Exhibits

Exhibit 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
August 8, 1980

Office of
Enforcement

MEMORANDUM

SUBJECT: PSD Applicability Determination: Babylon 2

FROM: Edward E. Reich (EN 341)
Director, Stationary Source Enforcement Division

TO: William K. Sawyer, Attorney
General Enforcement Branch, Region II

This is in response to your memo dated July 28, 1980, concerning the Babylon incinerator #2. Babylon #2 is a municipal incinerator capable of charging more than 250 tons of refuse per day and will have the potential to emit greater than 100 tons per year of particulate matter. The incinerator has been shutdown since 1975 and has been removed from the state's emission inventory. The source now wishes to reopen and the question is what are the implications as to the PSD permitting requirements.

Consistent with an earlier determination dated September 6, 1978, (copy attached), a source which has been shut down would be a new source for PSD purposes upon reopening if the shutdown was permanent. Whether a shutdown was permanent depends upon the intention of the owner or operator at the time of the shutdown as determined from all the facts and circumstances, including the cause of the shutdown and the handling of the shutdown by the State.Under the facts you have given us, we would presume that the shutdown was permanent, since it has lasted for five years, and the State has removed the incinerator from its emissions inventory.Consequently unless the owner or operator of the source were to rebut that presumption, we would treat the source as a new source (or modification if it occurs at an existing major source) for PSD purposes.Babylon #2 will be required to meet the BACT standards, but will not necessarily have to meet a limit at least as stringent as 40 CFR 60.52, unless this facility is itself subject to the requirements of NSPS.BACT sets NSPS as the minimum level of control when such source is subject to the NSPS. This means that the individual source would have to be subject to NSPS not just that NSPS applies to the source category.

This response was completed with the concurrence of the Office of General Counsel, should you have any additional questions or comments, please contact Janet Littlejohn EN-341.

[SIGNED BY WILLIAM J. JOHNSON]
Edward E. Reich

cc: Peter Wyckoff
Jim Weigold

Group Exhibit 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.20460

SEP 6 1978

OFFICE OF
ENFORCEMENT

SUBJECT: PSD Requirements

FROM: Director
Division of Stationary Source Enforcement

TO: Stephen A. Dvorkin, Chief
General Enforcement Branch
Region II

In response to your memo dated June 29, 1978, we have consulted with the Offices of General Counsel and Air Quality Planning and Standards and provide the following responses to your questions regarding the applicability of several PSD requirements.

Q - 1(a).Is a source which shut down approximately four years ago because of an industrial accident, and which was not and is not required to obtain a permit under a SIP, subject to the requirements of PSD?This source was not subject to PSD requirements prior to March 1, 1978.

A - This is a question which we have not previously addressed, but we believe that EPA policy should be as follows.A source which had been shut down would be a new source for PSD purposes upon reopening if the shutdown was permanent.Conversely, it would not be a new source if the shutdown was not permanent.Whether a shutdown was permanent depends upon the intention of the owner or operator at the time of the shutdown as determined from all the facts and circumstances, including the cause of the shutdown and the handling of the shutdown by the State.A shutdown lasting for two years or more, or resulting in removal of the source from the emissions inventory of the State, should be presumed permanent.The owner or operator proposing to reopen the source would have the burden of showing that the shutdown was not permanent, and of overcoming any presumption that it was.Under the facts you have given us,

we would presume that the shutdown was permanent, since it has already lasted about four years.Consequently, unless the owner or operator of the source were to rebut that presumption, we would treat the source as a new source for PSD purposes.

We assume that your statement that the source was not subject to the PSD regulations in effect before March 1, 1978, means that it was not in one of the nineteen source categories listed in Section 52.21(d) (1) of those regulations.A proposed new source which was not in one of those categories would be subject to the PSD regulations promulgated on June 19, 1978, unless (1) all required SIP permits had been obtained by March 1, 1978, and (2) construction commences before March 19, 1979, is not discontinued for 18 months or more and is completed within a reasonable time.See Section 52.21(i) (3), 43 FR 26406.Here, all required SIP permits were obtained by March 1, since none was required.Consequently, the source would not be subject to the new regulations, assuming that the reopening is commenced before March 19, 1979, is not discontinued for more than 18 months and is completed within a reasonable time.

If we were to treat the source as an existing source for PSD purposes, we would also conclude that it is not subject to the new regulations.[SEE FOOTNOTE 1]No source on which construction commenced before June 1, 1975, would be subject to those regulations. [SEE FOOTNOTE 1] See Clean Air Act Sections 168(b), 169(4); 40 CFR 52.21(d) (1) (1977).Here, since the source was in operation about 4 years ago, construction on it presumably commenced before then, well before June 1, 1975.Hence, it would (presumably) not be subject to the new regulations.

Q- 1(b).Would your answer to 1.a., above, change if the source is or was required to obtain a SIP permit? A- If the source shut down temporarily, it would not be required to obtain a PSD permit in order to start up.

[FOOTNOTE 1]Application of this rule requires special guidance for multifacility sources which construct in phases. Generally, if one phase of a multifacility source commenced construction by June 1, 1975, all other mutually dependent phase especifically approved for construction at the same time will also be "grandfathered".On the other hand, each independent facility must have commenced construction individually by June 1, 1975, to have achieved grandfather status. See 43 FR 26396, 19 June 1978.

On the other hand, if the source shut down permanently, it would, upon reopening, be required to obtain a PSD permit unless the following two conditions were met:1) the SIP permit was obtained prior to 3/1/78 and 2) any construction necessary for reopening is commenced prior to 3/19/79, is not discontinued for 18 months or more and is completed within a reasonable time.

Q - 2.Is the EPA required in all cases to forebear from issuing a PSD permit until a SIP permit has been issued or is such forbearance required only when the source is subject to the "Interpretative Ruling" (41 FR 55524, December 21, 1976)?

A - EPA should refrain from issuing a PSD permit prior to issuance of a SIP permit only in cases where the source is also subject to the Interpretative Ruling.(See 43 FR 26402, column 3.)

Q - 3.In the evaluation of BACT, does equipment reliability play a part, i.e., should a unit capable of 80% control with a 20% downtime, be preferred to a unit capable of 90% control with a 35% downtime?Can backup equipment be required for BACT purposes?

A - Questions concerning BACT should be addressed to the Control Programs Development Division in Durham, N.C.

Q - 4.For the purpose of determining what constitutes "air pollution control equipment," what is meant by the phrase ". . . normal product of the source or its normal operation"?(43 FR 26392, mid. col., June 19, 1978).Does that refer to the quantity or quality of the product or both, i.e., if a baghouse collects 100% of the product, a settling chamber collects 20%, and without some device no product is collected, what is deemed to be "air pollution control equipment"?

A - If a source (such as one which produces zinc-oxide) cannot capture any of its product without the use of some type of control device, the least efficient control device used in the industry will be considered vital to the process.For example, if sources in such an industry typically employ either settling chambers or baghouses, potential emissions will be calculated as the emissions from such a source with a settling chamber installed.

Q - 5.Do the provisions of Section 167 of the Clean Air Act, which refer to issuance of an Order and seeking injunctive relief for PSD violations, create enforcement authorities independent of those created in Section 113 for SIP violations, or do they simply incorporate Section 113 by reference?

