

Fact Sheet



For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the original Fact Sheet corresponding with the issuance of the initial Title V operating permit issued on January 4, 2006.

Permit Number: R30-00900001-2006
Application Received: August 30, 2007
Plant Identification Number: 03-54-009-00001
Permittee: Koppers Inc.
Facility Name: Follansbee Tar Plant
Mailing Address: 436 Seventh Ave, Pittsburgh, PA 15219

Physical Location: Follansbee, Brooke County, West Virginia
UTM Coordinates: 533.46 km Easting • 4465.02 km Northing • Zone 17
Directions: Take Route 2 North about 19 miles from Wheeling to Follansbee. Travel through town and at sixth traffic light, turn left at Veteran's Drive. Follow road to plant site.

Permit Action Number: *SM01*; Revised: *June 5, 2009*

Facility Description

Koppers Inc. Follansbee Tar Plant [SIC code 2865 and NAICS code 325192] produces tar acids, tar bases, various grades of coal tar pitch refined tars from crude coke oven tar (CCOT), distillate oils, Refined Chemical Oil (RCO), blends different coal tar distillates to produce a creosote solution, solvent naphtha, and naphthalene from refined chemical oil (RCO). The plant consists of the following units: tar stills, debenzolizer unit, acid washers, naphthalene distillation, pencil pitch unit, base plant, boiler house, tank car cleaning, storage tanks, and wastewater treatment. The tar plant has the maximum capacity to produce 165,650 tons per year of Carbon Pitch as well as specialty pitches and refined tars. The Chemical Plant at the Tar Plant has the capability of

recovering 98,156 tons of Naphthalene per year. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week and fifty-two (52) weeks per year.

This significant modification involves the changes reflected in Permit R13-2274E and R13-2274F.

R13-2274E required extensive changes to the initial Title V Permit's Sections 1.0, 3.0 through 14.0, 19.0, and 21.0. R13-2274E permitted the Koppers Follansbee Tar Plant to change its status from a major to a minor source of VOC, total HAP, Naphthalene and Polycyclic Organic Matter (POM) emissions. By reducing these emissions, this facility will not be subject to 40 C.F.R. 63 Subpart FFFF - the MON MACT. In order to become a minor source, Koppers Follansbee Tar Plant is:

- (1) To put into practice a plant-wide LDAR program;
- (2) To install a thermal oxidizer;
- (3) To remove #31 Tube Heater as air pollution control device and the two existing back-up flares to the #31 Tube Heater. The #31 Tube Heater will only be used as a process heater;
- (4) To control VOC and HAP emissions by at least by 98% with the new thermal oxidizer and the two existing flares;
- (5) To control VOC and HAP emissions by at least 98% from various storage and blending tanks, various product loading, Creosote Blend Tanks, Creosote product loading, and distillate tanks. To accomplish this, Koppers constructed a stainless steel piping duct system from these VOC, HAP, Naphthalene and Polycyclic Organic Matter (POM) emission sources to the thermal oxidizer and the two existing flares;
- (6) To construct new Tank 808 for storing petroleum pitch; and
- (7) To make minor changes to the Wastewater Treatment Plant that will not affect emissions.

Permit R13-2274E supersedes R13-2274D, incorporates Permit R13-0167, and incorporates consent orders CO-SIP-91-32 and CO-R13-E-2005-4. Permit R13-2274F supersedes R13-2274E.

The R13-2274F permit revised permit R13-2274E by:

1. Revising the temperature requirement for the thermal oxidizer and adding flare conditions.
2. Revising the main flare (774a) with a requirement to monitor gas flow and tip velocity of the flare to replace testing requirements. Koppers submitted an applicability determination for a similar situation that was made by R. Douglas Neely of EPA Region 4 for the state of Florida. Mr. Neely noted "Because continuous flow monitors that are installed on natural gas and process gas streams ducted to the flare provide information that can be use (*sic*) to verify compliance with the flare performance requirements in 40 C.F.R. § 63.11, it will not be necessary to conduct a test on the flare."
3. Taking the Piggy back flare (774b) out of service.
4. Removing the testing requirements for the Thermal Oxidizer (4.3.1.) since they were completed. Testing requirements for the flares were removed per items number two and three.
5. Removing duplicate information requested by Koppers for tanks and product loading racks since other conditions already have essentially the same requirement.

Emissions Summary

Plant Wide Emissions Summary [Tons per Year]	
Regulated Pollutants	Potential Emissions
Carbon Monoxide (CO)	No Change
Nitrogen Oxides (NO _x)	No Change
Particulate Matter (PM ₁₀)	No Change
Total Particulate Matter (TSP)	No Change
Sulfur Dioxide (SO ₂)	No Change
Lead (Pb)	No Change
Volatile Organic Compounds (VOC)	123.04 TPY Decrease
<i>PM₁₀ is a component of TSP.</i>	
Hazardous Air Pollutants	Potential Emissions
Benzene	1.1 TPY Decrease
Biphenyl	0.9 TPY Decrease
m-Cresol	1.2 TPY Decrease
o-Cresol	0.8 TPY Decrease
p-Cresol	0.4 TPY Decrease
Cumene	0.03 TPY Decrease
Dibenzofurans	1.5 TPY Decrease
Ethyl Benzene	0.2 TPY Decrease
Naphthalene	14.2 TPY Decrease
Phenol	3.2 TPY Decrease
Polycyclic Organic Matter (POM)	32.3 TPY Decrease
Quinoline	1.4 TPY Decrease
Styrene	0.3 TPY Decrease
Toluene	1.1 TPY Decrease
m-Xylenes	0.2 TPY Decrease
o-Xylenes	0.1 TPY Decrease
p-Xylenes	0.2 TPY Decrease
Formaldehyde	0.08 TPY Decrease
Hexane	0.19 TPY Increase
Antimony	0.005 TPY Decrease
Arsenic	0.004 TPY Decrease
Beryllium	No Change
Cadmium	0.002 TPY Decrease
Chromium	0.004 TPY Decrease
Cobalt	0.002 TPY Increase
Manganese	0.001 TPY Increase
Mercury	0.001 TPY Decrease
Nickel	0.011 TPY Decrease
Selenium	0.002 TPY Decrease
<i>Some of the above HAPs may be counted as PM or VOCs.</i>	

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons of Nitrogen Oxides (NO_x), Carbon Monoxide (CO), and Sulfur Dioxide (SO₂). Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Koppers Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 K	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and Prior to May 19, 1978
	40 C.F.R. Part 60 Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984
State Only:	None	

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2274F Class 1 Administrative Amendment that Supersedes and replaces R13-2274E and R13-0167 CO-SIP-91-32 and CO-R13-E-2005-4	March 3, 2009	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit

in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The only change to the initial January 4, 2006 Title V Permit and Fact Sheet is Permits R13-2274E and R13-2274F. Following is a list of extensive changes that were made to the Title V Permit by NSR permits.

