2 | | sion Point No. / Name: AA-0 | 001, REF. NO. 40, MULTICLON | <u>E</u> |
|----|----------------|---|---|--------------|
| 2. | Manı | afacturers Name and Model No.: | WELLONS MULTICLONE | COLLECTOR |
| 3 | Date | of construction for existing sources 1972 | or date of anticipated start-up for | new sources: |
| 4. | Cyclo a) | one Data: Cyclone type (if more than 1, Simple High Efficiency | put total number) : Potbellied Multiclone X | |
| | b) | Efficiency: | 90 % | |
| | c) | Pollutant viscosity: | poise | |
| | d) | Flow Rate: | <u>25,450</u> acfm | |
| | e) | Pollutant size entering cyclone: | microns | |
| | f) | Pressure drop: | inches H ₂ O | |
| | g) | Baffles or Louvers (specify): | | |
| | h) | Body | 2.0 ft : 0.5 ft diameter: 6.0 ft height: 15.0 ft neight: 8.0 ft | |
| | i) | Wet spray: Yes 1. No. of Nozzles | X No | |
| | 5 | Type of liquid Flow rate: Make-up rate: "recycled: | | |
| | j) | Fan location: 1. Downstream: | Direct emission Auxiliary Stack | |
| | | 2. Upstream: | X No cap (vertical em Fixed cap (diffuse er Wind respondent cap emissions) | nissions) |
| 5. | Which BOILE | process(es) does the cyclone(s) con ER SOURCE AA-001, REF. NO. 40 | trol emissions from? | WOOD FIRED |

SECTION L2 CYCLONES

| | UNKNOWN | | | • | |
|-------|----------------------------|-----------|-------------------------------|-------------|--|
| • | ne Data: | | | | |
| a) | Cyclone type X Simp | | e than 1, put total n | Potbel | |
| | | Efficien | су | Multic | lone |
| b) | Efficiency: | | | | _ % |
| c) | Pollutant visco | sity: | | | _ poise |
| d) | Flow Rate: | | | | _ acfm |
| e) | Pollutant size e | ntering c | yclone: | | microns |
| f) | Pressure drop: | | | | _ inches H ₂ O |
| g) | Baffles or Lor | ivers (sp | ecify): | | |
| h) | Cyclone dimensions: Inlet: | | | 0.83 | _ ft |
| | | | Outlet: Body diameter: | 0.83 4.0 | - ft - ft |
| | | | Body height: | 3.0 | ft |
| | | | Cone height: | 4.5 | _ ft |
| i) | Wet spray: | | Yes | _X No | |
| | 1. 2. | | f Nozzles: of liquid used: | | - |
| | 3. | Flow | - | | gpm |
| | 4. | Make- | -up rate: | | gpm |
| | 5. | % rec | ycled: | | _ % |
| j) | Fan location: | | | | |
| | 1. | Down | stream: | | emission |
| | 2 | T In atm | | | ary Stack |
| | 2. | Upstre | eam: | | o (vertical emissions) cap (diffuse emissions) |
| | | | | | respondent cap (horizontal |
| | | | | emissi | |
| Which | process(es) does | the cyclo | ne(s) control emiss | ions from | ? SAWDUST. |
| | | | | | S AND LUMBER |

SECTION M COMPLIANCE DEMONSTRATION (page 1 of 2)

Completion of Section M is not required for a complete application. It is presented to merely reflect what may be required by the Enhanced Monitoring and/or the Periodic Monitoring Regulations. Upon promulgation of those regulations, this section will be revised to reflect the actual requirements. Until then, the information in this section should be utilized for planning purposes.

Choose the type of monitoring that is suggested for your source in the "Enhanced Monitoring Guideline". Fill out the appropriate form and attach to the corresponding emission point description pages.

A. Compliance Demonstration by Continuous Emissions Monitoring (CEM).

 $\begin{array}{lll} Sulfur \ Dioxide(SO_2) & Nitrogen \ Oxides \ (NO_x) & Oxygen \ (O_2) \\ Carbon \ Dioxide \ (CO_2) & Total \ Reduced \ Sulfur \ (TRS) & Opacity \\ Hydrogen \ Chloride \ (Hcl) & Carbon \ Monoxide \ (CO) & Flow \\ Hydrogen \ Sulfide \ (H_2S) & Volatile \ Organic \ Compound \ (VOC) \end{array}$

B. Compliance Demonstration by Periodic Emission Monitoring using Portable Monitors.

SO₂ NO_x O₂ CO₂ CO HCl H₂S VOC Flow Moisture Combustibles Combustion Efficiency

C. Compliance Demonstration by Monitoring Control System Parameters or Operating Parameters of a Process.

Baghouse Pressure drop across baghouse, Broken bag detector,

Opacity.

Mechanical Collectors Pressure drop across collector, Hopper full detector,

Opacity.

Electrostatic Precipitators Primary and secondary voltage, Primary and secondary

currents, Spark Rate, Broken wire detector, Rap cycle frequency, Resistivity measurement, Inlet water flow,

Total solids, Opacity.

Thermal Incinerator Firebox temperature.

Catalytic Incinerator Catalyst bed temperature.

Flare Pilot light detector, Temperature after flame zone.

Particulate Scrubber Pressure drop across scrubber and demister, Scrubber fluid

recirculation rate, Pump discharge pressure, Pump motor

current.

Absorber for Gases pH of fluid, Fluid recirculation rate, Air flow, Pressure

drop across absorber and demister, Fluid temperature.

Carbon Absorber Steam mass flow rate per regeneration cycle, Carbon bed

temperature.

Condenser Condenser exit temperature, Amount of solvent recovered

daily. Charging rate, Production rate, Hours of operation, Secondary chamber temperature, Kiln or dryer exit temperature, Burner combustion efficiency, Power consumption, Static pressure, Fuel usage rate, Water

injection rate.

COMPLIANCE DEMONSTRATION (page 2 of 2) SECTION M

D. Compliance Demonstration by Monitoring Maintenance Procedures.

Water quality testing Sludge solids testing

Electrostatic precipitator cleaning frequency

Blacklight inspection of baghouses

Sludge mercury testing

Periodic inspection of process operating parameters

VOC leak testing Soot blowing frequency Fugitive dust control measures Control equipment inspection frequency

Reid vapor pressure testing

E. Compliance Demonstration by Stack Testing.

EPA Method 1 & 2:

Flow (S-type pilot tubes, Hot-wire anemometer)

EPA Method 3:

CO₂, O₂, CO (Orsat, Fyrite)

EPA Method 3A:

CO₂, O₂, (Analyzers)

EPA Method 4:

Moisture (Wet bulb-Dry bulb, Impingers)

EPA Method 5:

PM

EPA Method 6: EPA Method 6B: SO₂ (Impingers) SO₂ (24 hour average)

EPA Method 6C:

SO₂ (Analyzer)

EPA Method 7E: NO, (Analyzer)

EPA Method 9:

Opacity (Visible emissions reader)

EPA Method 10: CO (Analyzer)

EPA Method 16: TRS (Gas Chromatograph)

EPA Method 16A:

TRS (Impingers)

EPA Method 16B:

TRS (Gas Chromatograph)

EPA Method 18: VOC (Gas Chromatograph)

EPA Method 21: VOC Leaks (Analyzer)

EPA Method 25A:

VOC (Analyzer with FID)

EPA Method 25B:

VOC (NDIR Analyzer)

F. Compliance Demonstration by Fuel Sampling and Analysis (FSA).

Coal Sampling

Coke sampling

Tire derived fuel sampling

Waste oil sampling

Landfill gas sampling

Sewage sludge sampling Paper sludge sampling

G. Compliance Demonstration by Recordkeeping.

Testing and monitoring records Compliance schedule records

Refuse derived fuel sampling

Process hours of operation records

Fuel usage records

As-applied coating & ink composition records

Records of malfunction

As-applied coating & ink records,

Transfer efficiency records

Production records

SECTION M1 COMPLIANCE DEMONSTRATION BY CONTINUOUS EMISSIONS MONITORING (CEM)

An installation plan for each new (i.e. proposed) Continuous Emission Monitoring (CEM) System shall be submitted with the permit application for approval. Fill out one (1) sheet per analyzer.

| Emi | ssion Point No./Name: AA-001 WOOD FIRED BOILER |
|------|---|
| Cont | inuous Emission Monitoring Data: |
| A. | Name of Manufacturer: HORIBA |
| В. | Model number: CMA-321 |
| C. | Serial Number: 566220011 |
| D. | Date of installation of CEM: 1992 |
| E. | Which does the CEM monitor: X Pollutant Dilutent |
| F. | Pollutant / Dilutent / Flow being monitored: X Opacity CO, OPACITY |
| G. | Type of analyzer: In situ X Extractive Dilution CO ₂ Thermal Differential Pressure |
| H. | Other (specify): Type of analyzer description: MAGNETOPNEUMATIC |
| I. | Backup system (attach other compliance demonstration forms if needed): |
| J | Opacity CEM: How measured: X Monitor Visible Emission Evaluate |
| K. | If CEM is not previously certified, then it shall be submitted for certification within 60 day startup of the CEM system. |
| L. | State the operating principles of the analyzer: SEE FOLLOWING PAGE |

M. Attach a schematic of the CEM system showing the sample acquisition point and location of the monitor and explain any deviations from the siting criteria in Performance Specifications 1, 2, 3, 4, 5, 6 and 7 in 40 CFR Part 60, Appendix B.

Em Operating Principa

1 OVERVIEW

1.1 THEORY OF OPERATION

The SNIFFER system is designed to measure the concentration of CO, CO₂, and O₂ components in stack gas emitted from a stationary source. The system uses a magnetopneumatic analyzer to measure O₂ and infra-red analyzers (NDIR method) to measure CO and CO₂. During the operation of the magnetopneumatic analyzer, oxygen molecules are drawn into a non-homogenous magnetic field and attracted to a higher magnetic field, resulting in a pressure increase. A pressure increase is produced outside of the magnetic field using nitrogen gas. This differential pressure is measured using a condenser type microphone, which produces an electrical signal. A stable signal is then produced and transmitted by exciting the magnet intermittently and processing the alternating signal. The output signal is directly linear to the oxygen concentration.

The principle of the non-dispersive infra-red analyzer involves a dual beam method with an opto-pneumatic double layer detector. The infra-red source emits infra-red radiation, which is modulated by a rotating chopper wheel. After passing through the sample cell, the radiation is detected by the double layer detector. A window that is permeable to the infra-red radiation divides the detector chamber into two gas chambers or layers, which are linked together by a capillary that contains a microflow sensor. The center part of the absorption curve is absorbed by the first detector level while the edges are absorbed by the second detector level, resulting in a pressure differential between the two detector levels. The gas flow that results from the pressure differential is detected by the microflow sensor. This detected output signal is then processed by the microprocessor into a linear output signal.