A - We believe that Section 167 provides the Agency with enforcement authority which

is not necessarily otherwise provided by Section 113.The Office of Enforcement is drafting guidance on implementation of Section 167.This guidance should be completed shortly.In the interim, the Agency should enforce against violations of the PSD requirements under the mechanisms established by Section 113, generally.There is one important situation, however, in which resort to Section 167 may be necessary.This would occur when a state had issued a permit that EPA considered to be invalid.In this situation, we believe that Section 167 provides the Agency with the authority to halt the construction of the source directly, without first having to resort to the cumbersome process of seeking a judicial declaration that the state permit is invalid.(See 42 FR 57473 (1977)).In this respect, Section 167 provides the agency with authority similar to that provided by section 113(a) (5) and (b)(5) to prevent sources with invalid permits from constructing in nonattainment areas.Please note, however, that no delegations for enforcement of the PSD requirements have been signed yet, and so any action under Section 167 would have to be taken in close coordination with DSSE, and any Section 167 orders would have to be signed by theAdministrator.

If you have any further questions on these issues, please contact Libby Scopino at FTS 755-2564.

Edward E. Reich

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 27 1987

MEMORANDUM

SUBJECT: Reactivation of Noranda Lakeshore Mines' RLA Plant and PSD Review

FROM: John S. Seitz, Director Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: David P. Howekamp, Director Air Management Division, Region IX

Pursuant to your recent request, this memorandum addresses the status of Noranda Lakeshore Mines' roaster leach acid (RLA) plant in Arizona. Noranda is contemplating startup of the RLA plant which has been shut down since 1977. The company contends that the shutdown was not intended to be permanent, and therefore believes that the plant should not be subject to PSD review.

Whether or not a source which has been shut down is subject to PSD review upon reactivation depends on whether the shutdown is considered permanent. EPA evaluates permanence of shutdowns based on the intent of the owner or operator. The facts and circumstances of the particular case, including the duration of the shutdown and the handling of the shutdown by the State, are considered as evidence of the owner or operator's intent. This decision making framework follows the policy on plant reactivation which EPA set forth in 1978. The September 6, 1978 memorandum which initiated this policy states:"A shutdown lasting for two years or more, or resulting in removal of the source from the emissions inventory of the State, should be presumed permanent. The owner or operator proposing to reopen the source would have

the burden of showing that the shutdown was not permanent, and of overcoming any presumption that it was." Several memoranda later issued by SSCD (August 8, 1980; October 3, 1980; July 9, 1982) applied this shutdown/reactivation policy.

In the case of Noranda's RLA plant, your staff has provided the following information. The RLA plant, previously owned by Hecla Mining Company, was shut down by Hecla in 1977 due to market conditions. Reports issued by Hecla at the end of 1977 stated that the ALA facility could be operational within one week. However, due to poor economic conditions Hecla decided to terminate their lease for the ALA plant. In 1979 Noranda purchased the facility, but never operated the ALA plant due to similar economic problems; the ALA plant itself has not operated since 1977. The ALA plant was deleted from Noranda's operating permits in 1980, and Noranda' remaining operating permits were surrendered in 1984. In 1986, the ALA plant was removed from the State's emission inventory. Your staff has also indicated that the roaster may need at least several hundred thousand dollars worth of work before being operable, and could not come on line for approximately four months.

Since the ALA plant has been shut down for well over 2 years and has been removed from the State's emission inventory, EPA presumes that the shutdown was permanent. However, Noranda has submitted documentation to Region 9 seeking to demonstrate that the shutdown was not intended to be permanent. Included is a 1980 statement of intent for long term operation of the facility, evidence of some search for toll concentrates of sufficient quality to allow operation, and evidence of some level of custodial maintenance. The question which now arises is whether the information submitted is sufficient to rebut the presumption of a permanent shutdown.

EPA evaluates the permanence of the shutdown based on the demonstrated intent of the owner or operator to reopen the source. Facts and circumstances surrounding the shutdown, including duration of the shutdown and the handling of the shutdown by the source and State, are evidence of the owner's intent. In Noranda's case, the significant amount of time that has elapsed, as well as Noranda's failure to maintain the operating permit, removal of the ALA plant from the emissions inventory, and the time and capital that must be invested in the rehabilitation of the plant in order to make it operable, are evidence that the shutdown was intended to be permanent.

There is not sufficient evidence of intent to reopen the source to regard this as a temporary shutdown. Therefore, SSCD concurs with Region 9's determination that the source, for PSD purposes, is permanently shut down, and must meet Federal PSD requirements for construction and operation.

If You have any questions, please contact Sally M. Farrell at FTS 382- 2875.

cc: Wayne Blackard, Region IX
Nancy Harney, Region IX
Bruce Armstrong, OPAR
NSR Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

NOV 19, 1991

MEMORANDUM

SUBJECT: Applicability of PSD to Watertown Power Plant, South Dakota; Shutdown for 9 years.

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Douglas M. Skie, Chief
Air Programs Branch (8AT-AP)

This is in response to your memorandum dated September 26, 1991, regarding the applicability of PSD to a shutdown power plant upon reactivation. My staff has reviewed the materials provided and we believe that the position Region VIII has taken thus far is consistent with the EPA national policy.

The general policy on whether a shutdown plant if reopened would be subject to PSD as a new source is set forth in a series of memoranda from the Stationary Source Compliance Division (SSCD) starting with a September 6, 1978 memorandum from Edward E. Reich to Stephen A. Dvorkin. According to SSCD guidance, whether a source which has been shut down is subject to PSD review upon reactivation depends on whether the shutdown is considered permanent. EPA evaluates permanence of shutdowns based upon the intent of the owner or operator. The facts and circumstances of the particular case, including duration of the shutdown and the handling of the shutdown by the State, are considered evidence of intent of the owner or operator. A shutdown lasting for two years or more, or resulting in removal of the source from the emissions inventory of the State, should be presumed permanent. The owner or operator proposing to reopen the source would have the burden of showing that the shutdown was not permanent, and of overcoming any presumption that it was. Also see the attached May 27, 1987 memorandum from John S. Seitz to David P. Howekamp regarding Reactivation of Noranda Lakeshore Mines' RLA Plant and PSD review.

In the case of the Watertown Power Plant (WPP), your staff has provided the following information. The plant consists solely of a single unit, simple cycle, oil fired combustion turbine. The WPP operated from 1979 until 1981 when the turbine failed. Extensive and costly repairs were made and completed in 1982.

Of the $1.5 million spent on repairing the turbine, $1.2 million was covered by insurance, and more of the cost was recovered by litigation against the manufacturer. The net cost to restore the turbine at WPP was $237,953.

Due to operating costs and diminished load growth, however, the Board of Directors decided to place the plant on deactivated status until 1984 and decided again in 1984 and then in 1989 to continue the deactivated status. The SIP operating permit was allowed to expire.

Since 1982, the unit has been treated as being in cold standby, requiring 6-8 weeks to reactivate. Information submitted to EPA thus far indicates that the plant has been maintained to ensure its readiness. The September 13, 1991 letter to Mr. John Dale of your staff from the Missouri Basin Municipal Power Agency (MBMPA) details what has been done during the entire standby period to ensure readiness; thereby, validating the intent to reactivate. These actions include maintaining two full time employees on site, and periodic testing and maintenance of the system to ensure quick reactivation. It appears that reactivation of the plant would not require more than a limited amount of time and capital. Further, the MBMPA has stated in a variety of reports, starting from the early 1980s, their intent to reactivate the plant.

With the facts presented, which include an intent to maintain the turbine, WPP has overcome the presumption that the shutdown was permanent. Therefore, although this plant has been shut down for a period of time long enough to be considered permanently shut down, and has relinquished its operating permits, the source has demonstrated their intent to treat the shutdown as temporary. This is a unique situation given the very long period of the shutdown. However, the continued maintenance of the facility throughout the years, the resulting ability to bring the plant back on line with only a few weeks of work, and the statements of intent of the owners at the time of shutdown and in subsequent years to reactivate the facility, all compel us to concur with your determination that Missouri Basin has demonstrated that the shutdown was never intended to be permanent. Therefore, given the evidence presented, reactivation of this combustion turbine would not be subject to PSD requirements.