The R13-2274E revisions made to the Title V permit:

1. Implementation of a plant-wide leak detection and repair (LDAR) program for equipment that are not subject to 40 C.F.R. Part 63 Subparts H and MMM (see Section 13.0.). The monitoring results will be used to calculate the VOC emission using the "USEPA Correlation Approach" that is contained in EPA's "Protocol for Equipment Leak Emissions Estimates", EPA-453/R-95-017.
2. Remove #31 Tube Heater as an air pollution control device (formerly Section 7.1.1 through 7.1.3). The #31 Tube Heater will only remain as a process heater and fueled by natural gas. A new installed thermal oxidizer (778) or the two existing flares (774a and 774b) will control the VOC and HAP emissions (see Section 19.0) that the #31 Tube Heater controlled. The two existing flares were previously used as back-up flares to the #31 Tube Heater.
3. The new thermal oxidizer (778) along with the two existing flares (774a and 774b) shall be designed, maintained and operated so as to achieve a minimum destruction efficiency of 98% for VOCs and HAPs (see Section 19.1.1.) from the following emission sources. These emissions will be conveyed through a new stainless steel constructed piping system from various processes to the control devices.
 - 3.1. The Pavement Sealer Base (PSB) storage tanks and Modified PSB (MPSB) and Refined Tar (RT) blending tanks (Tanks 13, 14, 251, 252, 253, 254, 406, and 407) (see Sections 10.1.2, 10.1.3, and 10.1.5.).
 - 3.2. The Pavement Sealer Base (PSB), Modified PSB (MPSB), and Refined Tar (RT) Product Loading (see Sections 9.1.3 and 9.1.6).
 - 3.3. Creosote Blend Tanks 221, 222, 223 and 224 (see Sections 10.1.5 and 21.1.1).
 - 3.4. Creosote Product Loading (see Section 9.1.6.).
 - 3.5. Distillate tanks (middle and heavy fractions from the tar refining columns Tank 17 and 382) (see Section 10.1.3.).
4. According to Koppers Title V significant modification application Attachment G, Koppers will reduce VOCs and HAPs emissions to below the major source threshold level of Item 3 with the thermal oxidizer or with the two existing flares. There is a limitation and standard for the thermal oxidizer to achieve a minimum destruction efficiency of 98% for VOCs and HAPs (see Section 19.1.1.) but there is none for the two (2) flares. This issue was discussed with the Koppers' Follansbee Tar Plant contact, Mr. Mark Cilley, ESH Coordinator, and he agrees to adding "The Flares shall be maintained and operated so as to achieve a minimum destruction efficiency (DRE) of 98% for VOCs and HAPs" as Section 19.1.1 (see R13-2274F, Condition 4.1.20).
5. Use Petro Tar and Crude Tar/ Petro Tar blend as a new feedstock along with Crude Tar in the #1, #2, and #4 Distillation Column (VT01, VT03, and VT04) (see Section 5.0.) to produce petroleum pitch from Petro Tar, co-distill pitch from Crude Tar/ Petro Tar blend, and coal tar pitch from Crude Tar.
6. Construct Tank 808 to store petroleum pitch (see Section 10.1.6.) that will be controlled by Scrubber E (see Section 10.1.4.). Existing tanks 50 and 382 will be used for raw material and distillate fraction. Tanks 50 and 382 will be controlled by either a thermal oxidizer (778) or the two existing flares (774a and/or 774b) (see Section 10.1.3.).

7. Minor changes in the Waste Water Treatment Plant (see Section 11.1.1.) that will not result in any air emission changes or the addition of equipment. These changes are:
 - 7.1. Tanks 510 and 511 will receive sludge from the API Separator instead of receiving the plant's wastewater.
 - 7.2. Tanks 540 and 541 will receive the plant's process water instead of receiving the wastewater after the API Separator. Wastewater from the API Separator will go directly to the DAF Separator.
 - 7.3. Tanks 540 and 541 will be enclosed and off-gases will go to the Aeration Basin and used as the process air. The off-gases from the API Separator, DAF Separator, and Tanks 510 and 511 will also go to the Aeration Basin and used as the process air.
8. To show compliance as a minor source of total HAP, VOC's, individual HAPS of Naphthalene and POM, and with the facility benzene reduction, Koppers will maintain the following monthly records to calculate monthly emissions:
 - 8.1. Boilers and process heaters fuel consumption (see Sections 4.4.1.1., 5.4.1.1., and 7.4.1.1.).
 - 8.2. Process vents operating hours (see Sections 5.4.1.2., 6.4.1.1., 7.4.1.2.).
 - 8.3. Storage /blend tanks content and throughput of each (see Section 10.4.1.).
 - 8.4. Product loading quantity (see Section 9.4.1.).
 - 8.5. Melt Pot throughput (see Section 5.4.1.3.).
 - 8.6. Quantity of material from incoming vehicles requiring heat-up (see Section 12.4.1.1.).
 - 8.7. Quantity of tank cars cleaned (see Section 12.4.1.2.).
 - 8.8. Slop throughput to Slop Conveyor and Tanks 406 and 407 (see Section 7.4.1.).
9. Section 13.0 was revised to incorporate Koppers leak detection and repair (LDAR) program for all equipment not otherwise subject to the LDAR programs of 40 C.F.R. Part 63 Subparts H and MMM. According to Koppers Title V Significant Modification Application Attachment O, they propose to use the leak definition in 40 C.F.R. Part 63 Subpart H (HON). In the first year the plant will conduct LDAR monitoring for this equipment. After the first year they will monitor one-third of the plant every year for three years. If the percent of leaking equipment during the last three (3) years is less than 2%, then the plant will monitor the equipment every five (5) years. If the percent of leaking equipment during the last three (3) years is equal to or greater than 2%, then the facility will continue the same frequency of monitoring of one-third of the plant for three years. Then they will reevaluate the percentage of leaking equipment to see if the monitoring can be reduced to once every five (5) years.
10. Revised Section 19.0 by replacing Miscellaneous Organic Chemical Production and Processes (MON) Requirements with Control Devices Requirements. The Follansbee Tar Plant is no longer subject to the MACT MON, 40 C.F.R. Part 63 Subpart FFFF, per R13-2274E since the plant has become a synthetic minor source of VOC, total HAPS, and Naphthalene and Polycyclic Organic Matter (POM). The control devices are:
 - 10.1. New installed thermal oxidizer (778),
 - 10.2. Two flares (774a and 774b), and