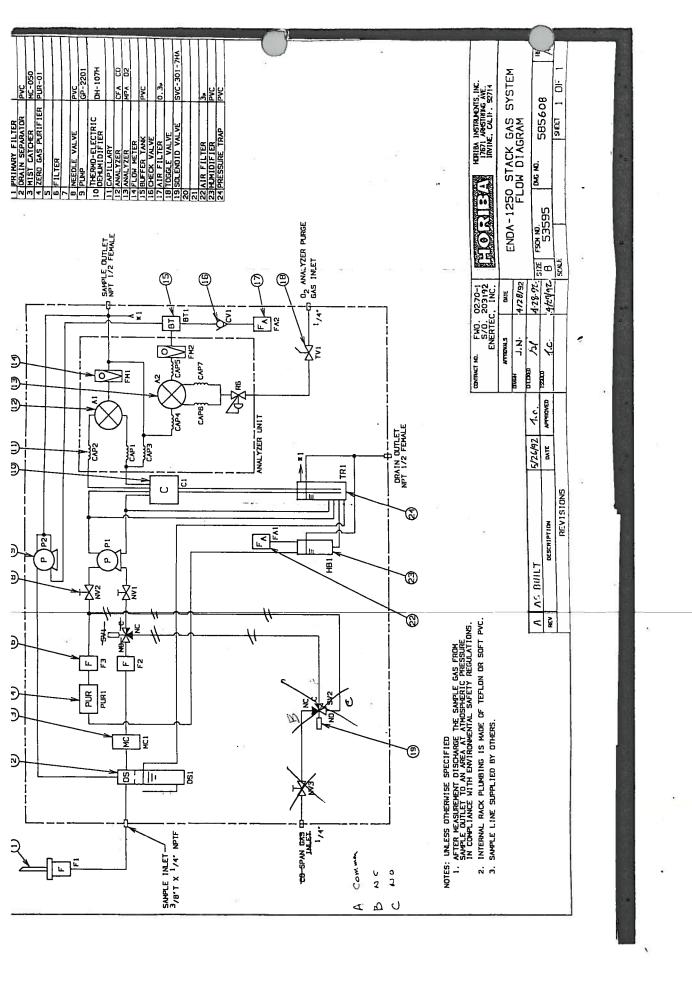
The SNIFFER system also incorporates other components that allow the Analyzers to be calibrated, and the data from them to be recorded.

1.2 COMPONENTS

The SNIFFER system incorporates a Sample Conditioner, Analyzer, Calibration Unit, Opacity Monitors, and Strip Chart Recorder. Figure 1-1 shows how the components are configured in the system cabinet.

1.2.1 Sample Conditioner

The Sample Conditioner takes sample gas from the stack port and supplies a steady flow of clean sample gas to the Analyzer.



The monitoring of a control system parameter or a process parameter may be acceptable provided that a correlation between the parameter value and the emission rate of a particular pollutant is established in the form of a curve of emission rate versus parameter values. At least three sets of stack test data, that bracket the emission limit if possible, shall be used to define the emission curve. This data shall constitute the certification of the system and must be attached for approval. If it is not attached, it shall be submitted within 60 days from the date of startup of the system or the date of application, which ever is later.

| 1. | Emission Point No./Name: AA-002, REF. NO. 41, OIL FIRED BOILER |
|-------|---|
| 2. | Method of monitoring description: MONITORING BY MEASUREMENT OF FUEL OIL CONSUMPTION FOR TOTAL TIME IN OPERATION |
| | |
| | |
| Attac | th separate sheets if needed. |
| 3. | Backup system (attach other compliance demonstration forms if needed): |
| 4. | The monitoring system shall be subject to appropriate performance specifications, calibration requirements, and quality assurance procedures. |

If a quality assurance / quality control plan is not attached with the application for approval, it shall be submitted within 60 days from the date of startup of the monitoring

program or the date of application, which ever is later.

5.

The monitoring of a control system parameter or a process parameter may be acceptable provided that a correlation between the parameter value and the emission rate of a particular pollutant is established in the form of a curve of emission rate versus parameter values. At least three sets of stack test data, that bracket the emission limit if possible, shall be used to define the emission curve. This data shall constitute the certification of the system and must be attached for approval. If it is not attached, it shall be submitted within 60 days from the date of startup of the system or the date of application, which ever is later.

| 1. | Emission Point No./Name: | AA-003 WOOD PRESERVING PROCESS | | | | | |
|----------|--|--------------------------------|-------|-------------|---------|-------|-----------------|
| 2. | Method of monitoring description: MONITORING BY MEASURI PRODUCED | EMENT | OF | CUBIC | FEET | OF | PRODUCTS |
| - | | | | | | | |
| - - | | | | | | | |
| Atta | ch separate sheets if needed. | | | | | | |
| 3. | Backup system (attach other comp | oliance d | emon | stration fo | orms if | neede | ;d): |
| 4. | The monitoring system shall be s | subject t | o app | propriate 1 | perform | ance | specifications, |

If a quality assurance / quality control plan is not attached with the application for

approval, it shall be submitted within 60 days from the date of startup of the monitoring

calibration requirements, and quality assurance procedures.

program or the date of application, which ever is later.

5.

The monitoring of a control system parameter or a process parameter may be acceptable provided that a correlation between the parameter value and the emission rate of a particular pollutant is established in the form of a curve of emission rate versus parameter values. At least three sets of stack test data, that bracket the emission limit if possible, shall be used to define the emission curve. This data shall constitute the certification of the system and must be attached for approval. If it is not attached, it shall be submitted within 60 days from the date of startup of the system or the date of application, which ever is later.

| 1. | Emission Point No./Name: AA-005, REF. NO. 43, NATURAL GAS SPACE HEATERS, (3) UNITS |
|-------|---|
| 2. | Method of monitoring description: |
| | MONITORING BY MEASUREMENT OF NATURAL GAS CONSUMPTION |
| | |
| | |
| | |
| | |
| Attac | ch separate sheets if needed. |
| 3. | Backup system (attach other compliance demonstration forms if needed): |
| 1. | The monitoring system shall be subject to appropriate performance specifications, calibration requirements, and quality assurance procedures. |
| 5. | If a quality assurance / quality control plan is not attached with the application for |

approval, it shall be submitted within 60 days from the date of startup of the monitoring

program or the date of application, which ever is later.

The monitoring of a control system parameter or a process parameter may be acceptable provided that a correlation between the parameter value and the emission rate of a particular pollutant is established in the form of a curve of emission rate versus parameter values. At least three sets of stack test data, that bracket the emission limit if possible, shall be used to define the emission curve. This data shall constitute the certification of the system and must be attached for approval. If it is not attached, it shall be submitted within 60 days from the date of startup of the system or the date of application, which ever is later.

| 1. | Emission Point No./Name: AA-006, REF. NO. 44, NATURAL GAS FIRED STEAM CLEANER |
|------|---|
| 2. | Method of monitoring description: MONITORING BY MEASUREMENT OF NATURAL GAS CONSUMPTION |
| a - | |
| - | |
| Atta | h separate sheets if needed. |
| 3 | Backup system (attach other compliance demonstration forms if needed): |
| 4. | The monitoring system shall be subject to appropriate performance specifications, |

5. If a quality assurance / quality control plan is not attached with the application for approval, it shall be submitted within 60 days from the date of startup of the monitoring

calibration requirements, and quality assurance procedures.

program or the date of application, which ever is later.

The monitoring of a control system parameter or a process parameter may be acceptable provided that a correlation between the parameter value and the emission rate of a particular pollutant is established in the form of a curve of emission rate versus parameter values. At least three sets of stack test data, that bracket the emission limit if possible, shall be used to define the emission curve. This data shall constitute the certification of the system and must be attached for approval. If it is not attached, it shall be submitted within 60 days from the date of startup of the system or the date of application, which ever is later.

| 1. | Emission Point No./Name: AA-015, REF. NO. 53, NATURAL GAS FIRED SPACE HEATER, (1) UNIT |
|--------|---|
| 2. | Method of monitoring description: MONITORING BY MEASUREMENT OF NATURAL GAS CONSUMPTION |
| | |
| | |
| Attach | separate sheets if needed. |
| 3. | Backup system (attach other compliance demonstration forms if needed): |
| 4. | The monitoring system shall be subject to appropriate performance specifications, calibration requirements, and quality assurance procedures. |

If a quality assurance / quality control plan is not attached with the application for approval, it shall be submitted within 60 days from the date of startup of the monitoring

program or the date of application, which ever is later.

5.

SECTION M5 COMPLIANCE DEMONSTRATION BY STACK TESTING

Compliance demonstration by stack testing will be carried out in accordance with EPA approved reference methods and the stack test report must be attached. Emission Point No./Name: AA-001, REF. NO. 40, WOOD FIRED BOILER 1. 2. Pollutant being tested for: PARTICULATE AND VISIBLE EMISSIONS 3. Test Method: SEE STACK TEST REPORT (FOLLOWING PAGES) 4. Compliance shall be demonstrated: Daily Weekly Monthly Other (specify): **BIENNIAL (ONCE EVERY 2 YEARS)** 5. Any measured emission rate that exceeds an emission limit established by the permit must be reported as an excess emission. 6. Is this an existing method of demonstrating compliance: X Yes No 7. Backup system (attach other compliance demonstration forms if needed):

NVIRONMENTAL NONITORING LABORATORIES, INC.

). Box 655 • 624 Ridgewood Road lgeland, Mississippi 39158

phone: 601/856-3092

fax : 601/853-2151

September 29, 2000

Section M5 Stack Test

Subject:

Koppers Industries - Grenada, Mississippi

Wood Waste Boiler - Stack Emissions Test

Facility No. 0960-00012

On September 22, 2000, Environmental Monitoring Laboratories performed air emissions testing for Koppers Industries in the Tie Plant community near Grenada, Mississippi. Testing was done to measure particulate and visible emissions from the wood waste boiler in accordance with requirements of the Mississippi Department of Environmental Quality.

Results of emissions testing are shown below.

| PAR | TICULATE EMISS | VISIBLE EMISSIONS | |
|------|----------------|---------------------|-------|
| #/hr | gr/dscf | High SMA, % opacity | |
| 8.75 | 0.076 | 0.192 | 31.88 |

Mr. Anthony Mahan of Koppers coordinated the testing project. Danny Russell of Environmental Monitoring Laboratories was responsible for sample collection and analysis of particulate samples. Sample custody was limited to Mr. Russell.

Following is a report of the test.

REPORT OF AIR EMISSIONS TESTS FOR KOPPERS INDUSTRIES, INC. GRENADA PLANT WOOD WASTE BOILER

Section M5

Grenada, Mississippi September 22, 2000 Stack Test

CONTENTS

| 1.0 | TES | T RESULTS | page | 1 |
|------|-----------------|------------------------------|------|---|
| 2.0 | SOL | JRCE DESCRIPTION | | 2 |
| 3.0 | TEST PROCEDURES | | | 2 |
| .4.0 | DATA REDUCTION | | | |
| 5.0 | NOMENCLATURE | | | |
| 6.0 | CALIBRATION | | | 7 |
| 7.0 | APP | ENDICES: | | 8 |
| | A. | Field and Laboratory Data | | |
| | В. | Calibrations | | |
| | C. | Visible Emissions Record | | |
| | D. | Boiler Steam Chart (Koppers) | | |

REPORT CERTIFICATION

I certify that I have examined the information submitted herein, and based upon inquires of those responsible for obtaining the data or upon my direct acquisition of data, I believe the submitted information is true, accurate and complete.