If you have any questions concerning our response, please contact Clara Poffenberger at FTS 398-8709.

Attachments

cc: John Dale, Region VIII
Gary McCutchen, NSR Section, AQMD (MD-15)

Exhibit 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE. SUITE 1200
DALLAS. TX 75202-2733

November 19, 1992

Mr. William R. Campbell
Executive Director
Texas Air Control Board
12124 Park 35 Circle
Austin, Texas 78753

Re: Interim guidance on New Source Review (NSR) Questions Raised in Letters Dated September 9 and 24, 1992.

Dear Mr. Campbell:

This is in response to letters to my staff dated September 9 and 24, 1992, from Ms. Karen Olson and Mr. Kerry Drake respectively, of the Permits Division. These letters raised significant questions and issues related to the new source permitting in nonattainment areas as required by the Clean Air Act Amendments (CAAA) of 1990. As discussed during a conference call September 30, 1992, and an October 8, 1992, meeting in Dallas, we are providing this initial response which addresses most of the items of concern. We will, however, be furnishing you with any additional guidance to remaining items which are identified in a subsequent letter.

The Environmental Protection Agency (EPA) has provided many of the Agencys' interpretations of the new Part D NSR requirements in the General Preamble to Title I (57 FR 13498) dated April 16, 1992. We wish to commend the State of Texas for its action in adopting revisions to its NSR rules consistent with Title I of the 1990 CAAA. However, it is not surprising that in a program of this magnitude some ambiguities remain. At this time, we are not expecting any additional national guidance in the near future. However, we agree with you that we jointly need some basis to proceed between the November 15, 1992, effective date of your nonattainment NSR permitting regulations and any additional direction we may receive at the national level. Therefore, we hope to use this and subsequent letters to articulate the interim guidance we will follow in the absence of national guidance. After national guidance is issued, it may be necessary to revise this interim guidance to conform to such national guidance. Any application which has been submitted and determined to be complete after the issuance of final national guidance, may be subject to the interpretations of such final guidance.

Outlined below is our interim guidance in response to the questions raised by the Texas Air Control Board (TACB) in its letters dated September 9 and 24, 1992.

1. Does any increase in emissions at a major source trigger the de minimis threshold test? Is there a lower cutoff?

   There is a concern that the current de minimis rule would be onerous and not practical for certain small changes such as adding a valve, pump, or small boiler. The TACB has suggested that an individual change of less than 5 tons per year (tpy) increase not be required to undergo nonattainment review nor should it trigger the requirement to perform de minimis netting. If the proposed increase equals or exceeds 5 tpy, only those increases and decreases; of 1 tpy or greater will be included in the de minimis test.

   We appreciate the concern that a literal interpretation of the definition of de minimis, as contained in Section 182(c)(6) of the Clean Air Act (CAA), could be potentially onerous to the States, the individual permit applicants, and EPA. However, our concern with setting a de minimis threshold is that projects that would aggregate to 25 tpy or greater should in no way become excluded from the NSR permitting requirements. In order to ensure this, we would support in this interim guidance the following two step approach. 1) we would agree with an interim policy of setting a de minimis threshold at 5 tpy for purposes of starting the accounting process for the netting calculation. If a project's emissions would be less than 5 tpy, then the company would not be subject to the 5 year de minimis threshold test, provided that de minimis netting is not required in Step 2 below. However, the source would be required to keep track of the emissions changes. The 5 year de minimis threshold test would only be applied when the project's emissions equal or exceed 5 tpy. Once this 5 tpy de minimis level would be exceeded, then all emissions increases and decreases associated with a physical change or change in the method of operation would be included in the test. The source would then be subject to the nonattainment permit requirements if the net emission increase is greater than 25 tpy. 2) The second test is as follows. If the aggregate of emission increases and decreases after November 15, 1992, become greater than 25 tpy (excluding projects for which an application was received before November 15, 1992, and was subsequently determined to be complete), then the source would be subject to performing the 5 year de minimis threshold test. If the accumulation of all emission increases and decreases over the contemporaneous timeframe was determined greater than 25 tpy, then the nonattainment NSR requirements would be applicable.

Your staff has noted concern with tracking the accumulation of emissions for Step 2. One way to implement the policy outlined could be to have the source submit a certification with the application for a permit or exemption. This certificate would state that the increase from the project does not exceed 5 tpy and the accumulation of increases and decreases since November 15, 1992, does not exceed 25 tpy. The State could then use the annual emission statements that companies will have to submit starting in 1993 as a check that no source has had net increases more than 25 tpy without going through nonattainment New Source Review.

Neither of these approaches allow for excluding increases of 1 tpy or less from emissions tracking. However, it does allow for exclusion of routine repair, replacement or maintenance which may be excluded from review under the definition of major modification.

Enclosed are example calculations of how the above described netting would work.

2. What is the exact definition of the 5 year period for the de minimis threshold test?

In the September 9, 1992, letter, TACB proposed to use the same definition as found in the Prevention of Significant Deterioration (PSD)/NSR regulations prior to November 15, 1992, which specify that the contemporaneous period begins 5 years prior to commencement of construction and ends when the proposed project begins operation: However, in section 101.1 of TACB's revised regulations, TACB defined the 5 year period to be 5 consecutive calendar years which includes the year of the project and the 4 previous years, which is consistent with the statutory definition of de minimis emissions. As was discussed on October 8, 1992, TACB would need to revise its regulation to be consistent with its proposal to have the 5 year period under the nonattainment NSR regulations identical to the 5 year period for PSD netting. We agree that Texas could use either definition of the 5 year period. This is premised on our belief that the contemporaneous timeframe for netting under the PSD program (40 CFR 52-21 (b)(3)(ii)) is as stringent or more stringent than the definition in Section 182(c)(6) of the CAA. Both the definition in Section 182 (c) (6) and the PSD definition in 52.21(b)(3)(ii) specify a 5 year timeframe including the period when the increase or particular change occurs.

3. Do majar sources, such as asphalt concrete plants, that move often within nonattainment areas, as well as in and out of nonattainment areas, require a nonattainment permit each time they move?

Portable sources currently in an ozone nonattainment area may relocate within the same nonattainment area without obtaining a nonattainment permit, provided that no physical change or change in the method of operation occurs which results in an emissions increase. A source relocating from outside the nonattainment area must obtain a permit if it has not been previously permitted within the area and is not included in the emissions inventory for the nonattainment area. A nonattainment permit is also required if a source relocates from one nonattainment area to another nonattainment area.

This guidance is not meant to exempt the relocation of sources that are not generally considered portable from nonattainment NSR. For example, moving a painting operation from one part of a nonattainment area to another would result in review.

4. TACB states that the definition of major source it serious and severe ozone nonattainment areas in Sections 182 (c) and (d) could be interpreted to include fugitives emissions. They would like to extend this definition to marginal and moderate ozone nonattainment areas for the purposes of Consistency.

   On October 8, 1992, TACB indicated that it would retain their existing definition of a major facility/stationary source. Its revised NSR regulations presently do not require fugitive emissions to be considered in determining applicability unless the source belongs to certain categories specified in the regulation. This is an acceptable approach.

5. For sources which trigger review for nitrogen oxides (NO_x) under both nonattainment review and PSD, TACB proposes to conduct a combined review which will include nonattainment review enhanced by NO_x increment modeling.

   This is the type of review that we anticipated would be performed and appears to be a reasonable and correct approach. As agreed upon October 8, 1992, all applicable requirements of the PSD review and nonattainment review must be met.