- 10.3. Scrubber E (777).
11. References to 45CSR6 for the back-up flares and #31 Tube Heater were deleted from Section 7.0. 45CSR6 references that became effective on June 1, 2008 were included in Section 19.0 for the two flares and thermal oxidizer.
12. Revised Section 20.0 from Industrial/Commercial/Institutional Boilers and Process Heaters MACT to *Reserved* since the Industrial/Commercial/Institutional Boilers and Process Heaters MACT has been vacated and remanded. EPA will be issuing guidance in the future regarding the 112(j) case-by-case MACT determination.
13. Permit R13-2274E includes:
- 13.1. Consent order CO-SIP-91-32 was for the installation of the Pencil Pitch Baghouse to reduce the PM and PM₁₀ from the Pencil Pitch Dryer, see Section 8.0. When the consent order was issued, the Follansbee Tar Plant was located in a PM₁₀ non-attainment area, which is now a non-attainment area for PM_{2.5}. PM_{2.5} emissions are a surrogate to PM₁₀ emissions.
- 13.2. Consent order CO-R13-E-2005-4 was for Koppers Follansbee Tar Plant to implement a Supplemental Environmental Plan Project (SEP) for equipment that is subject to 40 C.F.R. Part 61 Subpart J to follow LDAR requirements 40 C.F.R. Part 63 Subpart H instead of 40 C.F.R. Part 61 Subpart V LDAR requirements.
- 13.3. R13-2274E replaces R13-0167. R13-0167 was for installation of Boiler #5, see Section 4.1.1.
- 13.4. R13-2274E replaces and supersedes previously issued Permit R13-2274D, see Section 3.1.26.
- 13.5. R13-2274F replaces and supersedes previously issued Permit R13-2274E, see Section 3.1.26.
14. Monitoring (Section 8.2.1.) and Recordkeeping (Sections 8.4.2 and 8.4.3.) Requirements were included for the permittee to show compliance on a continuous basis. This will ensure the collection and control efficiencies required by the Pencil Pitch Baghouse (Section 8.1.3.). These conditions will provide adequate provisions for determining whether the Pencil Pitch Baghouse is or is not in compliance with the emission limits of Sections 8.1.1 and 8.1.2.
15. The following was added in Section 13.0 title “Group 007 and Other Equipment that is not subject to an LDAR program {Groups 002, 004, 006, 008, 009 (except LR 2-2), 00A (except Tanks 11, 83, 623, 3N, 221, 222, 223, 224), 00C, 00D, 00E, and 00G}.”
16. The following was added in Section 18.0 title “Equipment in Benzene Service under 40 C.F.R. Part 61 Subpart J, Equipment in Naphthalene Service - Group 005, LR 2-2, Tanks 3N, 83, and 623”. “Group 007 and Equipment in Benzene Service under Subpart J” was removed from the citations in Section 18.0.
17. Added Section 1.2, Active R13, R14, and R19 Permits and Table.
18. Removed the suffixes in the citations for permit R13-2274.
19. Updated the facility information and regulatory language for Sections 3.1.1 and 3.1.2, 45CSR§§6-3.1 and 3.2.

20. Flares, 774a and 774b, were installed in 1994 without a construction permit. In 1992, a Consent Order (CO-R27-92-16) was issued for the installation of a debenzolizer unit and to incorporate the benzene control program that was outlined in the consent order for the control of benzene emissions. Then NSR permit (R13-2274) was issued in 1999 to replace and supercede CO-R27-92-16. The only reference in the permit regarding the flares is that they “shall only be used as a back up in case of a process upset or malfunction with the #31 Tube Heater”. The requirements for the flares did not change in subsequent permits, R13-2274A, R13-2274B, R13-2274C, and R13-2274D. Limitations, monitoring, testing, and recordkeeping requirements for the flares were incorporated into R13-2274E for the Follansbee Tar Plant to become a synthetic minor source of HAPs.
21. The initial Title V Permit divides the Koppers’ Follansbee Tar Plant by process flow diagrams [thirteen (13) groupings]. The Significant Modification Title V Permit (SM01) maintains the same format.
22. Emission Unit Table (Section 1.0) revised from initial Title V Permit.
 - 22.1. Relocated the backup Flare (774) that was from Group 005 and Pencil Pitch Baghouse (771) that was from Group 008 to Control Devices group. During the Significant Modification Title V Permit (SM01) review, the writer was informed by the permittee that the backup Flare (774) was actually two flares (774a and 774b). This is the reason the backup Flare was listed as one flare in the initial Title V Permit.
 - 22.2. Equipment Unit Description for Emission Unit ID 007 under Equipment Leak Group 007 was revised to read Entire Facility not covered by a LDAR Plan.
 - 22.3. All the tanks are now listed in Group 00A since Group 00B for tanks was combined together with Group 00A as requested by the permittee. All citations referencing Group 00B for tanks were removed (see Sections 3.0, 10.0, 16.0, and 17.0.)
 - 22.4. Koppers desires flexibility to store commodities in any tank and load products from any loading rack as long as they follow the control plan as outlined in their Significant Modification Title V Permit (SM01) application. Koppers will maintain recordkeeping of such changes. Thus, the commodities stored in any tanks and products loaded by the loading racks and other information were removed from each tank and loading rack.
 - 22.5. Tanks 540 and 541 were relocated from Tanks Group 00B to Effluent Plant Group 00C. Tank 541 was modified in 2006 after the initial Title V Permit was issued in January 2006.
 - 22.6. According to the permittee’s records review, they determined that the “Year Installed” in the initial Title V Permit for the following tanks should be revised.
 - 22.6.1. Tank 11 was revised from 1993 to 1965.
 - 22.6.2. Tank 18 was revised from blank to 1957.
 - 22.6.2. Tank 52 was revised from 1929 to 1928.
 - 22.6.3. Tank 83 was revised from 1997 to 1966.
 - 22.6.4. Tank 100 was revised from 1951 to 1987.
 - 22.6.5. Tank 126 was revised from 1981 to 1970.
 - 22.6.6. Tanks 1M, 2N, 3N, 4N, 5N, 6R, and 553 were revised from 1993 to Pre-1970.
 - 22.7. According to the permittee’s review of records recalculations, the Tank 1 design capacity is 440,638 gallons instead of 440,640 gallons.

- 22.8. According to the permittee's review of records recalculations, the Tank 5 design capacity is 518,077 gallons instead of 518,484 gallons.
- 22.9. According to the permittee's records, Tank 15 was modified/reworked in 2003.
- 22.10. Tank 50 was removed and rebuilt in 2007. This was after the initial Title V Permit was issued in January 2006. The design capacity was also revised from 1,078,128 gallons to 1,065,991 gallons per the permittee's calculations. This was a like replacement.
- 22.11. Based on the Koppers' recalculations of Tanks 51 and 52 design capacities, they were each revised from 1,078,128 and 1,062,945 gallons, respectively, to 1,065,991 gallons.
- 22.12. According to the permittee's review of records recalculations, the Tank 57 design capacity is 440,638 gallons instead of 440,639 gallons.
- 22.13. According to the permittee's review of records recalculations, the Tank 126 design capacity is 60,162 gallons instead of 60,910 gallons.
- 22.14. According to the permittee's review of records recalculations, the Tank 127 design capacity is 60,162 gallons instead of 60,158 gallons.
- 22.15. According to the permittee's review of records recalculations, the Tank 302 design capacity is 5,269 gallons instead of 5,239 gallons.
- 22.16. According to the permittee's review of records and recalculations, the Tank 337 design capacity is 19,976 gallons instead of 30,000 gallons.
- 22.17. According to the permittee's review of records recalculations, the Tank 364 design capacity is 25,910 gallons instead of 15,158 gallons.
- 22.18. According to the permittee's review of records recalculations, the Tank 382 design capacity is 252,898 gallons instead of 252,618 gallons.
- 22.19. According to the permittee's review of records recalculations, the Tank 804 design capacity is 63,546 gallons instead of 55,943 gallons.
- 22.20. According to the permittee's review of records recalculations, the Tank 806 design capacity is 63,546 gallons instead of 65,267 gallons.
- 23.0. Three groups were added to the Emission Unit Table. They are:
 - 23.1. Control Devices (Section 19.0)
 - 23.2. Slop Conveying and Recycling Group 00G
 - 23.4. Paved Roadways
- 24.0. 40CSR34 is now cited with 40 C.F.R. Part 61 since 40CSR15 is listed as an inactive WV state rule. The citations have been revised accordingly.
- 25.0. The citation for Section 4.1.6 was revised to 45CSR§30-12.7. Mark Cilley, ESH Coordinator, concurs that "liquid fuel" needs to be defined in the Title V permit. "Liquid fuel" is a mixture of benzene-rich light oil and LB Unwashed Solvent. "Liquid fuel" is stored Tank 11 and the emissions are controlled by the Thermal Oxidizer or the Flare.
- 26.0. Occasionally in the R13 and the Title V applications, the Emission Unit ID's are given different numbers. Koppers requested that the emission unit ID's between Title V permit and the R13-2274F permit be consistent for example: Pencil Pitch Hot Oil Heater from (773) to (008-01),