Signed

Daniel G. Russell

2.0 SOURCE DESCRIPTION:.

Section M5 Stack Test

Koppers Industries, Inc. operates a 30,000 pound per hour Wellons wood waste boiler at their wood preserving facility in Grenada, Mississippi. The boiler provides steam for the timber treating processes and a turbine generator. Fuel is typically wood waste generated from the manufacture of treated wood products.

Heat input as calculated from the test data and an F-Factor was an average 45.16 MM Btu/hr.

The boiler exhausts to the atmosphere by way of a 34.5 inch diameter vertical stack. Two sample ports at 90° are provided at a location that is 432 inches (12.5 diameters) below the stack exit and 356 inches (10.3 diameters) above an upstream stack tapered section.

3.0 TEST PROCEDURES:

Test procedures used are those described in the Code of Federal Regulations, Title 40, Part 60, Appendix A. Specifically, Method 1 was used to determine the number of sample points and Method 5 to determine flow rates, moisture content, and particulate emissions. The sampling train was identical to that described in Method 5 except that the cyclone was omitted. Visible emissions were read in accordance with Method 9 concurrently with the emissions test

Heat input to the boilers was determined by continuously monitoring oxygen content of the flue gas as described in Method 3A and calculating heat input using an F-factor of 9280 scf per million Btu of heat input for the wood waste fuel.

Filters were recovered by rinsing the front half of the filter holder into the probe wash and securing the filters in glass petri dishes. Part of the sample filter normally adheres to the filter gasket, and some of the adhering material is recovered into the probe wash. Therefore some of the filter weight is attributed to the probe wash weight.

Filters were heated in an oven for 2 hours at 105° C, desiccated at least 24 hours and weighed to constant weight. Probe wash samples in acetone were evaporated to dryness over low heat in tared beakers, desiccated for at least 24 hours and weighed to constant weight. Weighings are made at 6 hour or greater intervals (samples stored in desiccator). Final weights were considered valid and were recorded if there was no more than 0.5 milligrams difference from the previous weighing.

Section M5 Stack Test

1.0 Test Results:

Wellons Wood Waste Boiler

| Run No. Date Time Start | 1 9/22/00 0955 | 9/22/00 0116 | 3 9/22/00 1235 | AVG. | |
|---------------------------|----------------------|-----------------|----------------------|-------|-------|
| Time End | 1059 | 1220 | 1339 | | |
| PARTICULATE EMISSIONS | #/hr | 12.69 | 5.10 | 8.46 | 8.75 |
| PARTICULATE EMISSIONS | gr/dscf | 0.109 | 0.044 | 0.075 | 0.076 |
| PARTICULATE EMISSIONS | #/MM Btu | 0.265 | 0.113 | 0.199 | 0.192 |
| VISIBLE EMISSIONS | high SMA, % | 31.88 | 15.00 | 10.42 | 31.88 |
| HEAT INPUT | MM Btu/hr | 47.92 | 45.12 | 42.43 | 45.16 |
| VOLUMETRIC FLOWRATE | acfm | 27884 | 26664 | 26376 | 26975 |
| VOLUMETRIC FLOWRATE | dscfm | 13593 | 13454 | 13149 | 13399 |
| VELOCITY | ft./sec. | 71.6 | 68.5 | 67.7 | 69.3 |
| STACK TEMPERATURE | °F | 481 | 470 | 462 | 471 |
| MOISTURE | % | 12.9 | 10.9 | 12.8 | 12.2 |
| SAMPLE RATE | % isokinetic | 100 | 101 | 97 | 99 |

| 1. | Emiss | sion Point No./Name: | AA- | 002, REF. NO. 41, | OIL FIRE | D BOILER | | | | |
|----|-------------|---|--|---------------------|----------------|-----------|--|--|--|--|
| 2. | Date o | | construction if for existing sources or date of anticipated start-up for new sources: BEFORE AUGUST 7, 1977 | | | | | | | |
| 3. | List th | List the ASTM fuel sample collecting and analyzing methods used: EMISSION ESTIMATE BASIS – AP-42 | | | | | | | | |
| | | EMISSION ESTIMATE | DASIS - AI -4 | | | | | | | |
| | 33 <u>4</u> | | - Martines | | | | | | | |
| 4. | Fuel t | peing sampled: | | | 5-45 - 60 - 66 | * 1 | | | | |
| 5. | How | will samples be taken: | Au | tomated | Manu | al | | | | |
| 6. | Fuel S | Sampling Data: | | | | | | | | |
| | A. | Name of Manufacturer: | | | | | | | | |
| | B. | Model number: | | | | | | | | |
| | C. | Serial Number: | | | | | | | | |
| | D. | Is this an existing FSA sy | stem: | YES | No | | | | | |
| | E. | How will samples be take | n: | Automated | | Manual | | | | |
| | F. | Backup system (attach of | ther compliance | e demonstration for | ms if need | ed): | | | | |
| | G. | State the method of operating of the sampler: | | | | | | | | |
| | Н. | Attach a schematic of the machine. | Attach a schematic of the FSA system showing the sample acquisition point and location of the machine. | | | | | | | |
| | I. | Compliance shall be demo | onstrated: | | | | | | | |
| | | Daily | Weekly | Mon | thly | Quarterly | | | | |
| _ | | | | | | | | | | |

- 7. Any composite sample over the emission rate will be reported as an excess emission.
- 8. If the FSA system certification is not attached for approval, it must be submitted within 60 days from startup of the FSA system or the date of application, which ever is later.

| 1. | | sion Point No./Name : TERS | AA-005 | , REF. NO. | 43, NAT | URAL GAS | SPACE |
|----|---------|--|-------------------------------------|-----------------|----------------|-----------------|----------------|
| - | (3) U | NITS | ······ | | | | — |
| 2 | Date | of construction if for existin BEFORE AUGUST 7, 1 | 077 | anticipated st | - | | |
| 3. | List t | he ASTM fuel sample collection EMISSION ESTIMATE | ting and analyzing BASIS – AP-42 | methods used | | | |
| 4. | Fuel | being sampled: | | | | | |
| 5. | How | will samples be taken: | Autom | ated | Manua | ı 1 | |
| 6. | Fuel ! | Sampling Data: | | | | | |
| | A. | Name of Manufacturer: | | | | | _ |
| | B. | Model number: | | | · | <u> </u> | _ |
| | C. | Serial Number: | | | | | |
| | D. | Is this an existing FSA s | ystem: | YES | No | | |
| | E. | How will samples be tak | en: | Automated_ | | Manual | |
| | F. | Backup system (attach o | other compliance de | monstration fo | orms if neede | :d): | |
| | G. — | State the method of oper | ating of the sampler | | | | <u>-</u> _ |
| | Н. | Attach a schematic of the machine. | FSA system showing | ng the sample a | acquisition po | oint and locati | — on of the |
| | I. | Compliance shall be den | nonstrated: | | | | |
| | | Daily | Weekly | Мо | nthly | Qu | arterly |
| | | | | | | | |

- 7. Any composite sample over the emission rate will be reported as an excess emission.
- 8. If the FSA system certification is not attached for approval, it must be submitted within 60 days from startup of the FSA system or the date of application, which ever is later.

| | ission Point No./Name: EANER | AA-006, REF. NO. 4 | 4, NATURAL GAS FIRED STEAM | | | | | |
|------|--|--------------------------------|----------------------------|--|--|--|--|--|
| Date | e of construction if for existing 1992 | sources or date of anticipated | start-up for new sources: | | | | | |
| List | | BASIS – AP-42 | | | | | | |
| Fue | l being sampled: | | | | | | | |
| Hov | w will samples be taken: | Automated | Manual | | | | | |
| Fue | l Sampling Data: | | | | | | | |
| A. | Name of Manufacturer: | | | | | | | |
| B. | Model number: | | | | | | | |
| C. | Serial Number: | | | | | | | |
| D. | Is this an existing FSA sys | tem: YES | No | | | | | |
| E. | How will samples be taken | : Automated | Manual | | | | | |
| F. | Backup system (attach oth | er compliance demonstration | forms if needed): | | | | | |
| G. | State the method of operating of the sampler: | | | | | | | |
| Н. | Attach a schematic of the FSA system showing the sample acquisition point and location of machine. | | | | | | | |
| I. | Compliance shall be demonstrated: | | | | | | | |
| | Daily | Weekly M | Ionthly Quarterly | | | | | |

- 7. Any composite sample over the emission rate will be reported as an excess emission.
- 8. If the FSA system certification is not attached for approval, it must be submitted within 60 days from startup of the FSA system or the date of application, which ever is later.

| 1. | Emission Point No./Name: AA-015, REF. NO. 53, NATURAL GAS FIRE HEATER, (1) UNIT | | | | | |
|------------|---|--|---------------------|----------------------|---------------|------------------------|
| 2. — | Date o | of construction if for existing BEFORE AUGUST 7, 19 | sources or date of | f anticipated start- | | |
| 3. | List th | ne ASTM fuel sample collec EMISSION ESTIMATE | BASIS – AP-42 | | | |
| - 4. | Fuel b | peing sampled: | | | - | |
| 5. | How | will samples be taken: | Auton | nated | Manual | |
| 6. | Fuel S | Sampling Data: | | | | |
| | A. | Name of Manufacturer: | | | | |
| | В. | Model number: | | | | |
| | C. | Serial Number: | | | | |
| | D. | Is this an existing FSA s | ystem: | YES | No | |
| | E. | How will samples be tak | en: | Automated | | Manual |
| | F. | Backup system (attach o | other compliance d | emonstration form | ns if needed |): |
| | G | State the method of oper | ating of the sample | | | |
| | H. | Attach a schematic of the machine. | FSA system show | ing the sample ac | quisition poi | nt and location of the |
| | I. | Compliance shall be den | nonstrated: | | | |
| | | Daily | Weekly | Mon | hly | Quarterly |
| _ | | | ingian mata will b | e renorted as an e | vcess emiss | ion |

- Any composite sample over the emission rate will be reported as an excess emission.
- 8. If the FSA system certification is not attached for approval, it must be submitted within 60 days from startup of the FSA system or the date of application, which ever is later.