6. What are applicants and permit engineers expected to do when implementing lowest achievable emission rate (LAER)?

   TACB mentioned the need for certain specified improvements in the RACT/BACT/LAER Clearinghouse, including the need for specifying emission levels in consistent units (i.e. lb/mmbtu, ppm, gr/dscf, etc.).

On October 8, 1992, it was agreed that the LAER determination would include a review of the RACT/BACT/LAER Clearinghouse. The review of the clearinghouse information would serve as a floor for the LAER determination. However, at this time the Clearinghouse is not considered comprehensive enough to be an adequate reference by itself for the ultimate determination of LAER. Ultimately LAER should be decided based on the technical evaluation and experience of the State permit engineer in conjunction with consideration of comments from EPA and the public. This approach should ensure that LAER is determined consistent with the regulatory definition.

7. How and to what depth must the alternative site analysis be performed?

TACB had suggested that an applicant include an alternative site analysis in its permit application, which TACB would maintain in the permit file.

In the absence of national guidance, we support development by TACB of reasonable interim procedures that can be implemented. Such interim procedures should include an appropriate level of technical review (as determined by the State) and ensure that comments from the public and EPA are adequately addressed for the public record.

At the meeting in Dallas on October 8, 1992, Ms. Karen Olson provided us material on the Texas Enterprise Zone Program from the Texas Department of Commerce. We are continuing to explore potential uses of the established Enterprise Zones Program for satisfying the alternative site analysis requirements. We will respond separately to you on this question.

8. When a modification exceeds de minimis level, is only the current project to be offset, or is the entire contemporaneous increase to be offset? If the offset provided by the applicant is in excess of the required amount, can the balance be used for future offsets?

In the absence of written national guidance on this subject, we are interpreting that only emissions associated with the specific project that results in the de minimis level being triggered are required to be offset. It is important to note that any emission increases occurring since the 1990 emission baseline must appear in future reasonable further progress tracking, be accounted for in the 15 percent requirement and be accounted for in the

attainment demonstration. It is in the State's discretion to require a more restrictive interpretation (such as offsetting the entire net emissions increase) during the interim in order to further progress toward attainment.

In regard to remaining excess offset credits, they would remain creditable if they continued to meat all criteria for creditable emissions reductions. This excess could also be deposited (or retained if previously deposited) in an approved bank.

9. Several questions were raised concerning the internal offsetting provisions for serious ozone nonattainment areas in Section 182 (c)(7) and (8) of the Act. These questions include: (A) What is an internal offset? (a) If an internal offset is provided would not the modification have been de minimis in the first place? (C) Would an internal offset be considered in future de minimis threshold tests? (D) Do these rules apply for serious areas only? (2) Since TACB proposes to do netting consistent with PSD does that eliminate this option?

National guidance does not presently exist to address the issue of internal offsets. Since TACB proposes to use the "Plant wide" source definition (as opposed to a "dual source" definition), internal offsets would be accounted for in the source wide netting under the de minimis rule in Section 182(c)(6) of the CAA.

Because the use of internal offsets are optional under Sections 182 (c) (7) and (8) of the CAA, and EPA has not issued national guidance concerning the use of internal offsets, TACB has agreed not to implement the provisions of Sections 182 (c) (7) and (8) which relate to internal offsets during the interim period covered by this guidance. We agree with this approach since the State's regulation does not define the term internal offsets or the extent of its use.

In connection with this matter, we note that footnote 2 of Table I (definition of "major modification") of TACB is revised definitions provides that best available control technology (BACT) may be used as an alternative to LAER in severe ozone nonattainment areas if an offset ratio of 1.3 to 1 is used. This would be contrary to the above discussion, and to the 1990 CAAA. Footnote 2 was apparently included to incorporate the 1.3 to 1 internal offset provision in Section 182(c)(8), which provides relief from the requirement to utilize LAER at a source whose potential emissions are greater than 100 tpy, if an internal

offset ratio of 1.3 to 1 is used. It was agreed on October 8, 1992, that TACB would delete Footnote 2, consistent with the previous paragraph in which TACB agreed not to implement the internal offset provisions.

10. What is the status of pre-1990 baseline increases and reductions in the context of the de minimis threshold test and for offsetting? TACB expands this question further in its letter dated September 24, 1992.

Pre-1990 emissions increases and decreases are creditable for the purpose of determining applicability (i.e. netting). Under this interim policy, the period for which netting would be performed would be consistent with the PSD definition. (See response to question 2). Pre-1990 decreases (with the exception of shutdowns or curtailment of production or operating hours) may be used for the purposes of satisfying general offset requirements only if they are federally enforceable prior to 1990, are still federally enforceable, and are carried over as growth in an approved post-1990 attainment demonstration. Use of prior shutdowns before an approved attainment demonstration is in place, will be addressed by EPA in a separate response.

Clearly, if the State wishes, it can be more stringent by not allowing pre-1990 emission decreases to be used for offsets. This approach may be especially useful in instances where pre-1990 credits cannot be well accounted for in the Rate of Progress State Implementation Plan (SIP)

11. Is there a time frame for offset expiration?

In general, offsets can continue to exist as long as they are accounted for in each subsequent emissions inventory. They expire if they are used, or relied upon, in issuing a permit for a major stationary source or major modification in a nonattainment area, or are used in a demonstration of reasonable further progress.

The State may include an expiration date in its SIP to ensure effective management of the offsets. For example, TACB's proposed banking rule would require each individually banked offset to expire 5 years after date the reduction occurs, if it is not used. The rule also provides that a particular banked reduction will depreciate by 3% each year that it remains in the bank. EPA is supportive of the approach Texas has taken in its proposed banking rule to limit the lifetime of the offsets and to allow for an annual depreciation.

12. NO_x is a precursor for both ozone and particulate matter less than 10 microns (PM-10). What defines a major source for a precursor in this case? Will NO_x be offset for ozone and PM-10?

    With reference to ozone, NO_x will be treated just like volatile organic compounds (VOC) except in transport regions where the major source threshold will be 100 tpy. (There are, of course, no transport regions in Region 6.) NO_x Will be regulated as a precursor for PM-10 only in certain sections of the country where EPA determines, in conjunction with the State, that precursors contribute significantly to the nonattainment area problem. (Texas is not considered to be one of those areas at present).

13. What are the precursors to PM-10?

    As stated in the April 2, 1991, memorandum from John Calcagni (Director, Air Quality Management Division) to the Regional Air Division Directors, entitled PM-10 Moderate Area SIP Guidance: Final Staff Work Product PM-10 precursors are defined to include volatile organic compounds which form secondary organic compounds, sulfur dioxide which forms sulfate compounds, and nitrogen oxides which form nitrate compounds (pg. 7). In general, EPA believes that PM-10 precursor emissions will not significantly contribute to PM-10 ambient levels except in a few major metropolitan areas (e.g., Loos Angeles, Salt Lake County, Utah County, Denver, San Joaquin Valley) (pg. 10). No areas in Texas were specifically mentioned in the Staff Work Product. See also the discussion in Item 12 above.

Additional question from TACB's letter dated September 24, 1992:

14. once a project has been offset, will the amount that is offset be relied upon in future determinations of the contemporaneous net increase? Restated, will the slate be partially or totally "wiped clean" (depending on whether or not the current project is offset, or the entire contemporaneous increase is offset)?

    First, recall that netting credits cannot be acquired outside the source for which the permit application is submitted. If a reduction has been used only as a netting credit and the source has netted out of review, then the credit is available as long as it remains in the contemporaneous time period.

    If an emission reduction at a source is used as an external offset for another source, that reduction can no longer be relied upon for netting purposes at the first source. Restated, the increase from the proposed project and the project offset

would be wiped off the slate for future netting and offset transactions. In addition, if the State chooses to offset any additional contemporaneous increases and decreases, such changes are also wiped off the slate for future netting transactions. The remaining emission increases and decreases within the 5 year contemporaneous timeframe would continue to be included in future netting transactions.