Pencil Pitch Dryer from (770) to (008-02), CCOT Barge Heating from (Z01-2) to (Z01-1), RCO Heating from (Z01-3) to (Z01-2), RCO Tankcars Heater from (Z01-4) to (Z01-3), and Tankcar Cleaning Station from (Z02) to (00E).

The R13-2274F revisions made to the Title V permit:

1. At Koppers request, the tanks and loading racks were removed from condition 4.1.1 of the R13-2274E permit since conditions 4.1.16 (Title V Permit, Sections 10.1.5 and 10.1.6) and 4.1.17 (Title V Permit, Sections 9.1.4 and 9.1.5) already have essentially the same requirement for the tanks and loading racks. This change will prevent the tanks from unnecessarily being vented to a control device in the event that the tanks/loading racks change service to non VOC/HAP materials. The condition 4.1.1 of the R13-2274F permit is divided into the following sections for the Title V that are based on Koppers' process flow diagram: Title V Permit, Sections 5.1.8, 6.1.1, 7.1.10, 10.1.1, 12.1.1, and 21.1.1.
2. The temperature requirement for the Thermal Oxidizer was revised and the additions of flare conditions were added to Title V Permit, Section 19.1.1 (R13-2274F, conditions 4.1.20. 1, 2, and 3). The temperature from the recent performance test was 1308 °F.
3. Title V Permit, Section 19.1.15 (R13-2274F, condition 4.1.31.) is for the "Piggy" back flare (744b) to be taken out of service by March 31, 2009 or be subject to the "Main" flare requirements. According to an email that the Title V permit writer received from Mark Cilley of Koppers, the "Piggy" back flare was taken out-of-service on March 9, 2009. All previous references to flare (774b) were removed.
4. Title V Permit, Sections 19.2.2. c., d., and e (R13-2274F, conditions 4.2.4. 3, 4, and 5) were included for additional flare monitoring requirements.

45CSR6 Combustion of Refuse

Koppers uses flare (774a) and a thermal oxidizer (778). Each flare and thermal oxidizer each have DRE 98% efficiency. These control devices combust natural gas.

Unit	Incinerator Capacity	Factor F	Allowable PM Emissions
	Tons/hr		LB/hr
Thermal Oxidizer	3.3425	5.43	18.15
Flare (774a)	3.3425	5.43	18.15

Koppers shall show compliance by keeping records of the quantity and type of gaseous emissions from each source being incinerated by the control devices. For the flares, Koppers will show compliance by continuously monitoring the flare flame (Section 19.2.2.a.), recordkeeping of monitored data on hourly basis (Section 19.2.2.b.), records of fuel type, quantity of fuel combusted, and calculating emissions using AP-42 factors. Koppers will also continuously monitor the combustion temperature of the thermal oxidizer (Section 19.2.1.a.), record the temperature at least once every 15-minutes (Section 19.2.1.b.), and daily calculate the 24-hour average temperature (Section 19.2.1.c.).

The permittee shall conduct monthly Method 22-like visible emission observations to determine if visible emissions are present, followed by 40 C.F.R. Part 60 Appendix A Method 9 tests unless corrected within 24 hours (Section 3.2.1.). Records are to be kept.

40 C.F.R. Part 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and Prior to May 19, 1978

The Koppers Follansbee Tar plant is subject to 40 C.F.R. Part 60 Subpart K since their Tanks 58, 59, and 806 were installed between June 11, 1973 and May 19, 1978. They have capacities greater than 40,000 gallons and a potential to store a petroleum liquid (petro tar or petro tar derivative). According to 40 C.F.R. § 60.113 (see Section 10.4.2.), Koppers shall maintain records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid stored.

Tank 153 is not subject to 40 C.F.R. Part 60 Subpart K since its capacity is less than 40,000 gallons. Tank 153 stores petroleum liquid and it was installed between June 11, 1973 and May 19, 1978.

The permittee provided information on Tanks 58, 59, and 806 that subject them to this subpart that was missed in the initial Title V Permit.

40 C.F.R. Part 60 Subpart Kb - Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984

The Koppers Follansbee Tar plant is subject to 40 C.F.R. Part 60 Subpart Kb since Tanks 48 and 49 were constructed, reconstructed, or modified after July 23, 1984. Tanks 48 and 49 have capacities equal to or greater than 75 m³ and they are used to store volatile organic liquids (VOL). These tanks are required to maintain records as outlined in the monitoring of operations of 40 C.F.R. § 60.116b (see Sections 10.4.3, 10.4.4, 10.4.5 and 10.5.1.).

Tanks 9, 15, 50, 100, 541, and 808 were built after 1984 and have a vapor pressure below 40 C.F.R. Part 60 Subpart Kb threshold; thus, these tanks are not subject to 40 C.F.R. Part 60 Subpart Kb.

The permittee provided information on Tanks 48 and 49 that subject them to this subpart that was missed in the initial Title V Permit.

Section 10.5.1 requires the permittee to notify the Administrator within 30 days when storing a volatile organic liquid (VOL) in a tank that exceeds the vapor pressures specified in 40 C.F.R. § 60.116b.

40 C.F.R. Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)

Koppers will no longer be a major source of HAPs after the facility implements a plant wide leak detection and repair (LDAR) program for all equipment otherwise not subject to 40 C.F.R. Part 63 Subparts H and MMM, installation of a thermal oxidizer, and installation of a vent systems for the emission streams from various processes to flares (774a) or thermal oxidizer (778).

40 C.F.R. Part 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Koppers submitted their initial notification requirements for liquid fuel fired Boilers 2 and 3 (001-01 and 001-02, respectively), natural gas fired Boilers 3 and 5 (001-02 and 001-04, respectively), Tube Heater #1 (002-01), Tube Heater #2 (002-02), Tube Heater #4 (002-03), Tube Heater #31 (005-05), and Pencil Pitch Hot Oil Heater (008-01) on March 10, 2005.