Current Applicable Requirements and Status (page 1 of 2) SECTION N

List applicable state and federal regulations and applicable test methods for determining compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the day the application is signed.

| Emission Point No. | Applicable Requirement | Pollutant | Test Method | Limits | Compliance Status |
|-----------------------|------------------------|---|-----------------------|------------------|----------------------|
| AA-001 | APC-S-1, SEC. 3.4(B) | PM | METHOD 6 | 10.3 CM (10.00) | 100 11 |
| AA-001 | APC-S-1, SEC, 3,1 | OPACITY | CEM | 4.00 GINDOCF | |
| A A 001 | ABC 0 1 0EC 4 1/C) | See | CEIM | 40% | NI |
| 100-W4 | Arc-3-1, 3EC. 4.1(C) | 202 | STACK TEST & FNGINFER | 2.4 LB/MMBTU | Z |
| | | | CALCS. | | |
| AA-002 | APC-S-1, SEC. 3.4(A) | PM | AP-42 | E=0.88081-0.1667 | Z |
| | | | | =14.36 LB/HR | |
| AA-002 | APC-S-1, SEC. 3.1 | OPACITY | | 40% | 2 |
| AA-002 | APC-S-1, SEC. 4.1(C) | SO2 | AP-42 | 2.4 LB/MMBTU | |
| AA-004 | APC-S-1, SEC. 6 | PM | AP-42 | E=4.1P 0.67 | Z |
| 010 | 1 | | | 27 LB/HR | |
| AA-010 | APC-S-1, SEC. 6 | PM | AP-42 | 4.78 LB/HR | 2 |
| AA-011 | APC-S-1, SEC. 6 | PM | AP-42 | 4 84 L B/HR | |
| PLANT - | APC-S-1, SEC. 6 | PM | VARIOUS | 28.4 LB/HR | Z |
| WIDE | | | | | |
| | | | | | |
| | | | | | |

Future Applicable Requirements and Status (page 2 of 2) **SECTION N**

List applicable state and federal regulations and applicable test methods for determining compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the day the application is signed.

| | - | | 1.19 | | | | | |
|----------------------------------|------|--|------|------|------|--|--|--|
| Compliance Status IN / OUT | | | | | | | | |
| Limits | | | | | | | | |
| Test Method | | | | | | | | |
| Pollutant | | | | | | | | |
| | | | | | | | | |
| Applicable Requirement | NONE | | | | | | | |
| Emission Point No. | | | | | | | | |

SECTION O COMPLIANCE CERTIFICATION

| | CITOIT | COMIT | DIANCE CERTIFICATION | /1\ | | | | |
|--|--|---|--|----------------------|--|--|--|--|
| 1. | Emission l | Point No./Name: | AA-001, REF. NO. 40, | WOOD FIRED BOILER | | | | |
| 2. | Indicate th | e source complianc | ce status: | | | | | |
| | A | | source is currently in compliance, we w to assure compliance for the duration o | | | | | |
| | В. | The Current Emissions Requirements and Status form (previous page) includes new requirements that apply or will apply to this source during the term of the permit. We will meet such requirements on a timely basis. | | | | | | |
| C. This source is not in compliance. The following statement of corrective ac submitted to describe action which we will take to achieve compliance. | | | | | | | | |
| | 1 | Attached is a brief description of the problem and the proposed solution. | | | | | | |
| | 2We will achieve compliance according to the following schedule. | | | | | | | |
| Prog | gress report Starting | s will be submi date: | | o) months thereafter | | | | |
| | Prob | lem | Action | Deadline | | | | |
| | | | | | | | | |
| | | | | * 1000 to 1 | | | | |
| | | | | | | | | |

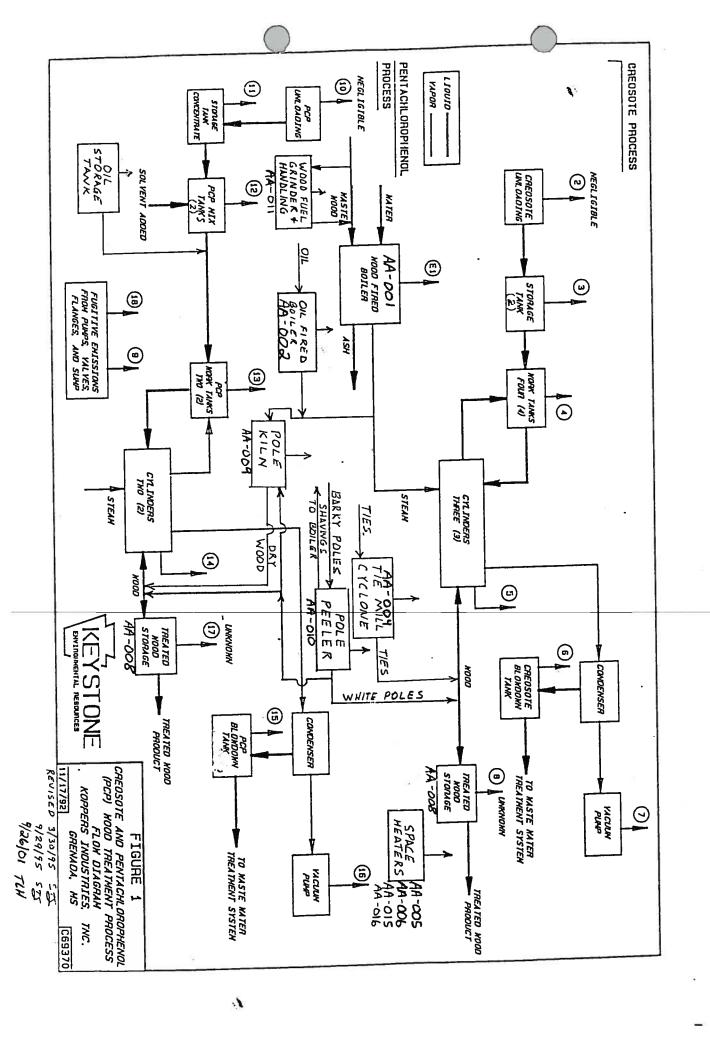
| Problem | Action | Deadline |
|---------|---------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | V 592 1 | |
| | | , , , |
| | | |
| | | |
| | | |
| | | |

COMPLIANCE CERTIFICATION SECTION O ALL POINTS EXCEPT AA-001 Emission Point No./Name: 1. 2. Indicate the source compliance status: Where this source is currently in compliance, we will continue to operate and maintain A. X this source to assure compliance for the duration of the permit. The Current Emissions Requirements and Status form (previous page) includes new B. requirements that apply or will apply to this source during the term of the permit. We will meet such requirements on a timely basis. This source is not in compliance. The following statement of corrective action is C. submitted to describe action which we will take to achieve compliance. Attached is a brief description of the problem and the proposed solution. We will achieve compliance according to the following schedule. Progress reports will be submitted:

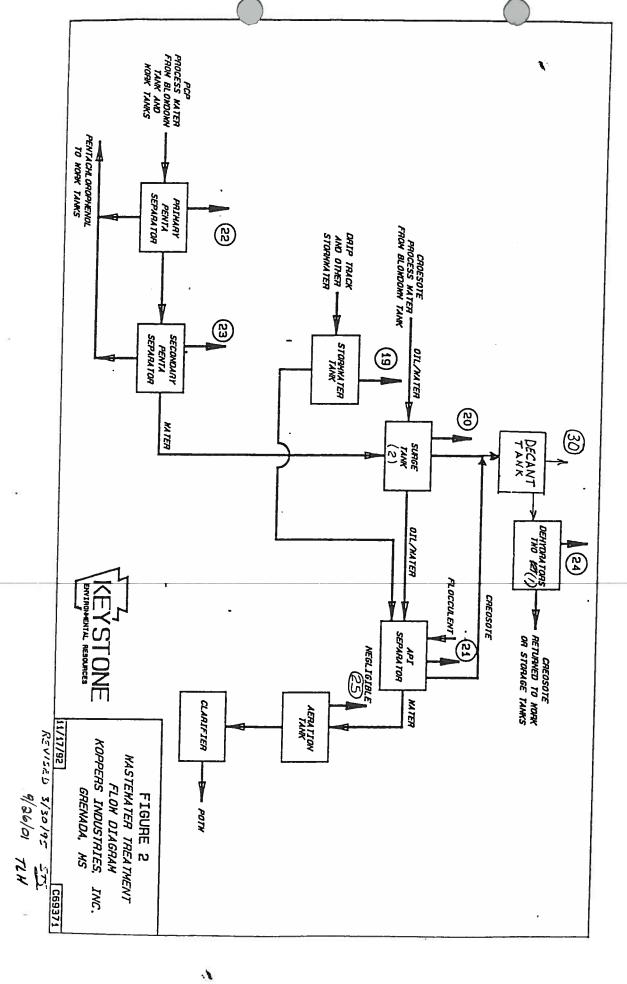
Starting date:

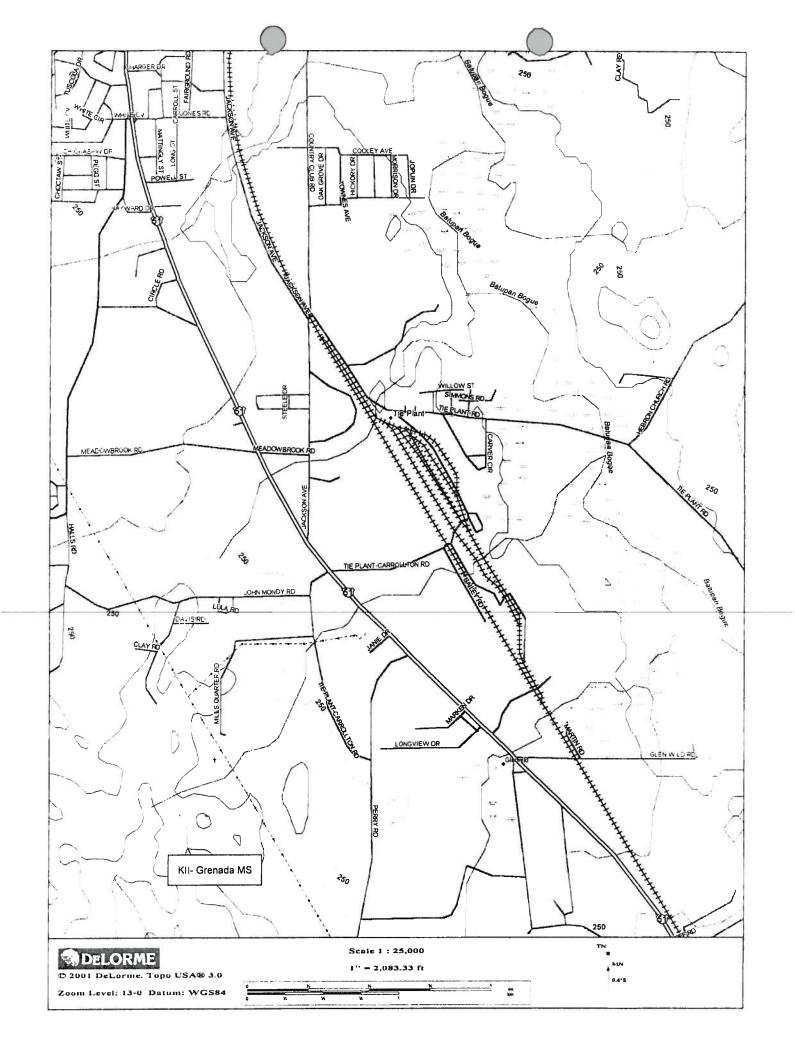
| Problem | Action | Deadline |
|---------|--------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

and every six (6) months thereafter



:







Fax

Koppers Inc. Environmental Dept. 436 Seventh Avenue

Pittsburgh, PA 15219

Tel 412 227 2337 Fax 412 227 2423

www.koppers.com

Fax Number: 601-961-5703

Company: MDEQ

Attention: CHRISTEN DAVIS

Date:

AA-001 INFORMATION - REQUESTED

8-7-03

PER OUR DISCUSSIONS, PLEASE SEE THE ATTACHED SHEET. PLEASE CALL IF YOU HAVE QUESTIONS, THANKS.