If a reduction meets all the criteria for a creditable offset and only part is used in an offset transaction, the unused part can be applied to future offsets, if proper accounting and federal enforceability are ensured. An example would be as follows:

Source "A", a major stationary source in a nonattainment area, applies for a permit to modify. Source "B" shuts down operations that produce 250 tpy of VOC reductions. The emissions increase from the proposed project (excluding contemporaneous increases and decreases), after application of LAER, is 150 tpy, and the overall net emissions increase exceeds de minimis. The 250 tpy reduction from source "B" is made federally enforceable and used to offset the 150 tpy increase from source "A". If the sources are located in a severe ozone nonattainment area, the required offset ratio is 1.3 to I or 1.3 X 150 tpy = 195 tpy. The difference of 55 tpy remains creditable as an offset as long as it meets the criteria identified in item # 11, above. Of course, the State may choose to offset any contemporaneous increases and decreases in addition to the project increase consistent with the approved SIP.

We appreciate this opportunity to review these issues with you. We will respond to the remaining item you have identified as quickly as possible.

If you have any questions, please contact me at (214) 655-7200, Mr. Gerald Fontenot, Ms. Jole C. Luehrs, Mr. Stanley M. Spruiell, or Mr. Thomas H. Diggs, Air Programs Branch Staff, at (214) 655-7205, or Ms. Lucinda S. Watson, Office of Regional Counsel at (214) 655-8071.

Sincerely yours,

Stanley Meiburg
Director
Air, Pesticides and Toxics, Division (6T)

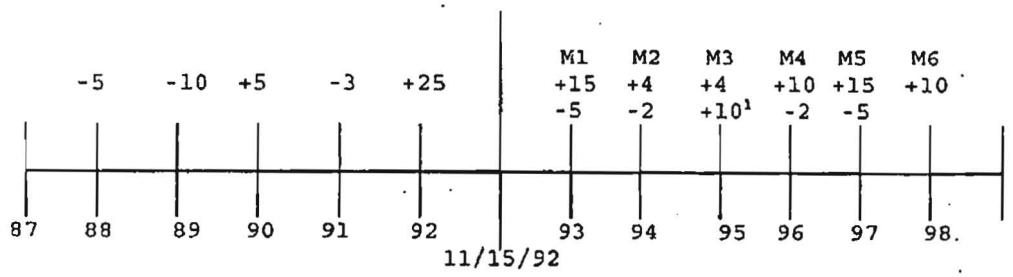
Enclosure

Enclosure

The TACB submitted letters dated September 9 and 24, 1992 posing questions regarding nonattainment NSR. Shown below are examples of modification scenarios that demonstrate our response to Item I of this letter.

Netting and offset calculations for nonattainment review (emissions represent VOC in a severe ozone (O_3) nonattainment area)

EXAMPLE 1.



MODIFICATION M1:

Step 1: Project increase is +15 tons per year (tpy) > 5 tpy. Netting is required.

Net emissions increase (NEI) = NEI = +15 + (-5+25-3+5-10-5)
= +15 + (+7) = +22 tpy

NEI < 25 tpy. Nonattainment review is not applicable.

MODIFICATION M2:

Step 1: Project increase is +4 tpy < 5 tpy.
Step 2: Net Changes after 11/15/92 = +4-2+15-5=12 tpy<25 tpy.

Netting is not required.

MODIFICATION M3:

Step 1: Project increase is +4 tpy < 5 tpy.
Step 2: Net Changes after 11/15/92=+4+4-2+15-5=+16 tpy<25 tpy.

Netting is not required.

[1]Increase is authorized by permit whose complete application was filed before 11/15/92.

MODIFICATION M4:

Step 1: Project increase is +10 tpy > 5 tpy. Netting is required.

NEI = +10 + (-2+4+10+4-2+15-5+25-3) = +10 + (+46) = +56 tpy
NEI > 25 tpy. Nonattainment review is required.

Total Emissions to be Offset = +10 + (-2+4+4-2+15-5,) = +10 + 14
= +24 tpy[2]

The required offset ratio in a severe O_3 nonattainment area is 1.3:1 or 1.3 x 24 = 31.2 tpy.

All increases which occur after 11/15/92 (except for the 10 tpy increase which was authorized in an application before that date) are relied upon in issuing Modification M4. They may not be used in future netting or for future offsets.

MODIFICATION M5:

Step 1: Project increase is +15 tpy > 5 tpy. Netting is required.

NEI = +15 + (-5+10+25) = +15 + (+30) = +45 tpy
NEI > 25 tpy. Nonattainment review is required.

Total Emissions to be Offset = +15 + (-5) = +15 - 5 = +10 tpy.
The required offset ratio in a severe O_3 nonattainment area is 1.3:1 or 1.3 x 10 = 13 tpy.

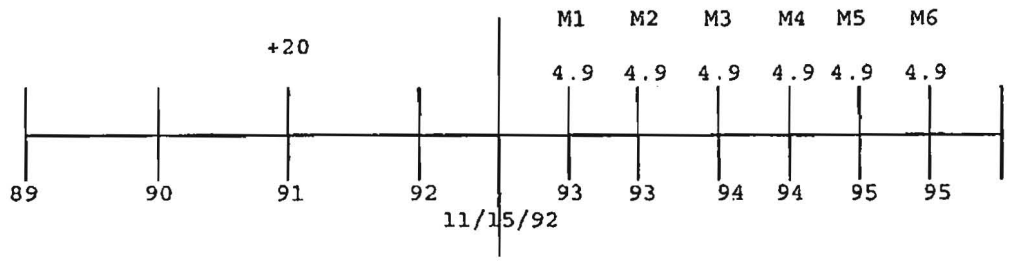
MODIFICATION 6:

Step 1: Project increase is +10 tpy > 5 tpy. Netting is required.

NEI = +10 + (+10) = +10 + (+10) - +20 tpy
NEI < 25 tpy. nonattainment review is not applicable.

[2]This method is consistent with the procedure described in item 6 of the letter.

EXAMPLE 2.



MODIFICATIONS M1 THROUGH M5:

Step 1: Project increase is 4.9 tpy < 5 tpy. 2: Net Changes after 11/15/92 < 25 tpy. Netting is not required.

MODIFICATION M6:

Step 1: Project increase is 4.9 tpy 5 tpy.
Step 2: Net Changes after 11/15/92=6 x 4.9=29.4 tpy>25 tpy.

NEI = 29.4 + 20 - 49.4 tpy.
NEI > 25 tpy. Nonattainment review is required.

Total Emissions to be offset = 29.4 tpy.
The required offset ratio in a severe O_3 nonattainment area is 1.3:1 or 1.3 x 29.4 = 38.2 tpy.

Exhibit 4

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR

April 2005

Responsiveness Summary
for Public Questions and Comments on the Construction Permit Application from
Chicago Coke Company

Site Identification No.: 031600AMC
Application No.: 04010037

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INTRODUCTION

The Chicago Coke Company has submitted a construction permit application for a "pad-up rebuild" prior to resuming operations of its plant, formerly owned by LTV Steel, Inc., in the City of Chicago. The plant produces metallurgical coke primarily for use in blast furnaces in the iron and steel industry. The pad-up rebuild would involve replacing the brickwork of the coke oven battery, in which coal is processed to convert it into coke. As part of the rebuild, Chicago Coke would also make various improvements to the emissions controls on the plant, as further described below. The proposed project requires a construction permit from the Illinois EPA because the plant is a source of emissions and the project involves modifications to the plant.