Removal of the 40 C.F.R. 63 Subpart DDDDD

The United States Court of Appeals for the District of Columbia Circuit on July 30, 2007 ruled the Boiler MACT, 40 C.F.R. Part 63 Subpart DDDDD, be vacated and remanded. As a result of the court's decision, a MACT for this source category will have to be implemented via a 112(j) case-by-case MACT determination or a subsequent 40 C.F.R. Part 63 proposal. Per DAQ's "Interim Guidance for Existing

Sources – Boiler and Process Heater MACT Vacature,” dated September 7, 2007, the DAQ does not intend to implement the provisions of the Boiler and Process Heater MACT for existing sources at this time. US EPA will be issuing guidance regarding the 112(j) case-by-case MACT determination of equivalent emission limitation in the future. Due to these facts, the 40 C.F.R. Part 63 Subpart DDDDD placeholder language has been removed.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

<p>40 C.F.R. Part 63 Subpart FFFF</p>	<p>National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON). Koppers is implementing plant wide leak detection and repair (LDAR) program (40 C.F.R. Part 63 Subpart H), installing a thermal oxidizer, and modifying the vent and vapor streams from the processes with stainless piping to two flares or thermal oxidizer to reduce their HAPs. Thus, Koppers Inc. Follansbee Tar Plant is not subject to this rule.</p>
<p>40 C.F.R. Part 63 Subpart DDDDD</p>	<p>National Emission Standards for Hazardous Air Pollutants for Industrial, Commerical, or Institutional Boilers and Process Heaters. This MACT has been vacated and remanded by the United States Court of Appeals for the District of Columbia Circuit on July 30, 2007.</p>
<p>40 C.F.R. Part 64</p>	<p>The Koppers Inc. Follansbee Tar Plant’s (1) Creosote Tanks (Pollutant Specific Emission Unit (PSEU)) are not subject to the Compliance Assurance Monitoring (CAM) rule because they are subject to a 40 C.F.R. Part 63 Subpart MMM that was proposed after November 11, 1990. (2) The Pencil Pitch Dryer (008-02) (PSEU) is not subject to CAM since Koppers Inc. did not submit any changes associated the significant modification for this PSEU. (3) The #32 Column, Naphthalene Loading (LR 2-2), and Naphthalene Storage (83, 623, 3N) are subject to 40 C.F.R. Part 63 Subparts F, G, and H (HON – MACT). This equipment was found to be Group 2 sources that do not require a control device. For Group 2 sources, the HON-MACT only requires recordkeeping and reporting. The HON - MACT does not have emission limitations or standards. CAM will be addressed at renewal for the HON-MACT facilities and Pencil Pitch Dryer.</p>

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

All written comments should be addressed to the following individual and office:

Wayne Green
 Title V Permit Writer
 West Virginia Department of Environmental Protection
 Division of Air Quality
 601 57th Street SE
 Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Wayne Green
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Attached are Koppers comments with DAQ's responses.



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0475 • FAX: 304/926-0479

Joe Manchin III, Governor
Randy C. Huffman, Cabinet Secretary
www.wvdep.org

June 5, 2009

Mr. Mark Cilley
SH&E Coordinator
Koppers Inc.
Carbon Materials and Chemicals
P.O. Box 665
Follansbee, WV 26037

Subject: Response to Koppers Inc.'s Follansbee Tar Plant Comments to the Draft/Proposed Title V Significant Modification Permit and Fact Sheet
Plant ID: 03-54-009-00001

Dear Mr. Cilley:

This is in response to your comments on the above subject. Although your comments were received by the DAQ after the comment period ended, May 11, 2009 at 5:00 pm, we have accepted them. Your comments are listed below, by item, followed by DAQ responses.

Comment Number 1

Koppers would like to see a general reference for the HON, PAI, Subpart FF, and request removal the bits and pieces of those regulations that were incorporated into the permit. Our argument before was that the restatements and paraphrased versions of the regulations are inappropriate, counter productive and makes the permit more confusing and complicated than necessary. The regulations are meant to be read and interpreted in their entirety.

Response Number 1

During the initial Title V permit review, Koppers provided the references to the regulations, 40 C.F.R. Part 63 Subparts F, G, H, and MMM and 40 C.F.R. Part 61 Subpart FF, that only apply to the Follansbee Tar Plant emission sources. Citing the regulations that are applicable to the Follansbee Tar Plant as stated in the draft/proposed permit meets the goal of increased clarity of an operating permit, especially for the public, Compliance and Enforcement personnel, and other permit reviewers to understand the sources obligation. DAQ disagrees with Koppers assessment that the restatements of the regulations are inappropriate, counterproductive and makes the permit more confusing and complicated than necessary since Koppers has identified what the facility is subject to. Moreover, this permit revision did not concern 40 C.F.R. part 61 Subpart FF.

Comment Number 2

Monthly actual emission calculations and recordkeeping – (Condition 4.4.1, 5.4.1, 7.4.1, 10.4.1, 12.4.1). Can this be listed one time as a facility wide recordkeeping requirement instead of broken into section? Some requirements placed under sections where the Group is not listed (quantity of tankcars cleaned put under heat up losses 00D, sloop throughput to sloop conveyors put under NDU Section 7).

Response Number 2

The significant modification Title V permit (SM01) maintains the same format as the initial Title V permit that divides the Koppers' Follansbee Tar Plant by process flow diagrams [thirteen (13) groupings]. Sections 4.4.1, 5.4.1, 7.4.1, 10.4.1, and 12.4.1 are shown with their process flow diagram grouping. These requirements are not considered a facility wide requirement.

Group 00G for Slop Conveying and Recycling was included in Section 5.0 heading and Section 7.4.1.3 was relocated to Section 5.4.1.4. According to the Emission Unit Data Sheet that was submitted with modification application for The Slop Conveying and Recycling Group, the conveyor will carry slop from tank bottoms in Group 002 to be recycled to dedicated tanks. The solid material will be heated in the dedicated tanks and then loaded with the product.

Group 00E for Tankcar Cleaning was incorporated in Section 12.0 heading.

Comment Number 3

Page 9 - VTMP, Column – Year Installed – delete 2005 as melt pot has not been installed.

Response Number 3

Replaced “2005” with “Future” for year installed since the melt pot has not been installed.

Comment Number 4

Page 9 - VTDB, Column – Year Installed – add 2008. Column – Design Capacity – insert per minute.

Response Number 4

The year installed and design capacity changes were incorporated as requested.

Comment Number 5

Page 10 - VT32, Column – Design Capacity – delete 19,280,000 Gallons of Naphthalene per year. Column 32 feed is Benzene Free Oil at a feed rate of 6,000 gallons per hour or 52,560,000 gallons per year (218,124 tons per year).

Response Number 5

The design capacity of “19,280,000 Gallons of Naphthalene” for VT32 was replaced with “52,560,000 Gallons of Benzene Free Oil” as requested.

Comment Number 6

Page 10 - VT31, Column – Design Capacity – delete 19,280,000 Gallons of Naphthalene per year. Column 31 Naphthalene production is approximately 45% of feed from 32 column or 98,156 tons per year (22,897,480 gallons)

Response Number 6

The design capacity of “19,280,000 Gallons” for VT31 was replaced with “22,897,480 Gallons” as requested.