ERICTACTACTA

TIM BASILONE 412-227-2114

| AA MA BON ED WOOD FIRED | tafor | | Sulfur | Chlorine | 94 | | (16/hr): |
|---------------------------|----------|-----------------|------------------------|---------------|-------|-----------|---------------------|
| Total Minor Burned. | , | 67,890 | | 0.01% | 0.04% | | 15500 |
| Constitution British | | 6 | . 0.2 | 2% | 0.04% | | |
| Doofs Wood Rugad | | 0 | 0.5 | 0.25% | 0.25% | • | |
| Mathematical Mood Burned: | | 67.890 | 0.0 | 0.01% | 0.04% | | |
| Removal Efficiency (1): | | | | 7.0 | 0.45 | | |
| | Emission | 5 | | | | Estimated | Estimated Emissions |
| - Collistent | Factor | | Units | Basis | | (tn/yr) | (Ib/hr) |
| Dartitulate | | 4.20 | 4.20 lb/tn | AP-42 | | 142.57 | 32.55 |
| 202 | | 0.075 lb/tn | lb/tn | AP-42 | | 2.55 | 0.58 |
| NON | | 1.8 | 1.6 lb/tn | 1894 Test | Test | 54.31 | 12.40 |
| 500 | | 6.8 | 6.6 lb/tn | AP-42 | | 224.04 | 51.15 |
| 200 | | 0.180 lb/tm | ıb/tn | AP-42 | ~ | 6.11 | 1.40 |
| | | 1.5E+00 | 1.5E+00 lb/tn PCP fuel | uel 2/96 Test | fest | 0.0000 | |
| Areaic | | 8.8E-05 lb/fm | ib/tn | AP-42 | 2 | 0.0030 | |
| Carlmin | - | 1.7E-05 lib/tn | libitn | AP-42 | 2 | 0.0006 | |
| Chamitan | | 1.3E-04 lb/tm | lb/tn | AP-42 | 2 | 0.0044 | |
| L part | | 3.1E-04 lb/tn | Ib/tn | AP-42 | 2 | 0.0105 | |
| Representation | | 8.9E-03 lb/tn | Ibrh | AP-42 | 2 | 0.3021 | |
| Nickel | | 5.6E-04 lb/tn | 1b/tn | AP-42 | 2 | 0.0190 | 0.0043 |
| Calenting | | 1.8E-05 (b/tn | (b/tn | AP-42 | 2 | 0.0006 | 0.0001 |
| March | | 0.0000065 lb/tm | (b/tn | AP-42 | 2 | 0.0002 | 0 |
| Total LAG Malaka | | | | | | 0.34 | 0.08 |
| TOTAL MOUSING | | | | | | | |

(1) Removal efficiencies based on 2/98 stack test

| Facility Numbe | Modification/Page # # | 3 |
|---|--|----------------|
| Facility Name: Kopp | MESHAP Subpart: | 97 |
| Project Engineer Type of Permit Action: | EPD Energy Application Rec'd: 7/ Minor Modification Assigned: | 7/2003 |
| Review Complete: | Date Determined Incomplete: Date Determined Complete: | d de accession |
| Ant. Public Notice: | Draft Permit to Supervisor: Draft Permit to Source: Public Notice Publish: | |
| int. Proposed to EPA: Ant. Permit Board: | Public Notice Expire: Proposed Permit to EPA: | |
| | Permit Board: 7-24-03-On 7-7-03, EPD Energy who is now handling this source receive nodification. The minor modification is for the purpose of installing a 29 allon creosote tank. The request as initially not detected as a modificati ecause it was incorporated in a package that initially indicated it was onlevisions to the renewal application on file. | |
| | | |

| Facility Numbe | | Facility Name: Ko | oppers Industries, Inc. | |
|---|--|---|---|-------------------------|
| | vai Application Due: 9/1/2001 pinal Permit Board: 3/11/1997 Mods, | | Class: TV Status: Renewal Application Rec'd: Permit Expires: Permit Renewed: | O 09/28/2001 3/1/2002 |
| MACT | Subparts: | | | |
| Major: Area: Notes/Comments from Original TV pplication Review: | Koppers will be una | NESHAP Subparts: NSPS Subparts: ble to become a SM solution of treated woodwa. | urce due to actual emissions of HCI | heing >10 |
| | revised renewal ann | modified 011497. 11-4 | ste in the boiler. Published PN 112 its so the company can begin using -02-On 10-30-02 the source submit nange in the source's operations. 7-n to the TV renewal application. | 1996 for 1 crossties |



July 1, 2003

CERTIFIED MAIL 7000 0520 0021 7551 8951

KOPPE

MECEIVEL

JUL 7 2003

Strice of Political Control

Koppers Inc. **Utility Poles and Piling** P.O. Box 160

Tie Plant, MS 38960 Tel 662 226 4584 Fax 662 226 4588 www.koppers.com

Ms. Maya Rao Mississippi Department of Environmental Quality P.O. Box 10385 Jackson, MS 39289-0385

RE:

Title V Operating Permit - #0960-00012 Koppers Inc. - Grenada, Mississippi Minor Permit Modification, and Second Revision to Renewal Application

Dear Ms. Rao.

On March 11, 1997, Koppers Industries, Inc. was issued the Title V Operating Permit No. 0960-00012 for its wood treating plant (the Plant) at Tie Plant, MS. An application for renewal of the Title V permit was submitted on September 26, 2001, in conformance with MDSEQ requirements. Since that time a modification to the renewal application was submitted on October 22, 2002, with regard to several changes at the facility that affected air emissions described in the original Title V Renewal Application. This transmittal contains information pertaining to a second modification to the Title V Renewal Application as a result of facility equipment changes that will occur.

The attached sheets provide revised and updated information and summarize changes in plant equipment that will occur during the summer of 2003. The subject changes affect air emissions in that the overall air emissions for the facility will be less than estimates provided in the Title V Renewal Application. Changes that will be made to the facility are discussed below, and forms and supplemental information for replacement of information submitted in the original Title V Renewal Application are attached.

Three tanks located at the Plant will be removed from service and dismantled, including the #4 Work Tank, Creosote Measuring Tank, and the Creosote Dehydrator. Reference Numbers for these tanks in the Renewal Application (Section H, Tank Summary Table) are GRN-09, GRN-11, and GRN-29, respectively. All three of the tanks to be removed are equipment included under Emission Point Number AA-003 in the Renewal Application. Only one of the tanks, the #4 Work Tank, will be replaced at this time. The new tank will be named "#4 Work Tank", and will be referenced as GRN-09 on the Tank Summary Table.

The attached sections contain information that was modified as a result of the changes described above. These sections should be used to replace sections of the renewal application submitted earlier. The following table serves as a guide for making these replacements.

| Attached Information | Replacement For: (Sections in the original renewal application and/or the first modification request dated 10/12/02 to be removed and replaced with the attached information) |
|--|---|
| Renewal Application Narrative - Section 2.1 (2 Pages). | Information provided in original application, and the first modification request on 10/28/02. |
| Section H (2 Pages), and the referenced Tank Summary Table (3 Pages) | Section H (2 Pages), and the Tank Summary Table (3 Pages). |

In addition to information referenced above, a cover page indicating the permitting activity (modification) and a completed Section B, Owners Information (2 Pages), are attached.

Please note that information contained in the Tank Summary Table for Section H was revised to include information on the new Work Tank #4 (GRN-09) that will be installed in July 2003. Information required on the Section H form for the new tank is highlighted in bold print under reference GRN-09 on the Tank Summary Table. Also, information for the Creosote Dehydrator (GRN-29) and the Creosote Measuring Tank (GRN-11) was removed from the Tank Summary Table.

Koppers understands that the new tank will be regulated under 40 CFR 60 Subpart Kb, which requires that a strapping table and a construction drawing of the tank are maintained on file at the facility. The full requirements of Subpart Kb are not applicable because the vapor pressure of the material stored in the tank is below the pressure criteria for Subpart Kb.

If you have any questions or require additional information, please call me at (662) 226-4584 extension 11.

Yours truly,

Thomas L. Henderson

Plant Manager

Enc.

cc. Steve Spengler – Environmental Permits Division MSDEQ Tim Basilone – KII, Pittsburgh

2.1 Changes in Equipment Reference Numbers

Several of these Reference Numbers have been changed to incorporate the numbering system used in the SPCC Plan for the Plant. Other Reference Numbers have been changed because the 1997 Title V Permit had duplicate Reference Numbers. For example, in the 1997 Title V Permit, both Emission Points AA-003 and AA-0010 had a Reference No. 32. By revising the Reference Number system used in this renewal application, this and other duplicate reference numbers have been avoided.

| Emission Point | Description (1997 Title V References) | Proposed Ref. No | Comments |
|-------------------|--|---------------------|-------------------------------------|
| AA-001 | Title V, Ref. No. 1 - the 60.0 MMBTUH | 40 | See also Section 4 |
| | Wellons/Nebraska Woodwaste Boiler | 1 | See also seedon 4 |
| AA-002 | Title V, Ref. No. 26 - the 28.5 MMBTUH fuel oil | 41 | |
| | fired Murray Boiler | 1 | |
| AA-003 | SPCC, Ref. No. 5 - the 34,000 gal treatment cylinder | 1 | |
| | containing Penta in oil. | 1 - | 1 |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 2 | |
| | containing Creosote | _ | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 3 | |
| | containing Creosote | | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 4 | |
| | containing Creosote | | |
| | SPCC, Ref. No. 5 - the 27,000 gal treatment cylinder | 5 | Changed from Creosote to Penta us |
| | containing Creosote. | | Contract nom Cleosofe to Leura fa |
| | SPCC, Ref. No. 6 - the 29,7786 gal #1 Work Tank | 6 | |
| | containing Penta in oil. | | |
| | SPCC, Ref. No. 7 - the 29,786 gal #2 Work Tank | 7 | |
| | containing Creosote | , | |
| | SPCC, Ref. No. 8 - the 29,786 gal #3 Work Tank | 8 | |
| | containing Creosote | | |
| | SPCC, Ref. No. 9 - the 29,786 gal #4 Work Tank | 9 | Original tank replaced in July 2003 |
| | containing Creosote | , | Original tank replaced in July 2003 |
| | SPCC, Ref. No. 10 - the 29,786 gal #5 Work Tank | 10 | |
| | containing Creosote/Water. | 10 | |
| | SPCC, Ref. No. 11 - the 4,200 gal Measuring Tank | | |
| | containing Creosote | | Removed in July 2003, not replaced |
| | SPCC, Ref. No. 12 - the 100,000 gal #1 Storage Tank | 10 | CI 10 |
| . [| containing Creosote | 12 | Changed from creosote storage to a |
| | SPCC, Ref. No. 13 - the 100,000 gal #2 Surge Tank | | storm water surge tank |
| | containing Process water | 13 | |
| | SPCC, Ref. No. 14 - the 100,000 gal #5 Storage Tank | 14 | |
| | containing Diesel #2 fuel oil | 14 | |
| 9 | SPCC, Ref. No. 15 - the 105,000 gal #6 Storage Tank | 15 | |
| lo | containing creosote | 15 | |
| | SPCC, Ref. No. 16 - the 300,000 gal #10 Surge Tank | 16 | |
| l c | containing process water | 10 | |
| 5 | SPCC, Ref. No. 17 - the 250,000 gal Storm Water | - 17 | |
| S | surge tank containing Storm Water | 17 | |
| 5 | SPCC, Ref. No. 18 - the 1,500 gal Coagulant Tank | | |
| c | containing water treatment system polymer additive | 18 | |
| | POG P C N 10 10 10 10 10 10 10 10 10 10 10 10 10 | | |
| 3 | SPCC, Ref. No. 19 - the 2,500 gal Decant Tank | 19 | |
| <u>°</u> | ontaining Creo/Oil/Water | | |
| S | PCC, Ref. No. 20 - the 8,000 gal Creosote Blowdown | 20 | |
| ta | ank containing Creo/Water | | |
| S | PCC, Ref. No. 21 - the 6 ft. Dia. X 60 ft. long, Air | | Removed from list. Contains only |
| R | eceiver containing compressed air | | compressed air |

