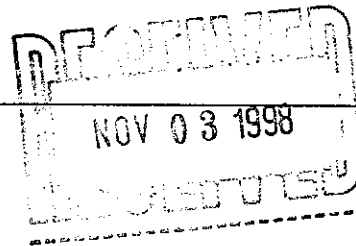


November 2, 1998



Mr. William J. Charlton, Chief
Engineering Services
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222

**CERTIFIED MAIL
RETURN RECEIPT
REQUESTED
Z 306 235 486**

**RE: Koppers Industries, Inc. – Monessen Coke Plant
Response #2 to June 2, 1998 Meeting**

Dear Mr. Charlton:

On June 2, 1998, Koppers Industries, Inc. ("KII") met with the Pennsylvania Department of Environmental Protection (the "Department") to discuss the amendment to the Reasonably Available Control Technology ("RACT") Permit. During this June 2nd meeting, the Department requested that KII provide three responsive items, as follows:

1. Propose RACT Permit language reflecting the method of demonstrating compliance with the limitations placed on those sources that are not subject to stack testing;
2. Proposed potential-to-emit emission rates for the coke battery underfire stacks (1B and 2) as well as the pushing emission control system ("PECS") stack; and
3. Determine whether there was an annual coal feed capacity limit under the 40 CFR Part 63 Subpart L Maximum Achievable Control Technology ("MACT") regulations for coke plants.

Proposed RACT Permit language for Condition 8

In a letter from myself, dated June 16, 1998, KII proposed language to be incorporated into the RACT Permit Condition 8, indicating the manner in which certain emission calculations were to be utilized. In order to provide the Department with a complete and accurate accounting of the factors and methodology used to calculate emissions, we would like to resubmit the proposed language for this condition, using document dates. KII would like the following language to be added to condition 8 of the KII RACT Permit in order to assure that future compliance is determined in the same manner as the limits are originally generated.

Compliance with the RACT NO_x and VOC limits for flare, coke quenching, coal charging, miscellaneous, fugitives and coke by-product plant sources will be based upon engineering calculations, the USEPA TANKS 2 program and other methods, including those described in the January 1995 USEPA AP-42 document and the March 1990 *Airs Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants* document.

Proposed potential-to-emit emission rates for coke battery underfire and PECS stacks

The initial RACT Permit application for the KII Monessen Coke Plant included permit limits, which were developed using a combination of annual compliance tests and air emission factors. KII initiated an internal investigation to determine whether compliance with these tightened limits was attainable on a continuous basis. As opposed to basing the emission limitations for these sources on limited information, it was decided that a more comprehensive testing program would be required. Air Compliance Consultants, Inc. ("ACCI") was retained to conduct a diagnostic test program on the Battery 1B Combustion Stack, the Battery 2 Combustion Stack and the Pushing Emission Control System. Further, understanding that emissions varied during the battery cycles, and the results of the previous test program were low due to an incorrect stack diameter measurement, KII initiated a more in depth study.

The purpose of this test program, which was conducted by ACCI in October 1998, was to determine the maximum hourly emission rate and the variability in the potential emissions for each unit under normal operating conditions. Attached, please find the final results and the analysis for this testing program. KII believes that the issuance of a RACT Permit, including the following emission limitations, would allow the Monessen Coke Plant to maintain and continue its compliant operation of these air emission sources.

Emission Source	NO _x		VOC	
	[TPY]	[lb/hr]	[TPY]	[lb/hr]
Battery 1B Combustion Stack	476	131	146	54
Battery 2 Combustion Stack	287	81	64	26
Pushing Emission Control System	31	12	5.2	2

Annual coal feed capacity limit under the MACT rule

The full narrative of this determination was presented to the Department in the June 16, 1998 letter from myself. If there are further questions on this particular issue, please contact me.


Letter to W. J. Charlton
RACT Permit Issue
November 2, 1998
3

Conclusion

KII believes that this letter, along with the June 16, 1998 letter, is fully responsive to the requests made by the Department during the June 2nd meeting. If any further information is needed, please contact me at 227-2114. Additionally, KII would be happy to meet with you at your earliest convenience to discuss next steps.

Thank you for your cooperation and patience in this matter.

Sincerely,



Nathan J. Prepelka, R.E.M.
Environmental Manager

cc: M. Wayner (w/o att.) PADEP
J. P. Pezze (w/o att.) PADEP

Letter to W. J. Charlton
RACT Permit Issue
November 2, 1998
4

bcc w/o att.: R. D. Collins K-1700
 K. J. Fitzgerald K-1600
 S. T. Smith K-1800

G. Shamitko Monessen Coke Plant

J. Merrill ACCI

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

Telephone: (412) 227-2001
Fax: (412) 227-2423

April 14, 1999

PA Department of Environmental Protection
Field Operations-Air Quality Control
400 Waterfront Drive
Pittsburgh, PA 15222-4745

ATTN: Francis D. Condrick, Jr.