Comment Number 7

Page 10 - BW02, Column – Emission Point ID – delete fugitive. Not needed, covered under Emission Unit ID 007.

Response Number 7

The word “Fugitive” was removed from the emission point ID column for BW02 as requested.

Promoting a healthy environment.

Comment Number 8

Page 10 - BW03, Column – Emission Point ID – delete fugitive. Not needed, covered under Emission Unit ID 007.

Response Number 8

The word “Fugitive” was removed from the emission point ID column for BW03 as requested.

Comment Number 9

Page 10 - 773, Column – Emission Unit ID – delete 773 and keep 008-01 to remain consistent with R13 permit.

Response Number 9

Although the emission unit ID in the Title V modification application was listed as “773,” the emission unit ID was revised to “008-01” and “773” was deleted as requested. Occasionally, in the R13 and the Title V applications, the emission unit ID’s are given different numbers. Koppers requested that emission unit ID’s between Title V permit and the R13-2274F permit be consistent.

Comment Number 10

Page 10 - 770, Column – Emission Unit ID – delete 770 and keep 008-02 to remain consistent with R13 permit.

Response Number 10

Although the emission unit ID in the Title V modification application was listed as “770,” the emission unit ID was revised to “008-02” and “770” was deleted as requested. Occasionally, in the R13 and the Title V applications, the emission unit ID’s are given different numbers. Koppers requested that emission unit ID’s between Title V permit and the R13-2274F permit be consistent.

Comment Number 11

Page 15 - 42, Column – Design Capacity – delete 1,000,000. Tank volume is 251,898 gallons not 1,251,898.

Response Number 11

Tank 42’s design capacity was amended as requested.

Comment Number 12

Page 18 - 301, Column – Design Capacity – delete 3 and insert 6. Tank volume is 5,269 gallons not 5,239.

Response Number 12

Tank 301’s design capacity was revised as requested.

Comment Number 13

Page 18 - 302, Column – Design Capacity – delete 6 and leave 3. Tank volume is 5,239 gallons not 5,269.

Response Number 13

The typo was corrected.

Comment Number 14

Page 19 - 382, Column – Design Capacity – delete 2 and insert 1. Tank volume is 251,898 gallons not 252,898.

Response Number 14

The typo was corrected.

Comment Number 15

Page 19 - 501, Column – Design Capacity – delete 7200 gallons/hr.

Response Number 15

Under the “Design Capacity” for Tank 501, the “7200 gallons/hr” was removed as requested.

Comment Number 16

Page 20 - 805, Column – Emission Point ID – delete 805 and insert 777.

Response Number 16

Tank 805’s emission point ID was revised as requested.

Comment Number 17

Page 20 - 805, Column – Control Device – delete None and insert 777 (Scrubber E).

Response Number 17

The control device for Tank 805 was amended by replacing “None” with “777 Scrubber E” as requested.

Comment Number 18

Page 21 - 540, Column – Year Installed – add 2006 and delete 1953. Tank was rebuilt in 2006.

Response Number 18

The year installed for Tank 540 was revised by replacing “1953” with “2006.”

Comment Number 19

Page 21 - 541, Column – Year Installed – delete 2006 and keep 1953. Tank ha(s) not been rebuilt.

Response Number 19

The year installed for Tank 541 was revised by replacing “2006” with “1953.”

Comment Number 20

Page 21 - Z01-1 CCOT Barge Heating, Column – Emission Point ID – Delete 2 and keep 1 to remain consistent with R13 permit

Response Number 20

The change was made as requested, which agrees with the initial Title V permit. Occasionally, in the R13 and the Title V applications, the emission unit ID’s are given different numbers. Koppers requested that emission unit ID’s between Title V permit and the R13-2274F permit be consistent.

Comment Number 21

Page 21 - Z01-2 RCO Barge Heating – Emission Point ID – Delete 3 and keep 2 to remain consistent with R13 permit.

Response Number 21

The change was made as requested, which agrees with the initial Title V permit. Occasionally, in the R13 and the Title V applications, the emission unit ID's are given different numbers. Koppers requested that emission unit ID's between Title V permit and the R13-2274F permit be consistent.

Comment Number 22

Page 21 - Z01-3 RCO Tankcar Heating – Emission Point ID – Delete 4 and keep 3 to remain consistent with R13 permit.

Response Number 22

The change was amended as requested, which agrees with the initial Title V permit. Occasionally, in the R13 and the Title V applications, the emission unit ID's are given different numbers. Koppers requested that emission unit ID's between Title V permit and the R13-2274F permit be consistent.

Comment Number 23

Page 22 - Z2 – Emission Point ID – Delete Z2 and keep 00E to remain consistent with R13 permit.

Response Number 23

The emission point ID for Tankcar Cleaning Station was revised by deleting “Z02” and keeping “00E” as requested, which concurs with the initial Title V permit. Occasionally, in the R13 and the Title V applications, the emission unit ID's are given different numbers. Koppers requested that emission unit ID's between Title V permit and the R13-2274F permit be consistent.

Comment Number 24

Page 22 - 221, Column – Design Capacity – delete 2 and add 6. Tank volume is 54,146 gallons not 54,142.

Response Number 24

The design capacity for Tank 22 was revised as requested.

Comment Number 25

Page 22 - 222, Column – Design Capacity – delete 2 and add 6. Tank volume is 54,146 gallons not 54,142.

Response Number 25

The design capacity for Tank 222 was amended as requested.

Comment Number 26

Page 22 - 223, Column – Design Capacity – delete 2 and add 6. Tank volume is 54,146 gallons not 54,142.

Response Number 26

The design capacity for Tank 223 was revised as requested.

Comment Number 27

Page 22 - 224, Column – Design Capacity – delete 2 and add 6. Tank volume is 54,146 gallons not 54,142.

Response Number 27

The design capacity for Tank 224 was revised as requested.

Comment Number 28

Page 23 – Under Flares or Thermal Oxidizers

Remove the material listed for each loading rack.

As part of the permit negotiations with WVDEP for storage tanks and loading racks, Koppers requested that individual tanks/rack have no control requirement except when handling a “material requiring control”, then the control device would require a 98% DRE. Can we put at the end of the Emission Unit/Control Device table that the controls listed are dependant of the materials being stored or transferred from the tank or rack? For example, Tank 6 is listed as controlled. If Tank 6 stores NSR, then controls are not required, but if it stores crude tar, controls are required.

Response Number 28

This table was requested by Koppers during the initial Title V permit process. The storage tanks and loading racks listed in this table are based on the VOC and HAP Control Plan that Koppers submitted and the information submitted in their application.

1. The material from the loading racks was removed as requested.
2. The loading racks and storage tanks were removed from the table as requested.

Comment Number 29

Page 36 – Visible emissions from processes. Condition 3.1.17, why are Groups 00A, 00F and Tanks 510/511 listed? Is this just a facility-wide requirement?

Response Number 29

Section 3.1.17 was relocated to Sections 10.1.5, 11.1.2, and 21.1.10. Section 3.1.17 was revised to read “Reserved.” The citation for each section was revised accordingly.