Upon review of comments received during the public comment period and final review of the application, the Illinois EPA has determined that the project meets the standards for issuance of a construction permit. Accordingly, on April 28, 2005, the Illinois Environmental Protection Agency (Illinois EPA) issued a construction permit to the Chicago Coke Company for the project. When the facility resumes operation, the facility must be constructed and operated in accordance with applicable regulations and the conditions of the permit.

DESCRIPTION OF PROPOSED PROJECT

Metallurgical coke is produced by "cooking" coal in coke ovens. In the ovens, appropriate coal that is suitable for "coking" is heated at high temperature in an oxygen-free atmosphere. This drives off volatile components in the coal, yielding coke oven gas as a byproduct. The solid material remaining behind in the ovens is the coke. In a recovery coke plant, like Chicago Coke's plant, the raw coke oven gas from the coke battery is processed in the by-product plant through a series of processes to recover coal tar, sulfur compounds, ammonia, benzene and certain other organic chemical components. The gaseous material that remains after processing in the by-products plant has fuel value and is used for heating the coke ovens. Support operations at the plant for the coke making process include coal and coke handling and material processing. The plant also has four boilers, which are fired with cleaned coke oven gas and natural gas, that supply heat and power for the coke making process.

This project involves the coke oven battery located on the south side of Chicago that was formerly owned by LTV Steel, Inc. LTV operated the plant until December 2001. In December 2001, LTV discontinued coke production and the battery was put into hot idle mode. In February 2002, the battery was placed into cold idle-mode. On December 30, 2002, the plant was sold to Calumet Transfer Company, LLC and Chicago Coke Company was organized to operate the plant for Calumet Transfer.

Chicago Coke has decided that for effective operation, a "pad-up rebuild" is necessary. The most appropriate time to perform a "pad-up rebuild" is before resuming operation. This "pad-up rebuild" involves rebricking the coke oven battery from the pad up, i.e., it does not involve changes to the existing deck slab or coke oven battery layout or "footprint." However, Chicago Coke will be making various enhancements to the battery and ancillary operations during the "pad-up rebuild" that should improve operation and the level of emissions control. The plant will also be subject to

tighter operating and emission limitations such that a significant increase in emissions will not occur.

The planned improvements to the plant include installation of a PROven System in the gas collection system from the battery, to better manage the pressure in the ovens. This is an electronic controller system, called the Pressure Regulated Oven (PROven) System, that should increase the effectiveness of gas collection and emissions control from the coke oven battery. With the PROven System, the gas collecting main is maintained under suction (negative pressure) and the pressure of individual ovens is controlled depending on the stage of the coking cycle, independent of the pressure in the collecting main. Chicago Coke expects that by better management of oven pressure during the coking cycle, the PROven system will reduce the number and extent of leaks from the ovens and reduce the associated emissions. For emissions of nitrogen oxides (NOx), enhancements would be made to the existing staged combustion system in the battery. Low NOx burners would be installed in two of the boilers at the plant, Boilers 1 and 4. Chicago Coke would also replace the steam turbine generator associated with the boiler house with a larger unit, so that the capacity of the turbine does not act to limit the amount of the coke oven gas burned in the boilers. Chicago Coke anticipates that with the larger turbine, less coke oven gas would be flared. This "extra" coke oven gas would be burned in the lower emitting boilers (as compared to flaring).

COMMENT PERIOD AND PUBLIC HEARING

The Illinois EPA Bureau of Air evaluates applications and issues permits for sources of emissions to the atmosphere. An air permit application must appropriately address compliance with applicable air pollution control laws and regulations before a permit can be issued. Following its initial technical review of Chicago Coke's application, the Illinois EPA Bureau of Air made a preliminary determination that the project met the standards for issuance of a construction permit and prepared a draft permit for public review and comment.

The public comment period began on December 11, 2004, with the publication of a notice in the Daily Southtown. Additional notices were published in the Daily Southtown on December 18 and 25th, 2004.

A public hearing was held on January 25, 2005, at The Zone, Youth and Community Center, 11731 South Avenue O in Chicago to receive oral comments and answer questions regarding the application and draft air permit. The comment period originally was scheduled to close on February 24, 2005, to receive written comments. The comment period was extended twice with the comment period ultimately closing on March 25, 2005.

AVAILABILITY OF DOCUMENTS

Copies of the final Permit and this Responsiveness Summary are available through the following means:

1. By viewing the documents at one of the following repositories:

Vodak/East Side Branch of the Chicago Public Library 10542 S. Ewing Avenue Chicago, IL 312/747-5500	Illinois EPA – Des Plaines Regional Office 9511 West Harrison Des Plaines, IL 847/294-4000	Illinois EPA 1021 North Grand Avenue, East Springfield, IL 62794 217/782-7027

2. By contacting the Illinois EPA by telephone, facsimile or electronic mail:

   Illinois EPA
   Bradley Frost, Office of Community Relations
   217-782-7027 Desk line
   217-782-9143 TDD
   217-524-5023 Facsimile
   brad.frost@epa.state.il.us

3. By accessing the World Wide Web at www.epa.state.il.us/public-notices/general-notices.html or www.epa.gov/region5/air/permits/ilonline.htm (for the second address look under All Permit Records, State Construction Permit, New).

To obtain a printed copy of the documents by mail and free of charge, please contact me at the contact information listed in #2 above.

QUESTIONS AND COMMENTS

1. **What is a coke oven battery?**

   A coke oven battery is group of oven chambers connected by common walls in which coal is fed and "cooked". The heat in the ovens drives off volatile compounds from the coal as gases, to form carbon-rich coke.

2. **What is the difference between a recovery coke oven battery and a non-recovery battery? Where are there non-recovery coke oven batteries?**

   At a recovery coke oven battery, such as the Chicago Coke plant, the gas produced by the "cooking" of coal in the ovens is processed at an associated byproducts plant before the gas is burned as fuel. In the byproducts plant, certain chemical constituents in the gas are recovered for separate sale, as those constituents have value. The remaining gases from the byproducts plant are sent back to the coke ovens as "clean" coke oven gas to be used as a fuel.

   At a non-recovery coke oven battery, the gas produced by the coking process is immediately combusted in and around the coke oven to provide heat for the coking process, thus eliminating the need for a by-products plant.

   Recovery coke oven batteries are more common. However, there are several non-recovery coke oven batteries in the country including Indiana Harbor (East Chicago, IN) and Jewell Coal & Coke Company (Vansant, VA).

3. **What is a "pad-up rebuild" of a coke oven battery?**

   A pad-up rebuild is a complete reconstruction of the brickwork or refractory of an existing coke oven battery on the same site and pad without an increase in the design capacity of the coke plant. Because the ovens are made of brick, the pad-up rebuild will involve replacing the brick but not the deck slab or coke oven footprint, i.e., the oven will retain its original size. In addition, the coke oven battery will continue to utilize existing infrastructure associated with the battery, including coal charging and coke pushing and quenching systems.

4. **When did this plant last operate?**

   The facility discontinued coke production in December 2001.

5. **The draft permit reflects an unacceptable exercise of agency discretion in favor of the applicant and against public health and environmental quality.**

   This comment reflects a lack of understanding about the extent of discretion that the Illinois EPA has in the review of a permit applications for a proposed project. If a proposed project complies with applicable regulatory requirements, it shall be the duty of the Illinois EPA to

issue a permit for such project. This said the Illinois EPA has general authority to impose additional requirements on the plant to minimize its emissions and impacts, which it has done.