| Emission Point | Description (1996 Title V References) | Proposed Ref. No | Comments |
|-------------------|--|---------------------|---|
| | SPCC, Ref. No. 22 - the 7 ft. Dia. X 40 ft. long Air | | Removed from list. Contains only |
| | Receiver containing compressed air | | compressed air |
| | SPCC, Ref. No. 23 - the 8,000 gal Penta Blowdown | 23 | |
| | tank containing water/penta/oil | | |
| | SPCC, Ref. No. 26 - the 150,000 gal Aeration Tank | 26 | † · · · · · · · · · · · · · · · · · · · |
| | containing waste water | | |
| _ | SPCC, Ref. No. 27 - the 25,000 gal Clarifier Tank | 27 | |
| | containing waste water | | |
| | SPCC, Ref. No. 28 - the 15,000 gal Discharge Tank | 28 | |
| | containing waste water | | |
| | SPCC, Ref. No. 29 - the 8,000 gal Creosote | | Removed in July 2003, not replaced |
| | Dehydrator | | Removed in July 2003, not replaced |
| | SPCC, Ref. No. 30 - the 14,000 gal North Penta | 30 | |
| | Equalization Tank containing water/penta/oil | 30 | |
| | SPCC, Ref. No. 31 - the 14,000 gal South Penta | 31 | |
| | Equalization Tank containing water/penta/oil | 31 | |
| | SPCC, Ref. No. 32 - the 9,400 gal Penta Mix Tank | 32 | |
| | containing Oil/Penta | 32 | |
| | SPCC, Ref. No. 33 - the 5,000 gal Penta Mix Tank | 22 | |
| | containing Oil/Penta | 33 | |
| | SPCC, Ref. No. 34 - the 10,500 gal Penta Concentrate | 24 | |
| | Tank containing 40% Pentachlorophenol Concentrate | 34 | |
| | SPCC, Ref. No. 35 – the 100,000 gal Stormwater Tank | | |
| | of oc, ter. No. 55 – the 100,000 gai Stormwater Tank | 35 | This Tank has been added. |
| AA-004 | Title V, Ref. No. 27, the Tie Mill and Lumber Mill | 42 | |
| | with cyclone | 42 | |
| AA-005 | Title V, Ref. No. 33, the Boiler House natural gas fired | | T |
| | space heater rated at 0.2 MMBTUH | 43 | Insignificant Activity per APC-S-6.IV |
| | Spars name (mod at 0.2 MMMD [OII | | Three (3) space heaters each rated at |
| AA-006 | Title V, Ref. No. 35, the natural gas fired steam | | 0.2mmbtu/hr. |
| | cleaner rated at 0.44 MMBTUH | 44 | Insignificant Activity per APC-S-6.IV |
| AA-007 | Title V, Ref. No. 36, the Wood Stove Shop Heater | | |
| | rated at 0.10 MMBTUH | | Source no longer exists. Has been |
| AA-008 | Title V, Ref. No. 8, the Treated Wood Storage Areas | | removed from site. |
| 141 000 | The v, Rel. No. 8, the Treated Wood Storage Areas | 46 | |
| AA-009 | Title V, Ref. No. 31, the Pole Kiln | 42 | |
| | v, real rot 51, the rote Killi | 47 | |
| AA-010 | Title V, Ref. No. 32, the Pole Peeler | 48 | |
| | | 70 | |
| AA-011 | Title V, Ref. No. 34, Wood Fuel Preparation and | 49 | |
| | handling including grinding, conveying, and silo | 72 | |
| | loading | | |
| AA-012 | Title V, Ref. No. 37, the two (2) Parts cleaners- | 50 | |
| | degreasers | 30 | |
| AA-013 | SPCC, Ref. No. 24, the 1,250 gal Gasoline Storage | 51 | Indical Country of the ADC C CT |
| | tank containing Gasoline used by company vehicles | 31 | insignificant Activity per APC-S-6.IV |
| AA-014 | SPCC, Ref. No. 25, the 9,000 gal Diesel Storage tank | 52 | noionificant Autiti |
| | used by company vehicles/Rolling Stock | JZ 1 | nsignificant Activity per APC-S-6.IV. |
| AA-015 | Title V, Ref. No. 33, the Oil Fired Murray Standby | | |
| | boiler room Natural Gas fired Space Heater rated at 0.1 | 54 I | nsignificant Activity per APC-S-6.IV. |
| ŀ | MMBTUH | 1 | |
| | Title V, Ref. No. 33, the Fire Pump building Natural | <u>-</u> | |
| | Gas fired Space Heater rated at 0.02 MMBTUH | | Source no longer exists. Has been |
| L | THE SPACE FICALCE FAILED BY 0.07 WIMBIOH | r | emoved from site. |

| FOR OFFICIAL USE ONLY | |
|--|--|
| APPLICATION RECEIPT DATE: | |
| APPLICATION NO.: | |
| FOR MODIFICATION : MINOR: SIGNIFICANT: | |
| | |

STATE OF MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF POLLUTION CONTROL AIR DIVISION P.O. BOX 10385 JACKSON, MS. 39289-0385 PHONE NO.: (601) 961 - 5171

APPLICATION FOR TITLE V AIR POLLUTION CONTROL PERMIT TO OPERATE AIR EMISSIONS EQUIPMENT

| PERMITTIN | G ACTIVITY: | 86 E5 | |
|--|---|----------------------------|--|
| X | INITIAL APPLICATION MODIFICATION RENEWAL OF OPERATING | G PERMIT | |
| NAME: - CITY: COUNTY: - FACILITY No. (| TIE PLANT GRENADA | DUSTRIES INC 0960-00012 | |

| 360 | HOH D | Owners inform | аноп | | | | |
|------------|--------|---|---|---|--|--|--|
| 1. | Nam | ne, Address & Contact fo | r the Owner/Applicant | | | | |
| | A. | Company Name: KOPPERS INC. | | | | | |
| | В. | Mailing Address: | | | | | |
| | | | ss or P.O. Box: SBURGH 15219-1800 o.: (4) | 436 SEVENTH AVENUE 3. State: PA 12) 227-2114 | | | |
| | C. | Contact: | | | | | |
| | | 1. Name: 2. Title: | TIMOTHY R. BAS ENVIRONMENTA | | | | |
| 2. | Nam | Name, Address, Location and Contact for the Facility: | | | | | |
| | A. | Name: KOP | PERS INC. | | | | |
| | В. | | ss or P.O. Box: PLANT 38960 D.: (66 | P.O. BOX 160 3. State: MS | | | |
| | C. | Site Location: 1. Street: 1 KC | PPERS DRIVE | | | | |
| | ŧ | 2. City: TIE 1 4. County: 6. Telephone No Note: If the facility is locate | PLANT GRENADA D.: (66 d outside of the City limits, pl | 3. State: MS 5. Zip Code: 38960 2) 226-4584 ease attach a sketch or description | | | |
| | D. | to this application showing to Contact: | he approximate location of the | e site. | | | |
| | | 1. Name: 2. Title: | THOMAS L. HEND PLANT MANAGER | | | | |
| 3. | SIC (| Code(s)(including any as | sociated with alternate of | operating scenarios): 2491 | | | |
| 4. | Numl | ber of Employees: | 65 | | | | |
| 5. | Princ | ipal Product(s): | UTILITY POLES A | ND RAILROAD CROSSTIES | | | |
| 6. | Princ | cipal Raw Materials: | | ROSSTIES, LUMBER, CREOSOTE, PHENOL, DIESEL FUEL | | | |
| 7 . | Princi | ipal Process(es): | WOOD PRESERVI | NG | | | |

| 8. | Maxii | num amount of principal product product 20,000 CUBIC FEET | ed or raw materi | al consumed per d | ay: | |
|---------|---|--|--|---|-------------------|--|
| 9. | Facili | ry Operating Schedule (Optional): | | | | |
| | A. | Specify maximum hours per day the o | peration will occ | ur: | 24 HOURS | |
| | B. | Specify maximum days per week the c | peration will occ | cur: | 7 DAYS | |
| | C. | Specify maximum weeks per year the | operation will oc | cur: | 52 WEEKS | |
| | D. | Specify the months the operation will o | occur: | ALL | | |
| 10. | Is this | facility a small business as defined by th | e Small Busines | s Act? (Optional) | NO | |
| 11. | 11. EACH APPLICATION MUST BE SIGNED BY THE APPLICANT. | | | | | |
| | The a | pplication must be signed by a respons 5-6, Section I.A.26. | sible official as | defined in Regula | tion | |
| | respon respon | fy that to the best of my knowledge ents and information in this application sible official, my signature shall consti sibility for any alteration, additions, on e and maintain compliance with all app | n are true, comp tute an agreeme r changes in op | lete, and accurat nt that the applic eration that mav | e, and that, as a | |
| | | HENDERSON | PLANT MAN | AGER | | |
| Printed | i Name | of Responsible Official | Title | | | |
| | 1-03 | | Thomas | 1 Hombus | L ia | |
| Date A | pplicati | on Signed | Signature of A | pplicants Respon | nsible Official | |

SECTION H TANK SUMMARY (page 1 of 2)

| 1. | | sion Point No./Name: AA-003, ALL RELATED TANK DATA INCLUDED IN TANK MARY DATA SPREADSHEET (FOLLOWING PAGES) |
|----|----------------------------------|---|
| 2. | Was i | this tank constructed or modified after August 7, 1977?yesno please give date and explain. |
| 3. | | nct Stored: re than one product is stored, provide the information in 4.A-E for each product. |
| 4. | Tank | Data: |
| | A. B. C. D. E. F. G. H. I. K. L. | True Vapor Pressure at storage temperature: Reid Vapor Pressure at storage temperature: Density of product at storage temperature: Density of product at storage temperature: Molecular Weight of product vapor at storage temperature: Ib/gal Molecular Weight of product vapor at storage temperature: Ib/lbmol Throughput for most recent calendar year: Tank Capacity: Tank Diameter: Tank Diameter: Tank Height / Length: Average Vapor Space Height: Tank Orientation: Vertical or Horizontal Type of Roof: Is the Tank Equipped with a Vapor Recovery System? Yes No If Yes, describe on separate sheet of paper and attach. Indicate efficiency. Check the Type of Tank: Fixed Roof Pressure Variable Vapor Space Other, describe: |
| | N. | Check the Closest City: Jackson, MS Memphis, TN Birmingham, AL Montgomery, AL |
| | 0 | New Orleans, LA Check the Tank Paint Color: Aluminum Specular Aluminum Diffuse Red Other, describe: Baton Rouge, LA Gray Light Gray Medium White |
| | P. Q. | Tank Paint Condition: Check Type of Tank Loading 1. Trucks and Rail Cars Submerged Loading of clean cargo tank Submerged Loading: Dedicated Normal Service Submerged Loading: Dedicated Vapor Balance Service Splash Loading: Dedicated Normal Service Splash Loading: Dedicated Vapor Balance Service Marine Vessels |
| | | Submerged Loading: Ships Submerged Loading: Barges |