Comment Number 30

Page 38, Condition 3.1.28 – list of sources subject to this requirement – instead of listing all the emission units, processes, etc, can we leave just as a facility-wide requirement?

Response Number 30

Since Section 3.1.28 is a facility-wide requirement, the emission sources that were listed in the citation were removed.

Comment Number 31

Conditions 5.1.2 (pg 52) and 5.1.5 (pg 53) are repeated. Remove Condition 5.1.2.

Response Number 31

Condition 5.1.2 is for sulfur dioxide and Condition 5.1.5 was intended to cover particulate matter only, therefore, it is not repeated and does not need to be removed. However, the following changes were made to correct the repetition.

Condition 5.1.2 was revised by adding “s” to Section and “3.1.27.”

Condition 5.1.5 was revised by removing “sulfur dioxide and” and “Section 5.1.1” that were mistakenly included.

Comment Number 32

Page 47, Condition 4.1.8, PM limits. This table should be removed. The applicable requirement is for PM limits from all fuel burning units. The table shows only the combined emissions from the Boilers; other fuel burning sources are omitted. (Same for 5.1.4, 7.1.2)

Response Number 32

Compliance streamlining language for PM was incorporated in Sections 3.1.27 and 4.1.2. Streamlining is a side-by-side comparison of applicable requirements that an emission unit is allowed to emit per an NSR permit, state rule, or a federal regulations. Since the PM requirements in Sections 3.1.27 and 4.1.2 are more stringent than 45CSR§§2-4.1 and 4.1.b, streamlining language was included in these sections referencing this rule. Sections 4.1.8, 5.1.4, and 7.1.2 were deleted as requested.

Comment Number 33

Page 48, Condition 4.1.14, SO₂ limits. This table should be removed. The applicable requirement is for SO₂ from all stacks (all fuel burning equipment). The table shows only the combined emissions from the Boiler; other fuel burning sources are omitted. (Same for 5.1.1, 7.1.6)

Response Number 33

Compliance streamlining language for SO₂ was incorporated in Sections 3.1.27 and 4.1.2. Streamlining is a side-by-side comparison of applicable requirements that an emission unit is allowed to emit per an NSR permit, state rule, or a federal regulations. Since the SO₂ requirements in Sections 3.1.27 and 4.1.2 are more stringent than 45CSR§§10-3.1 and 3.1.e, streamlining language was included in these sections referencing this rule. The tables in Sections 4.1.14, 5.1.1, and 7.1.6 were deleted as requested.

Comment Number 34

Page 55, Condition 6.1.1.1, remove acid washers.

Response Number 34

“Acid washers” was removed from Section 6.4.1.1 as suggested since it is not considered to be a process vent as thought. Also, “Acid washers” is not in the R13-2274F permit. “Acid Washers of source Group 004” in section 6.0 heading and the “Acid Washers” in the Emission Table were removed. These were in the initial Title V permit.

Comment Number 35

Page 57 Condition 7.1.4, Delete reference to section 4.1.9 (this applies only to boiler 2 & 5) and reference section 4.1.10 that we believe was intended.

Response Number 35

The typo error was corrected as suggested.

Comment Number 36

Page 62, Section 8.31 and 8.5.1, keep “no additional requirements” instead of “See Section 3.?”. This is what was done for other sections.

Response Number 36

Sections 8.3.1 and 8.5.1 were revised as mentioned. Section 8.4.2 becomes section 8.4.1 and the sections that followed section 8.4.1 were renumbered accordingly.

Comment Number 37

Same comment as item #26 for description in Section 9, pg. 63.

Response Number 37

Per comment number 28, references to control devices in section 9.0's heading were removed and revised from:

“Source-Specific Requirements [Product Loading Racks (LR 2-2, LR 3-2, LR 4-1, LR 4-2, LR 5-2, LR 5-3) controlled by Flares or Thermal Oxidizer; Loading Racks (LR 4-5, LR 5-4, and LR 5-5) controlled by Scrubber E; No add-on controls devices for Loading Racks (R-1, R-2, LR 1-1, LR 1-2, LR 1-3, LR 1-4, LR 1-5, LR 2-1, , LR 3-1, LR 4-3, LR 4-4, LR 4-6, LR 5-1, LR 5-6, LR 5-7, LR 5-8, LR 5-9, LR 5-10) of source Group 009 and emission point ID(s) (774a, 776, 777, 778~~31, Stack, Stack Stack, Stack~~)”

to:

“Source-Specific Requirements [Product Loading Racks (LR 2-2, LR 3-2, LR 4-1, LR 4-2, LR 5-2, LR 5-3, LR 4-5, LR 5-4, LR 5-5, R-1, R-2, LR 1-1, LR 1-2, LR 1-3, LR 1-4, LR 1-5, LR 2-1, , LR 3-1, LR 4-3, LR 4-4, LR 4-6, LR 5-1, LR 5-6, LR 5-7, LR 5-8, LR 5-9, LR 5-10) of source Group 009 and emission point ID(s) (774a, 776, 777, 778~~31, Stack, Stack Stack, Stack~~)”

Comment Number 38

Same comment as item #26 for description in Section 10, pg. 65.

Response Number 38

Per comment number 28, references to control devices in section 10.0's heading were removed and revised from:

“Source-Specific Requirements [Tanks Regulated of source Group 00A~~B~~ with Controls: 774a or 778 #31 Tube Heater for Tanks 2N, 3N, 6, 7, 9, 10, 11, 13, 14, 17, 30, 40, 41, 48, 49, 50, 55, 56, 58, 82, 83, 89, 126, 127, 251, 252, 253, 254, 382, 406, 407, and 623; Scrubber B for Tank 4; Submerge Fill for Tanks 51 and 52; Tanks 801, 802, 804, 805, 806, and 808 controlled by Scrubber E; no add-on controls devices for Tanks 1, 2, 3, 5, 8, 15, 16, 18, 20, 21, 23, 24, 25, 28, 33, 42, 51, 52, 53, 54, 57, 59, 70, 71, 72, 73, 84, 85, 87, 88, 100, 151, 152, 153, 300, 301, 302, 303, 304, 305, 308, 323, 337, 351, 352, 360, 361, 362, 363, 364, 377, 378, 381, 382, 383, 408, 501, 502, 540, 541, 553, 560, 561, 580, 803, 1M, 4N, 5N, and 6R; and emission point ID(s) (778~~31, 774a, and 777, 775~~Stack Stack Stack)]”

to:

“Source-Specific Requirements [Tanks Regulated of source Group 00A~~B~~ with Controls: #31 Tube Heater for Tanks 2N, 3N, 6, 7, 9, 10, 11, 13, 14, 17, 30, 40, 41, 48, 49, 50, 55, 56, 58, 82, 83, 89, 126, 127, 251, 252, 253, 254, 382, 406, 407, and 623; Scrubber B for Tank 4; Submerge Fill for Tanks 51 and 52; Tanks 801, 802, 804, 805, 806, and 808 no add-on controls devices for Tanks 1, 2, 3, 5, 8, 15, 16, 18, 20, 21, 23, 24, 25, 28, 33, 42, 51, 52, 53, 54, 57, 59, 70, 71, 72, 73, 84, 85, 87, 88, 100, 151, 152, 153, 300, 301, 302, 303, 304, 305, 308, 323, 337, 351, 352, 360, 361, 362, 363, 364, 377, 378, 381, 382, 383, 408, 501, 502, 540, 541, 553, 560, 561, 580, 803, 1M, 4N, 5N, and 6R; and emission point ID(s) (778~~31, 774a, and 777, 775~~Stack Stack Stack)]”

Comment Number 39

Page 71, Section 13. It is confusing as to what should be here. The description should be “Equipment Leaks – Group 007. Includes Equipment regulated under the HON and PAI NESHAP, and Other Equipment not Regulated under a Federal NESHAP LDAR Program”. Remove the groups and reference the HON and PAI sections as necessary in this section.