6. **This original application submitted by Chicago Coke was denied, in large part, because Chicago Coke failed to establish its proposal was not subject to the emission standards appropriate for a major modification or a new source. The Illinois EPA was correct in denying Chicago Coke's original permit application for its failure to demonstrate that this project is a minor modification. Correspondingly, the draft permit proceeding is legally inadequate because it characterizes this project as a minor modification, rather than as a new source or major modification.**

The Illinois EPA denied Chicago Coke's initial permit application because that application did not include necessary information to address several issues with respect to the proposed project, one of which was the appropriate treatment of the project for purposes of New Source Review. Chicago Coke subsequently resubmitted an application that did include information to further address this issue. The fact that the initial application was inadequate is not relevant to the adequacy of the later application, which is the basis of the Illinois EPA's action to issue a permit. The Illinois EPA's review of this later application indicates that this project should be treated as a modification, but not a major modification, because the increases in emissions of various pollutants are not significant.

7. **It does not appear that Chicago Coke applied for a CAAPP permit renewal within 18 months of the existing permit expiration date as required.**

Chicago Coke applied for a renewal of its existing CAAPP permit in a timely manner. Applications for renewal of CAAPP permits are to be submitted no less than 9 months prior to the date of expiration, not 18 months. (Refer to 39.5(5)(n) of the Environmental Protection Act.)

8. **The construction permit application submitted by Chicago Coke does not meet the requirements of 35 IAC 201.152 as related to mercury emissions from the plant. This rule requires that a permit application contain the following information:**

> **...the nature of the emission and air pollution control equipment, including the expected life and deterioration rate, information concerning processes to which the emission unit or air pollution control equipment is related; the quantities and types of raw materials to be used in the emission unit or air pollution control equipment; the nature, specific points and quantities of uncontrolled and controlled air contaminant emissions at the source that includes the emission unit or air pollution control equipment...**
>
> **Instead, the draft permit allows the plant to resume operation without determining the nature, specific points and quantities of uncontrolled and**

controlled mercury emissions, and without an evaluation of pollution control equipment that might control these emissions.

The application contains information that is adequate to meet the cited rule. In addition, with respect to emissions of mercury, the information in the application indicates that the mercury emissions of the plant should be small, as the mercury contained in the incoming coke is retained in the coke or collected in the by-products plant. Coke ovens are also not identified as a source of concern for mercury emissions, like coal-fired power plants. As such, the application includes information for mercury that is sufficient to generally assess the emissions from the plant, particularly as no state or federal regulations are currently applicable to the plant for mercury. Applicants for permits are required to provide information sufficient to address compliance with applicable requirements. In order to obtain a permit for a project like the one proposed, the applicant is not required to conduct an evaluation of controls for pollutants that are not currently regulated. This is specifically acknowledged by 35 IAC 201.152, as it also provides that the Agency may waive the submission of information that is unnecessary to an application.

9. **USEPA identified the greater Chicago area as a nonattainment area for PM2.5 appeared in the Federal Register on January 5, 2005. However, the effective date of this designation is 90 days later, on April 5, 2005. The record closes as a matter of law 30 days beyond the end of a public hearing unless extended by the hearing officer. The record in the present matter was closed as a matter of law at midnight on March 25, 2005. Since the record closed before Chicago area was effectively designated as a nonattainment area for PM2.5, the Illinois EPA may not consider the change in attainment status for this pollutant.**

This comment confuses the record for the public comment period with the record for the permitting decision.

10. **The USEPA is subject to a consent decree that require it to complete a review of the federal standards for emissions of hazardous air pollutants from coke ovens by March 31, 2005. (*Sierra Club v. Michael O. Leavitt*, Case No. 1:02CV00946, U.S. District Court for D.C.) The decree requires USEPA to review its existing emission standard for coke ovens, to determine the health risk from these facilities and, if necessary, to set new standards that are sufficient to protect public health with an ample margin of safety. Additionally, USEPA must assure that its standards reflect the maximum achievable degree of reduction in emissions. Changes to the regulations that result from this review may impact this plant and any further permit deliberations should reflect any findings and new rules resulting from this analysis.**

These events do not provide a legal basis to delay action on the requested permit. In addition, these comments identify and confirm actions by USEPA that will apply to this plant and act to further assure that emissions from this plant are well controlled and do not pose a significant threat to the health of the local community. In particular, if USEPA determines that the emission standards for existing coke oven batteries must be tightened,

the tighter standards would also apply to this plant. Such standards would be addressed in future permits for the plant.

11. **Condition 2.1.3-7(c)(ii) of the draft permit, which deals with opacity limit for the combustion stack of the battery during certain repairs to oven brickwork, is not consistent with 35 IAC 212.443(g)(2).**

This is correct. This condition reflects requirements of a site-specific revision of Illinois' State Implementation Plan (SIP) that impose more stringent requirements on opacity during such periods than 35 IAC 212.443(g)(2). (Refer to 40 CFR 52.720(c)(150)(i)(B).) These requirements were developed with USEPA as part of Illinois' strategy for attainment of the PM10 air quality standard. In addition to reducing the duration of higher opacity during such periods, the SIP revisions also clarifies that these provisions are intended to only address opacity during such periods and would not apply to the standard for particulate matter emissions, as contained in 35 IAC 212.443(g)(1). In addition, if Chicago Coke operates a continuous opacity monitor on the combustion stack, such action would not invalidate observations of opacity made in accordance with USEPA Method 9 by human observers. As human observations of opacity address actual opacity of the discharge, rather than opacity in the stack, and are not subject to mechanical failure like opacity monitors, human observations of opacity also may take precedence over data from an opacity monitor.

12. **If the plant were characterized as a new source or major modification, the opacity limit would be 20 percent, pursuant to the applicable standard for new emission units.**

This is not correct. The various State emission standards for coke oven batteries are contained in 35 IAC 212.443, which sets identical standards for new and existing plants and incidentally does limit opacity from pushing of coke ovens to 20 percent (35 IAC 212.443(c)(1)).

13. **The permit inappropriately requires that the Permittee assess whether a permit violation has occurred. The finding of a violation is only appropriate by the agency itself.**

It is true that the Illinois EPA is authorized and has a duty to identify and appropriately address violations of the state and federal environmental laws and regulations. However, for myriad reasons, the source is also obligated to identify its compliance status with applicable environmental laws and regulations. Most importantly, as an existing CAAPP source, Chicago Coke is obligated to identify its compliance status with each and every applicable regulatory requirement or permit condition. In fact, the permit requires the submittal of an annual certification of compliance by May 1 of each year for the prior calendar year, pursuant to the source's CAAPP permit.

14. **This opacity testing provision imposes a standard that is inconsistent with other similar provisions in the permit where it would only allow the termination of opacity**

testing if "the first 12 minutes of observations are both less than 5.0 percent." Other permit provisions (See e.g. 2.6.7-1.a.ii) more appropriately allow the early termination of opacity testing if the first 12 minutes of observations are "less than half of the applicable standard." This language should be inserted here

From a technical perspective, the cited differences relate to the inherent differences between boilers and the miscellaneous process equipment. Specifically, based on available information, the Illinois EPA expects that boilers will typically operate considerably below the opacity standard as compared to the miscellaneous process equipment. From a legal perspective, the Illinois EPA has general statutory authority for the requirements as cited.

15. **This provision would require the conduct of "detailed inspections" of the dust collection units while they are "out of service." There is no basis for requiring the inspection of units that are out of service. Rather, the weekly inspections required during operations should be sufficient to identify any concerns that must be addressed. This requirement should be deleted entirely.**

The purpose of inspection of out of service dust collection units relates to the fact that a different type of evaluation can occur during outage than can occur during a weekly inspection of an in-service unit, as such out-of-service inspections can extend to the condition of the internal components of control devices. Further, the Environmental Protection Act gives the Illinois EPA the authority to "impose such other conditions as may be necessary to accomplish the purposes of th[e] Act...