SECTION H TANK SUMMARY (page 2 of 2)

| | R. For | External Floating Roof Tanks | |
|----|----------------------|---|--|
| | 1_{e} | Check the Type of Tank Seal: | |
| | | Mechanical Shoe | |
| | | Primary Seal Only | |
| | | With Shoe-Mounted Secondary Seal | |
| | | With Rim-Mounted Secondary Seal | |
| | | Liquid Mounted Resilient Seal | |
| | | Primary Seal Only | |
| | | With Shoe-Mounted Secondary Seal | |
| | | With Rim-Mounted Secondary Seal | |
| | | Vapor Mounted Resilient Seal | |
| | | Primary Seal Only | |
| | | With Shoe-Mounted Secondary Seal | |
| | | With Rim-Mounted Secondary Seal | |
| | 2. | Type of External Floating Roof: Pontoon | |
| | | Double-Deck | |
| | | | |
| | S. For I | internal Floating Roof Tanks | |
| | 1. | Check the Type of Tank Seal: | |
| | | Liquid Mounted Resilient Seal | |
| | | Primary Seal Only | |
| | | With Rim-Mounted Secondary Seal | |
| | | Vapor Mounted Resilient Seal | |
| | | Primary Seal Only | |
| | | With Rim-Mounted Secondary Seal | |
| | 2. | Number of Roof Columns: | |
| | 3. | Length of Deck Seam feet: | |
| | | | |
| | 4. | Area of Deck: feet ² | |
| | 5. | Effective Column Diameter: feet | |
| | 6. | Check the Type of Tank: | |
| | | Bolted with Column Supported Roof | |
| | | Welded with Column Supported Roof | |
| | | Bolted with Self-Supported Roof | |
| | | Welded with Self-Supported Roof | |
| 5. | Emissions Sur | nmow. | |
| ٥. | 1. | | |
| | 2. | *** | |
| | 3. | | |
| 6. | UTM Coordin | | |
| | A. Zone | B. North C. East | |
| | | D. Politi C. East | |
| | | | |

SECTION H
TANK SUMMARY TABLE

Lb

| | Kem | Unite | | | | 3 | | | | | | |
|-------------------|---|------------|--------------|--------------|---------------|------------------|-------------------|-------------|--------------------------|------------------------|-------------------|----------------|
| Pant Refe | Plant Reference Number | | GRN-06 | GRN-07 | GRN-08 | GRNJO | GPW 40 | 25N 42 | 6000 | 17.100 | | |
| mission | Emission Point Number | | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA 003 | GKN-14 | GKN-13 | GRN-18 |
| (erener | Meremence No. (Table 2.1) | | ဗ | , | 80 | 8 | đ | 12 | 13 | 14 | 35 | 46.00 |
| Name | | | #1 Work Tank | #2 Work Tank | #3 Winds Tank | A Month of | #8 Interd T | #1 Creosote | 1 | | ! | 2 |
| onstruc | Construction Date | | 1903 | 1903 | 1979 | 2003 | 1930 | 1903 | #2 SUIDB I BITIK 1903 | #55 STONE GENTRAL 1903 | #6 Storage Tarrik | #10 Surge Tank |
| Meterial Stored | pasoff | | /ijo | į | į | | | | | | | |
| OB/ 957 | True Vapor Pressure @ Storage Temperature | e la c | | Clabbilla | Credeois | Creosote | Pentachiorophenol | Creosota | Process Water | #2 Diesel Fuel | Creosote | Process Water |
| Red Vap | Reid Vapor Pressure @ Storage Temperature | L | | | | | | | | | | |
| eganor | Storage Temperature | ద | | 200 | 200 | 200 | 450 | 900 | Va | 90 | 64.7 | |
| Serielly (| Density @ Storage Temperature | pyda | 7.76 | 9.25 | 9.25 | 8.95 | 7.75 | 8.95 | 834 | 7 2 | 35.0 | 934 |
| /olecuta | Molecular Weight @ Storage Temperature | Dibmole | | | | | | | | | 27.5 | 5.0 |
| London | J | gallonslyr | 8,500,000 | 8,200,000 | 8,200,000 | 8,200,000 | 8,500,000 | 740,000 | 1,600,000 | 127,500 | 000 099 | 1 400 000 |
| Capacian Capacian | pacity | gallons | 29,786 | 29,786 | 29,786 | 28,786 | 29,786 | 100,000 | 100,000 | 100,000 | 105.000 | 300 000 |
| 5 2 | mener | Teet | 13 | 5 | 13 | 13 | 13 | 82 | 82 | 12 | 90 | GF CF |
| A L | ENK Height/Lengu | feet | g | 8 | 30 | 30 | æ | 24 | 24 | 24 | 8 | 22 |
| | Average Vapor Space Height | feet | | 1 | - | - | + | - | - | | | |
| S S | entation (Horizontal or Vertical) | | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical |
| | I you of Koor (Lome of Cone) | | Dome | Dome | Dame | Воте | Dome | Cone | Cone | Cone | Corre | e C |
| Vapo of course | Valva Accovery Systems | yes or no | 2 | 2 | 2 | No | οN | 2 | 2 | 2 | ٤ | R |
| 5 | ark. | | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof |
| Tonk Ballet Color | 200 | Memoris | Membris | Memphis | Memohis | Memphis | Memphis | Memphis | Memphis | Memphis | Memoriis | Memoris |
| 5 1 | Doing County County | | X DECK | Xac | Šæč | Aluminum | Back | Black | Back | Back | Sack | Black |
| 3 | Iduari (Saco or Poor) | | 2007 | Poor | Poor | Good | Poor | Poor | Poor | God | Good | Poor |
| BUX LOS | Normal Sendor: Statesh Loading - Dedicated | | | | | Splash Loading - | | | | | | |
| 'abor Ba | Vanor Balance Service: Rottom) | | Bottom | Dotter. | 400 | Dedicated Normal | | : | | | | |
| of Apple | Not Applicable To Ary Tanks | | | DOLLOSIII | шотор | Service | HOLLOW | Bottom | Bottom | Bottom | Bottom | Bottom |
| of Appl | Not Applicable To Any Tanks | | | | | | | | | | | |
| reathing | Breathing Loss (See Note) | PA | | | | | | | | | | |
| | | À | | | | | | | | | | |
| Vorlding | Working Loss (See Note) | J. G | | | | | | | | | | |
| | | Ϋ́ÞΥ | | | | | | | | | | |
| otal Emi | Total Emissions (See Note) | bhr | | | | | | | | | | |
| | | TPY | | | | | | | | | | |
| OTE: A | NOTE: All tank emissions are included in Plent Summary Table of Section C of the | | | | | | | | | | | |
| Application. | Ä. | | | | | | | | | | | |
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| | | | | | | | - | | | | | |

| | 00 NG 3 | AA 003 | 28 | | Olscharge | 1986 | ě | Weter | | | 8 | 8.34 | 5,000,000 | 45 000 | 3000 | 2 6 | 2 | Mortinal | None | 2 | | Memorie | a ar | 900 | ┰ | Š | Service | | - | | | - | | | | - | | | | | - |
|---------------------------------|----------------------|--|-------------------------|-------------------|-------------------|------|-------------------|---|---|---------------------|-------------------------------|--|------------|-----------------|---------------|------------------------|----------------------------|--|------------------------------|------------------------|------------------|--------------|--------------|----------------------------|--|--------------------------------|-----------------------------|-----------------------------|---------------------------|-----|-------------------------|----|------------------------------|-----|--|--------------|--|---|--|---|---|
| | GPN-27 | AA 003 | 77 | | Clarifler | 1986 | Process Weste | Water | | | 8 | 45.50 | 6 000 000 | 25,000 | 4,000 | 2 | • | Varifical | NON. | 2 | 2 | Memoris | S. F. | Good | Spiash Loading | Dedicated Normal | Service | | | | | | | | | | | | | | |
| | GRN-28 | AAAM3 | 26 | | Aeration | 1986 | Process Weste | Water | | | 3 | 45.0 | 5000000 | 150 000 | QV QV | × | 3 | Verifical | None | N N | Open | Memohis | White | G000 | Spitash Loading | Dedicated Normal | Octavice | | | | | | | | | | | | | | |
| | GRN-25 | AA-014 | 25 | | Diesel | 1930 | į | #Z Clesel | | 2 | 3 | , | 000 06 | 0006 | 9 | 32 | - | Hortzonta | | 2 | Fixed Roof | Memphis | Atmirem | Good | | Rottom | | | | | | | | | | | | | | | |
| | GRN-24 | AA-013 | 24 | | Gesofine | C/AL | 1 | Cascarae | | | A.K | 20 | 10,000 | 250 | 4 | 12 | - | Horizontal | | Š | Fixed Roof | Memphis | Atminum | 6000 | | Bottom | | | | | | | | | | | | | | | |
| | GRN-23 | AA-003 | 23 | Pentachlorophenol | Blowdown | 206 | Pertachiorophenol | 5 | | φ, | 25.8 | | 493,000 | 9,000 | 2 | 4 | - | Vertical | Dome | ş | Fixed Roof | Memphis | Black | Poor | Splash Loading | Service | | | | | | | | | | • | | | | | |
| | GRN-20 | AA-003 | æ | Craosote | HOWGOWN | 200 | Crananta (Water | O GOSOIG / VAIG | | 480 | 8.34 | | 532,000 | 8,000 | 9 | 4 | - | Vertical | Dome | S | Fixed Roof | Memphis | Black | Poor | Splash Loading | Service | | | | | | | | | | | | | | | |
| | GRN-19 | AA-003 | 19 | | Jeganang | ene! | Creosote / Oil / | | | SO SO | 834 | | 230,000 | 2,500 | 80 | 12 | - | Vertical | Dome | No | Fixed Roof | Memphis | Back | 899 800 | Splash Loading | Service | | | | | | | | | | | | | | | |
| | GRN-18 | AA-003 | 18 | - | 1987 | | Coaculant Polymer | | | 98 | 8.67 | | 000'6 | 1,500 | | 0) | 1 | Vertical | Dome | 2 | Fixed Roof | Memoris | Belge | 800 | Spiash Loading | Service | | | | | | | | | | | | 1 | | | |
| | GRN-17 | AA-003 | 4 | Storm Corne Meter | 1989 | | Storm Water | | | 8 | 8.34 | | 2,272,000 | 250,000 | 36 | 36 | ÷ | Vertical | None | | S S | Memohis | 936 | 885 | Spiash Loading | Service | | | | | | | | | | | | | | | |
| Units | | | | | | | | elso | 1 | පී | la/da | D/bmole | gallons/yr | gellons | feet | feet | feet | | | Ves or no | | Memphis | | | | | | | EMr. | Τργ | Į. | ΤĐ | T T | Lbγ | | | | | | | |
| Mem Defendence Museum Annah and | Figure Delice Number | Distribution in the control of the c | National No. (1809 2.1) | e Ean | Construction Date | | Material Stored | True Vepor Pressure @ Storage Temperature | Reid Vapor Pressure @ Storage Temperature | Storage Temperature | Density @ Stonage Temperature | Molecular Weight @ Stonage Temperature | Throughput | I BITK Capacity | Tank Diameter | I BITK HEIGHT / LENGTH | Average Vapor Space Height | I BITK Chlemation (Horizontal or Vertical) | I ype af Koof (Dome of Cane) | vapor recovery system? | I ype of I Brik? | Consent City | BIT THE COOL | rain Contagn (Social Poor) | i ann Loading (Shash Loading - Dedicated Normal Service; Spiash Loading - Dedicated | Vapor Balance Service; Bottom) | Not Applicable To Any Tanks | Not Applicable To Any Tanks | Breathing Loss (See Note) | | WORKING LOSS (See NOTE) | | I offel Emissions (See Note) | | NOTE: At tank emissions are included in plant Summary Table of Section Coffee | Application. | | | | | • |
| Section H Reference | Ţ | | | | 2 | | m | 4 | Γ | Г | | | # | Ť | 2 | 1 | Ī | 2 | T | T | E C | T | 2 0 | Ť | | 8 | 7 | 3 | 1 | 7 | 70 | 1 | 5.3 | | | | | T | | - | |