Response Number 39

References in section 13.0's heading was revised from:

“Source-Specific Requirements [Equipment Leaks – Group 007 and Other Equipment that is not subject to an LDAR program {Groups 002, 004, 006, 008, 009 (except LR 2-2), 00A (except Tanks 11, 83, 623, 3N, 221, 222, 223, 224), 00C, 00D, 00E, and 00G}]”

to:

“Source-Specific Requirements [Equipment Leaks – Group 007]”

Reference to the HON and PAI were not made to the conditions in 13.0 since section 13 is for a plant wide leak detection and repair program for all equipment not subject to LDAR programs; such as, 40 C.F.R. Part 63 Subparts H and MMM.

Comment Number 40

Section 14, Subpart J

Page 73, Condition 14.1.3(1). Remove “Currently, Koppers has the design capabilities to use more than 1,102 tons of benzene per year”.

Page 73, Condition 14.1.3(2). Remove “Koppers does not qualify for this exemption since the Debenzolizer Unit does have equipment in benzene service”

Page 73, Why does 14.1.4, Definitions, require a compliance certification?

Response Number 40

The changes to sections 14.1.3 (1) and (2) were not requested in the modification application but they appear to be administrative in nature. Therefore, the requested statements were removed from these sections.

Koppers wants to know why “require a compliance certification” is in the definition. It appears that this was an error in the initial Title V permit. This change was not requested in the modification application, but it appears to be administrative in nature. Since section 14.1.4 does not require compliance certification, this statement was removed.

Comment Number 41

Page 74, Condition 14.1.5 and 6, remove, there is no longer a SEP, this is now a R13 requirement.

Response Number 41

- a. Section 14.1.5 was revised to concur with condition 4.1.24 of the R13-2274F permit. The consent order requiring the Supplemental Environmental Project (SEP) was merged into the R13-2274F permit.
- b. Section 14.1.5 in the initial Title V permit was deleted because it was replaced with section 14.1.5 of the Title V significant modification.

Comment Number 42

Page 124, remove “Note: The most recent test temperature for the thermal oxidizer is 1308 °F”.

Response Number 42

This note is to inform the inspector of the recent test results to provide a guide for enforcement of section 19.1.1.1. The note will remain in the permit. However, the note will list the date on which the test resulted in this temperature.

Please note the following additional revisions:

1. Headings for sections 14.0 and 15.0 were revised to include “Equipment in Benzene Service” since these sections are requirements only for equipment in benzene service.
2. Headings for sections 16.0, 17.0 and 18.0 were revised as well as the citations in these sections were revised to remove reference to loading racks and storage tanks that transfer and store material as requested in comment number 28, for example, benzene, POM, naphthalene or etc.

Fact Sheet

Comment Number 43

Page 1 of Fact Sheet – Facility Description – change capacity of tar plant to 166,650 tons per year and chemical plant capability of recovering 98,156 tons to correspond to current permitted capacities from permit modification.

Response Number 43

The facility description was revised as requested.

Comment Number 44

Page 3 - Plant Wide Emissions Summary – states “No Change” or a decrease or increase. From what? Not sure what this table is referencing.

Response Number 44

“No Change” or a decrease or increase in emission means the difference in emissions from the initial Title V permit to the current significant modification (see Attachment S of Koppers Facility-Wide Modification Permit Application).

Comment Number 45

Page 5 of Fact Sheet – Item 3 – Change verbiage in first sentence to read: “The new thermal oxidizer (778) along with the two existing flares (774a and 774b) shall be designed, maintained and operated so as to achieve a minimum destruction efficiency of 98% (see Section 19.1.1.) for VOCs and HAPs from the following.” This is a more accurate description and corresponds to verbiage in R13 permit.

Response Number 45

Number 3.0 under the Determinations and Justifications heading in the Fact Sheet was revised as follows:

“The new thermal oxidizer (778) along with the two existing flares (774a and 774b) shall be designed, maintained and operated so as to achieve a minimum destruction efficiency of 98% for VOCs and HAPs (see Section 19.1.1) from the following emission sources.”

Comment Number 46

Page 5 of Fact Sheet – Item 3 – Change verbiage in first and second sentence to read: “According to Koppers Title V significant modification application Attachment G, Koppers will reduce VOC and HAP emissions to below the major source threshold level (Item 3) with the thermal oxidizer or with the two existing flares. There is a limitation and standard for the thermal oxidizer to achieve a minimum destruction efficiency of 98% for VOCs and HAPs (see Section 19.1.1.) but there is none for the two (2) flares.”

Response Number 46

Number 4.0 under the Determinations and Justifications heading in the Fact Sheet was revised as suggested.

Comment Number 47

Page 7, Item 13, replace R13-2274E with R13-2274F. Also in 13.1 & 2, R13-2274F replaces CO-SIP-91-32 and CO-R13-E-2005-4, respectively.

Response Number 47

Number 13.0 under the Determinations and Justifications heading in the Fact Sheet was revised by adding 13.5 to indicate that R13-2274F replaces and supersedes the previously issued Permit R13-2274E, CO-SIP-91-32 and CO-R13-E-2005-4, see Section 3.1.26 of the Title V permit.

Comment Number 48

Page 10, 45CSR6, remove the incinerator capacity and allowable PM emissions.

Response Number 48

Koppers' flare and thermal oxidizer are incinerators that are subject to 45CSR6. The incinerator capacity and allowable PM emissions were not removed as requested.

The following was included in the Fact Sheet's Determinations and Justifications heading as 26.0:

Occasionally in the R13 and the Title V applications, the emission unit ID's are given different numbers. Koppers requested that the emission unit ID's between Title V permit and the R13-2274F permit be consistent for example: Pencil Pitch Hot Oil Heater from (773) to (008-01), Pencil Pitch Dryer from (770) to (008-02), CCOT Barge Heating from (Z01-2) to (Z01-1), RCO Heating from (Z01-3) to (Z01-2), RCO Tankcars Heater from (Z01-4) to (Z01-3), and Tankcar Cleaning Station from (Z02) to (00E).

Thank you for your comments.

Should you have any questions regarding the responses, please call me at (304) 926-0499 ext 1258.

Sincerely,

Wayne Green

Wayne Green
Engineer