Dear Frank:

SUBJECT: MEETING MINUTES

Koppers Industries Inc. (KII) would like to thank you, Joe Pezze and Bill Charlton for meeting with representatives of Koppers Industries Inc. (KII) on March 30, 1999. During this meeting, various topics were discussed. I have attached a draft of the meeting minutes. Please provide comments/clarifications as soon as possible. KII would like to work with PADEP to resolve the outstanding issues. Please contact me to schedule additional meetings.

Sincerely,



Traci I. Self
Environmental Manager

cc: Joe Pezze
Bill Charlton
Jim Dietz
Greg Shamitko
Randy Collins
Mark Urbassik

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APR 15 1999

EP, Southwest Regional Office
Air Quality

Meeting Minutes and Issue Summary
Meeting with PADEP on Koppers Industries Inc. (KII)-Monessen Coke Plant

On March 30, 1999, Jim Dietz, Jill Merrill (ACCI), Greg Shamitko and I met with Bill Charlton, Frank Condrick and Joe Pezze from the Pennsylvania Department of Environmental Protection ("PADEP") Southwest Regional Office. At the request of PADEP a draft agenda was prepared by KII and sent to Bill Charlton before the meeting. (Copy attached). The purpose of the meeting was to ascertain the permitting and compliance status of the Monessen Coke Plant. The Monessen Plant was issued three plan approvals for construction of the coke oven battery, Coke by-product recovery plant and two boilers. A Reasonable Available Control Technology (RACT) permit was issued in March, 1998. There have been several personnel changes in both PADEP and KII in recent years. The purpose of the meeting was to establish the operating permits and mechanism for achieving compliance with New Source Performance Standards (NSPS). A brief explanation of each agenda item follows:

1. Existing Plan Approvals; options: renewal, or issue Title V permit

Plan approvals were issued by PADEP for construction of:

Coke Oven Battery-Plan approval # 65-305-048 expired 4/14/96
Coke Byproduct Recovery Plant- Plan approval # 65-305-049 expired 4/14/96
Two Boilers-Plan Approval # 65-302-071 expired 6/30/96

Extensions to the expirations dates were requested by KII and granted by PADEP to allow additional time to improve equipment reliability. Discussion was held concerning whether extensions had been granted or if issuance of the RACT permit in 1998 negates the need for extensions of the plan approvals. PADEP will look into the issue of whether both the plan approvals and RACT are necessary for operation of the plant until a Title V permit is issued. PADEP suggested that KII continue to request extensions of the Plan Approvals until the Title V permit is issued. PADEP stated those conditions of both the RACT and Plan Approvals would be reviewed after the extension request is submitted.

2. RACT Permit; modification previously justified and needed to reflect existing conditions
A RACT permit for the facility was issued on March 20, 1998. The permit states the facility is to operate in accordance with plan approvals issued under the same number. KII did not have an operating permit issued with the same RACT number. KII asked for clarification as to what permit limits are in effect, limits of plan approvals or limits of RACT permit. PADEP will review both permits and make a determination. KII requested revisions to the RACT permit limits by letter of June 16, 1998. KII asked for status of the request. PADEP will review the request.

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3. Compliance Order and Agreement (COA) 6/12/98; specific items to be addressed e.g. CEMS installation required by 6/12/99 before PADEP approval of Phase I.

Condition P and 3(a) state emission credits will be available once the OB ERC's are entered into the PA registry. PADEP will determine if the credits were entered in the registry and if anything, more needs to be done to ensure that the credits have been applied.

KII and PADEP entered into a consent order and agreement for excess NOx emissions for the Boilers. Stack testing indicated the boilers are emitting 82 tons/yr. Plan approval is for 14 tons/yr. The level could not be reached due to disparity in guarantees from the boiler manufacturer. Condition 3 (b) and (c) require installation of CEM monitor. KII has submitted a Phase I application for installation of the unit. Because of the determination by US EPA that 90% sulfur reduction cannot be based on the incoming coal, the submittal must be revised. PADEP will inform Harrisburg-Central office that KII will submit another Phase I application. The current submittal will not be reviewed. PADEP will determine if the COA

P, Southwest Regional Office
Air Quality

should be amended. KII has provided verbal notice that the CEM unit will not be installed by June 12, 1999.