SECTION H TANK SUMMARY TABLE

| 1 | | | | | | | | |
|-----------|--|--|---------------------|---|-------------------|------------------|-------------------|------------------|
| Reference | | Unite | | | | | | |
| | Plant Reference Number | | GRN-30 | GRN-31 | GRN-32 | GRN-33 | GRN-34 | GRN-35 |
| - | Emission Point Number | | AA-003 | AA-003 | AA-003 | AA-003 | AA-003 | AA-OO3 |
| | Reference No. (Table 2.1) | | 30 | 31 | 32 | 33 | 77 | 1 |
| | | | North | _ | | | | 3 |
| | Same. | | Pertachlorophenol | Pentachlorophend | Pentachlorophenol | Peritac | å | Stomwater |
| - | Construction Data | | 1083 | COURTERIOR | WIX | XW | Concentrate | Process |
| | | | 2061 | 2061 | 0/81 | O/BL | 1960 | 1970 |
| c | | | | | | | Pentachiorophenol | ğ |
| ٠ | Material Stored | _ | Water / Penta / Oil | Water / Penta / Off Weter / Penta / Oil | Oil / Perrits | Oll / Penta | Concentrate | Water |
| ¥ | True Vepor Pressure @ Storage Temperature | psia | | | | | | |
| 4 | Reid Vapor Pressure @ Storage Temperature | psla | | | | | | |
| | Storage Temperature | 1 | 8 | 8 | 8 | 99 | 98 | 99 |
| Ş | Density @ Stonage Temperature | ib/gal | 8 | 80 | 7.76 | 7.76 | 9.65 | 8.34 |
| Ş | Molecular Weight @ Storage Temperature | D/fbmale | | | | | | |
| ¥ | Throughput | gallonslyr | 66,000 | 65,000 | 850,000 | 850,000 | 120,000 | 400,000 |
| # | Tank Capacity | gallons | 14,000 | 14,000 | 9,400 | 9,000 | 10,600 | 100,000 |
| ą | Tank Diameter | feet | 9 | 9 | 6 | 9 | 2 | 30 |
| ¥ | Tank Height / Length | feet | 24 | 24 | 14 | 16 | 8 | 9% |
| 4 | Average Vapor Space Height | feet | _ | - | - | | - | - |
| 3 | Tenk Orientation (Horizontal or Vertical) | | Vertical | Vertical | Vertical | Horizontal | Vertical | Vertical |
| ¥ | Type of Roof (Dome or Cone) | | e CO | Cone | Ē | | Tiet. | 191 |
| 44 | Vapor Recovery System? | yes or no | 2 | 2 | 2 | 2 | 2 | 2 |
| ₩. | Type of Tank? | | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roof | Fixed Roaf |
| ÅN. | Closest City | Memphis | siddweigi | Memphis | Memoris | Memohis | Memoris | Memohis |
| \$ | Tank Paint Color | | Back | Black | Back | Back | Aumoum | Concrete |
| 4 | Paint Condition (Good or Poor) | | Poor | Poor | Poor | Poor | 900g | |
| | Territ Loading (Splash Loading - Dedicated | | Splash Loading | Spiash Loading | | Splash Loading | | Splash Loading |
| ç | Normal Service; Splash Loading - Dedicated | | Dedicated Normal | Dedicated Normal | | Dedicated Normal | | Dedicated Normal |
| 2 | Vapor Barance Service; Borrom) | | Service | Service | Bottom | Service | Bottom | Service |
| ž, | Not Applicable To Any Tanks | | | | | | | |
| ĝ, | Not Appacable 10 Any 18nics | | | | | | | |
| 9 | Breathing Loss (See Note) | thr. | | | | | | |
| | | TPY | | | | | | |
| 25 | Worlding Loss (See Note) | J. J | | | | | | |
| | | TPY | | | | | | |
| 5.3 | Total Emissions (See Note) | J.J.Cog | | | | | | 1 |
| | | YPY | | | | | | |
| | NOTE: All tank emissions are included in | | | | | | | |
| | Plant Summary Table of Section C of the | | | | | | | |
| | Application. | | | | | | | |
| | | | | | | | | |
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| AA-001 | 1 | | | | CDCC D | | | | _ |
|-----------|----------------------------------|----------------|---|----|--|----------|------------|-------------------|---|
| 60.0 MM | BTUH woodw | aste boiler | *baseline operationuntre | 40 | SPCC R | et. No. | | | |
| | | Loto Bollo | bascime operationunite | 40 | | + | | | |
| AA-002 | 26 | | | | | | | | |
| | IBTUH fuel oil | fired boiler | | | | | | | |
| | | III CO DOIICI | | 41 | | - | -111 | | |
| AA-003 | - | | | | | + | | | |
| 34.000 a | al treatment c | vlinder/ Pen | ta in oil | | | - | | | |
| 27.000 g | al treatment c | vlinder/ Cre | neoto | 1 | | 5) | | | |
| 27.000 g | al treatment c | /linder/Creo | sote | 2 | | 5 (| | | |
| 27.000 g | al treatment cy | dinder/ Cred | soto | 3 | , | 5 | | | |
| 27.000 g | al treatment cy | /linder/ Den | ta | 4 | | 5 (| | | |
| 29.786 g | al #1 work tan | k/ Penta in | id | 5 | | 5 | | | |
| 29.786 as | al #2 work tan | d Creasata |)II | 6 | | 6 | | | |
| 29.786 gs | al #3 work tan | d Crossota | | 7 | | 7 | | | |
| 22 419 as | al #4 work tank | Crosset | Bellevin in the second of the | 8 | | 8 | | | |
| , , 10 gc | 20 786 act 4 | M work tool | | 9 | | 9 remo | ved | | |
| 9 786 00 | 29,786 gal # | Cross-to | Verensote | 9 | | 9 | | | |
| 200 fal | al #5 work tank measuring tan | v Creesote/ | vvater | 10 | 10 | - Linear | | | |
| 00 000 0 | ral #1 storage | to play of | | 11 | 1 | 1 remov | /ed | | |
| 00,000 g | gal #1 storage | tank/ storm | water | 12 | 12 | 2 | | | |
| 00,000 g | al #2 surge ta | rik/ process | water | 13 | 13 | 3 | | | |
| 05,000 g | al #5 storage | tank/ Diese | #2 | 14 | 14 | 1 | | | 1 |
| 00,000 g | al #6 storage | tank/ Creos | ote | 15 | 15 | 5 | | | |
| 50,000 g | al #10 surge t | ank/ proces | s water | 16 | 16 | 3 | | | |
| 50,000 g | al storm water | surge tank | storm water | 17 | 17 | | | | |
| ,500 gai | coagulant tani | c/ polymer a | dditive | 18 | 18 | | | | |
| ooo da | decant tank/ c | reo/oil/wate | | 19 | 19 | | | | |
| ouu gai d | creosote blow | down/ creo/ | water | 20 | 20 | | | | |
| π. dia. X | 60 ft. long, air | receiver/ c | ompressed air | r | emoved f | 4 | (insignif | icant) | |
| π. dia. X | 40 ft. long, air | receiver/ co | Ompressed air | re | emoved fi | om list | (insignifi | icant) | |
| 000 gal F | Penta blowdov | vn tank/ wat | er/penta/oil | 23 | 23 | | (o.griiii | Carity | |
| 50,000 ga | al aeration tan | k/ waste wa | ter | 26 | 26 | | | | |
| 0,000 gal | clarifier tank/ | waste water | | 27 | 27 | | | | |
| ,000 gal | discharge tan | k/ waste wa | ter | 28 | 28 | | - | | |
| 000 gal c | reosote dehyd | irator | | 29 | The second secon | remove | -d | \longrightarrow | |
| ,000 gal | north penta e | qualization t | ank/ water/penta/oil | 30 | 30 | 10,1101 | - | | |
| ,000 gai | south penta e | qualization 1 | tank/ water/penta/oil | 31 | 31 | | | - | |
| 400 gai p | enta mix tank | oil/penta | | 32 | 32 | | - | | |
| 000 gal p | enta mix tank | oil/penta | | 33 | 33 | | | | |
| ,500 gal | penta concent | rate tank/ 4 | 0% pentachlorophenol | 34 | 34 | | | | |
| 0,000 ga | l stormwater ta | ank | | 35 | - | added | | | |
| -004 | 27 | | | 42 | | | | | |
| Mill and | Lumber Mill w | vith cyclone | | | | | | | |
| | | | | | | | | | |
| -005 | 33 | 24 - YU = +035 | NOTICE OF SECURITION OF SECURITION | 43 | | nsignifi | 98 | | |

MMBTUH AA-006 35 44 insignificant activity natural gas fired steam cleaner rated at 0.44 MMBTUH **AA-007** 36 wood stove shop heater rated at 0.10 MMBTUH DNE, removed from site **AA-008** 8 46 treated wood storage areas **AA-009** 31 47 pole kiln **AA-010** 32 48 pole peeler AA-011 34 49 wood fuel preparation and handling * *wood hog grinder-->Precision Husky Chipper **AA-012** 37 50 two parts cleaners-degreasers AA-0013 24 51 insignificant activity 1,250 gal gasoline storage tank/ gasoline **AA-014** 25 52 insignificant activity 9,000 gal diesel storage tank **AA-015** 33 54 insignificant activity oil fired murray standby boiler room natrual gas fired space heater rated at 0.1 MMBTUH **AA-016** 33 DNE, removed from site fire pump building natural gas fired space heater rated at 0.02 MMBTUH also Outdoor kerosene heaters (5) Emergency Power Generators (3 units at 11 hp and 6000 watts; 3 units at 16 hp and 8000 watts)