The COA allotted \$40,000 to the City of Monessen for community environmental projects. The funds were to be used by June 12, 1999. The City has provided receipts of approx. \$9000. Any remaining portion must be sent to PADEP. PADEP would like the city to use the funds. KII will send a letter to the City of Monessen informing them that the deadline for spending the funds is approaching. The receipts and/or any unused money will be turned over to PADEP.

4. Specific existing plan approval conditions which need modification prior to incorporation into final permit:

1. Coke Oven Battery #65-305-048

Condition 11- contingency plan to minimize sulfur emissions during maintenance outages.

The contingency plan was submitted by KII on June 9, 1997. KII asked if the plan was approved. PADEP will review the plan.

Condition 21-sulfur compounds shall not exceed 45-grains/100 cu.ft or 90% whichever is more stringent.

KII and PADEP have had correspondence with US EPA on this issue. PADEP clarified that the 90% sulfur reduction was based on the sulfur limits under Subpart Db and applies to the boilers. US EPA has determined that Coke Oven Gas (COG) constitutes a coal as defined under section 60.41 b and the facility is subject to NSPS Subpart Db. PADEP will work with KII to identify a means to determine compliance with this subpart.

2. Coke by-product recovery plant

The first page states that KII must notify that the facility is complete and ready for inspection and request issuance of an operating permit. PADEP believed that an inspection was completed. KII and PADEP will search files to determine if a notice of completion and inspection were made. PADEP will determine if an operating permit should be issued until a Title V permit is issued.

3. Two boilers # 65-302-071

Condition 6-3.2 lb/hr or 14 Tons/yr NOx. KII asked if the plan approval limit is superceded by the RACT limit of 112.1 tons/yr. PADEP will review the permits and the ERC's that were calculated to make a determination. PADEP stated it might be necessary for KII to submit a BAT analysis for the boilers to determine the appropriate boiler NOx limits. PADEP will also determine if the NOx limits were agreed to in the COA.

Condition 19-CEMS installation.

KII agreed to amend the Phase I submittal. PADEP agreed that a CEMS would be acceptable in the common stack.

Both parties agreed that this issue needs to be settled as soon as possible. PADEP named Frank Condrick as the point of contact and KII named Traci Self.

Agenda
KII/PADEP Meeting
9:00 AM

- Existing Plan Approvals; options: renewal, or issue Title V permit.
- RACT Permit; modification previously justified and needed to reflect existing conditions.
- Compliance Order and Agreement 6/12/98; specific items to be addressed eg., CEMs installation required by 6/12/99 prior to PADEP approval of Phase I.
- Specific existing Plan Approval conditions which need modification prior to incorporation into final permit:
 1. Coke Oven Battery #65-305-048
 - Condition 11-contingency plant to minimize sulfur emissions during maintenance outages
 - Condition 21-sulfur compounds shall not exceed 45 grains/100 cu ft. or 90% whichever is more stringent
 2. Coke Byproduct Recovery Plant #65-305-049
 - No issues
 3. Two Boilers #65-302-071
 - Condition 6. 3.2 lbs/hr NO_x and 14 tons/yr NO_x
 - Condition 19 CEMS installation
- EPA letter, January 13, 1999

June 24, 1999

Pennsylvania Department of Environmental Protection
Air Quality Control
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Attn: William Charlton

RE: Koppers Industries, Inc.-Monessen Coke Plant

Dear Mr. Charlton:

This letter is in response to our meeting of May 18, 1999 and subsequent telephone conversation of June 15, 1999. During the meeting, the following issues concerning the Monessen Coke Plant were discussed.

1. Existing plan approvals:

- a. Coke oven battery-#65-302-048- PADEP agreed to amend condition 21 (to replace 45-grains/100 cu.ft. with 50 grains/ 100 cu. ft.) In addition, delete the words "reduced by 90% whichever is more stringent" PADEP will review KII contingency plan submitted in accordance with condition 11. Plan approval extension was approved until July 14, 1999.
 - b. Coke by-product recovery plant-#65-302-049- Extension approved until July 14, 1999. PADEP informed KII that the operating permit could not be issued until boiler compliance issues are addressed. At the direction of PADEP, KII will apply for another extension before July 14, 1999.
 - c. Two boilers-#65-302-071-Condition 6, 7 and 19 were discussed. PADEP will advise KII of course of action. Condition(s) 4, 9 and 11 were discussed in detail. KII committed to submitting a written position on the applicability and implementation of New Source Performance Standards in subpart Db.
2. RACT Permit issued March 20, 1998- will be evaluated for re-issuance based on KII comments of June 2, 1998 and stack test data from next stack test.
3. Compliance Order and Agreement(COA) dated June 12, 1998-PADEP will review condition 3(b) and 3(c) KII has submitted a request to PADEP to delete condition 3(c) and rely of condition 3(b) to govern installation of the CEM's unit. PADEP agreed that proof of payment for community environmental programs in condition 4(b)(4) could be submitted after June 12, 1999. Receipts are attached to this letter.
4. Phase I submittal and approval- KII submitted a revised stack test protocol to Chris Whiteash -PADEP for approval on June 1, 1999 and approved by letter dated June 8, 1999. During a conversation with

FRANK - I've got
a letter for them on
RECEIVED NSPS/CEM

JUN 25 1999

EP, Southwest Regional

dictated - not
finalized.
I talked to
Neyarro, Byler & Hazedorn last
week.
P.H.

I don't think
we did phone
do this -
we agree
to this.

what do?
that's why.

June 24, 1999

you on June 15, 1999 you indicated PADEP was proposing that "KII install COG flow meters on the boilers, flare and combustion side of coke oven". You also indicated that this approach would provide PADEP with a comfort level to approve the Phase I and amend the COA. KII and PADEP have been trying for almost two years to resolve this issue and install the CEM unit. In an effort to expedite the permitting process and resolve compliance issues, KII has installed flow meters to the boilers and proposes to install sampling ports on the underfire lines for both batteries. KII can also install a sampling port to monitor total COG before separating to any unit. KII will conduct flow measurements using an S-type pitot on an annual basis. With total flow, boiler and battery meters the flare COG usage can be calculated

Does this mean they are refusing to install the meters on the flare and combustion side. I want to put this in TV permit.

To clarify KII's Phase I submittal, a CEM to monitor NOx, O2, SO2 and opacity will be installed in the combined stack. NOx and SO2 will be determined on a pound per million British thermal unit (lb/mmBtu) bases in accordance with subpart Db. The F-Factor was determined based on 1997 data and approved by Mr. Richard Begley on March 2, 1998. The F-Factor will be verified annually during the Relative Accuracy Test Audit (RATA). The boiler outlet emissions will be determined on a 30 day rolling average basis in accordance with Subpart Db. As you are aware, KII purchased the unit for NOx and O2 on July 23, 1997. The unit must be modified to include SO2 and opacity. KII will re-submit the Phase I and provide a schedule for installation of the CEM within 20 days of PADEP approval of the approach detailed in this letter.

5. Registry of ERC's.- PADEP has informed KII that the notification of the credits to KII will be published in the PA Bulletin.
6. NSPS, Subpart Db-KII has reviewed the NSPS SO2 issue and proposes an approach to demonstrating compliance with subpart Db. We believe EPA has provided KII with inconsistent determinations, finding in 1997 that COG was coal, and stating earlier this year that COG was not coal for purposes of calculation of sulfur reduction. We believe EPA's position, particularly in the January, 1999 letter are not directly applicable because EPA assumes the boiler will have a post combustion control device (such as a FGD), while the Clean Air Act and NSPS states that credit may be taken for any cleaning of the coal after mining and prior to combustion, provided sulfur can be reduced either by a control device, fuel pretreatment or a combination of the two. If allowed to demonstrate percent reduction in accordance with Subpart Db and EPA Method 19, as discussed with PADEP previously, KII can demonstrate a 90% reduction of sulfur emissions from the incoming or as-mined coal to the boiler exhaust. Sulfur is removed in a number of processes in addition to the desulfurization unit, all of which are "upstream" of the boilers. The coal cleaning at the mines is the beginning of the process, all steps including the removal of sulfur in coke, coke breeze, and byproduct chemicals are all part of the "desulfurization" process.

need to do this. units can only fire gaseous fuel.

COG byproducts don't is fuel pretreatment.

PADEP has permitted and certified CEM systems for the following NSPS boilers to base percent reduction "desulfurization" on the incoming coal:

- A/C Colver Power Plant, Colver, PA
- Piney Creek Power Point, Clarion, PA
- Cambria County Cogeneration Facility, Ebensburg, PA
- PH Glatfelter, Spring Grove, PA

} solid fossil fuel-fired

KII is only requesting the same consideration given to other NSPS boilers within the commonwealth. By letter dated October 10, 1997, U.S. EPA states "The words "including but not limited to" indicate that all coal-derived synthetic fuels are "coal" for purposes of Subpart Db, regardless of whether they are specifically listed." Since COG is coal, the Monessen facility must be allowed to account for sulfur reduction from the beginning of the process, like all subpart Db facilities.

I need to see this.

applicability