16. **The permit's requirement that inspections be performed "by personnel not directly involved in the day-to-day operation of the affected units" is inappropriate and should be deleted. This would create needless inefficiency by requiring the Permittee to train employees not familiar with the operations at issue solely for the purpose of inspections. This would impose unnecessary and unwarranted personnel costs and would unfairly infringe on the staffing flexibility needed to operate the facility in an efficient manner.**

The purpose of the inspections is to ensure compliance with the control measures for material handling operations. More specifically, the rationale for requiring the inspections be performed by "personnel not directly involved in the day-to-day operations of the affected units" is to provide assurance that the control measures have been properly implemented, beyond that which is provided where inspections are performed by the day-to-day staff operators.

17. **The Permittee should have the flexibility to increase its daily coal usage if it can demonstrate that the emission factor has changed and more coal can be charged without exceeding the applicable short-term emission rate.**

The flexibility requested by this comment is not available and will not be included in the permit. This is because a change in emission factors alters not only the permitted emissions but may also affect the quantification of the past actual emissions. The specific example

provided would require a revision of the permit which would entail an adjustment of the actual emissions (Attachment 3) and the future permitted emission (Attachment 1).

18. **There is no limit in the permit for ammonia content, and therefore there is no basis for including provisions requiring sampling and analysis of ammonia nor recordkeeping associated therewith.**

Coal contains nitrogen that when "cooked" in the ovens will produce ammonia which is converted to NOx when buried. Thus the purpose of the sampling, analysis and recordkeeping for ammonia in the coke oven gas is to ensure compliance with the NO_x emission limits set forth in this permit.

19. **Condition 1.5.1(a)(ii) inappropriately precludes the exclusion from the annual emissions calculations (for purposes of compliance with annual emission limits) increases in emissions that are unrelated to the physical changes allowed under this permit. The permit should remove the artificially limit the excluded emission increases to the boilers. Other emission units (e.g., roads, gasoline storage and transfer, material handling) could also experience increases in emissions unrelated to the rebuild of the coke plant that should be excluded from the annual emissions used to demonstrate compliance with annual emission limits. The phrase, "that are unrelated to the production of coke and coke byproducts" should be deleted because emissions from any subsequent projects should be excluded from the relevant annual emissions calculations.**

The boilers at the plant can clearly have functions that are not related to the operation of the coke plant and emissions from such activities could easily be distinguished from the total emissions of the facility and independently quantified (i.e. generating electricity for sale). However, it is difficult to make the same determination for emissions from roads, gasoline storage and transfer and/or material handling. As Chicago Coke failed to address in its application those units from which emissions increases could possibly be excluded from annual emissions calculations, the Illinois EPA could only address limited units in this permit; those for which the exclusion was obviously appropriate.

20. **Why does the permit contain limits from the PSD permit when they appear to be less stringent than NESHAP limits or other conditions of the permit?**

The PSD permit conditions, unless otherwise noted, are an instantaneous limit, whereas the NESHAP limits have specific provisions allowing a 30-day average. Accordingly, it would not be appropriate to supersede an instantaneous PSD permit limit with a seemingly more stringent NESHAP limit with which compliance is determined on a 30-day average. Also, some terms are defined differently for the PSD permit and the NESHAP. For example, the PSD permit limits emissions from charging hole lids, whereas other conditions in the permit address emissions from *all* lids, which is interpreted to include both charging hole lids and jumper pipe lids.

21. **Condition 1.4.1(b) should read "Compliance with the annual *emissions* limit shall be determined on a rolling 12 month total." Furthermore, coal usage should be one way to calculate the monthly emissions in that rolling 12-month summation.**

The purpose of Condition 1.4.1(b) is to require a 12-month summation each month such that the annual coal usage limit would be enforceable each month that the plant operated. For many emission units at the plant, coal usage is one factor needed to calculate emissions for the month and the rolling 12-month summation.

22. **The limits for sulfur dioxide (SO_2) in the draft permit are arbitrary and contrary to material in the application. The SO_2 emission limits are much higher than the emissions previously reported by LTV for the plant, without any rationale for this increase. The SO_2 emission increases are contrary to minimal legal requirements.**

The allowable emissions of SO_2 in the draft permit also far exceed Chicago Coke's own representations of emissions of SO_2. In a letter from Chicago Coke to the Illinois EPA, dated August 12, 2004, supplementing its application, Chicago Coke indicated that the net change in annual SO2 emissions would be 3.2 tons, based on future allowable emissions of 196.6 tons, as compared to past actual emissions of 193.3 tons, based on average actual annual emissions from 1999 and 2000, consistent with 40 CFR 52.21(b)(2)(i) and (b)(48). Instead of reflecting these performance-based emission estimates, the annual limit for SO_2 emissions in the draft permit is 232.9 tons, with a net change of 39.6, not 3.2. The Illinois EPA fails to explain why this higher limit for SO_2 emissions is justified. In addition, in Condition 1.5.2 of the draft permit, the new level of permitted SO_2 emissions is described as 299 tons per year, more than 100 tons in excess of historical levels, and more than 65 tons per year greater than emission limitation in Attachment 1 of the draft permit. Table 3 in the Project Summary describes "historical actual emissions" of SO_2 as 193.4 tons per year, while Attachment 3 in the draft permit describes historical actual emissions of SO_2 as 257.3 tons per year, completely different figures both somehow based on "the calendar years 2001 and 2002." Attachment 2 of the draft permit includes a table with yet another actual emission levels, 181 tons per year, and two characterizations of the plant's potential SO_2 emissions, 193.7 and 299 tons per year respectively. This erratic characterization of actual and potential emissions is internally inconsistent, strongly suggesting any resulting emission limitation is arbitrary and also calling into question whether the emissions calculations for SO_2 emissions are credible.

The confusion about past SO2 emissions of the plant and the applicable limitations is understandable, particularly as both the project summary and the draft permit inadvertently failed to reflect the most recent data for past SO2 emissions from the plant submitted by Chicago Coke. The issued permit corrects these errors, setting an annual limitation on SO_2 emissions of 287.6 tons, based on past emissions of 248.1 tons, with an increase of 39.5 tons per year.

This confusion occurred because Chicago Coke initially used available data for the plant, which only accounted for the hydrogen sulfide (H_2S) content of the coke oven gas, to

calculate the past emissions of SO2 from the plant. This calculation did not account for other organic sulfur compounds (CS2 and COS) also present in the coke oven gas in lesser concentrations than H_2S. Accordingly, the Illinois EPA required Chicago Coke to submit revised calculations to address all SO2 emissions from the plant, including the SO2 emission attributable to the organic sulfur content of the coke oven gas. This resulted in a higher level of past SO2 emissions from the plant than initially calculated by Chicago Coke.

23. **The SO_2 emission limits in the draft permit appear to be arbitrarily and contrary to the application. The plant's allowable SO_2 emissions are not consistently calculated or described in the draft permit and related documents. For example, the draft permit provides no sulfur emission factor for the combustion stack and clean coke oven gas, but rather a footnote stating, "SO_2 emissions are to be determined from actual sulfur content of coke oven gas, assuming complete conversion of sulfur to SO_2." By contrast, the previous CAAPP permit issued to LTV used an SO_2 emission factor of 94.05 lb/million cubic foot.**

This comment reflects a misunderstanding of the role of emission factors. As related to the emissions of SO2 attributable to burning coke oven gas, the permit requires that the future emissions of SO2 from the plant be determined based on actual sampling and analysis of coke oven gas. This provides more accurate information on actual emissions than an emission factor and accounts for variability in the sulfur content of the coal supply to the battery and the performance of the sulfur removal system in the by-products recovery plant.

24. **The annual limitation for SO_2 emissions in the draft permit is unenforceable because exceedances would not be considered violations for up to 27 months following resumption of operation of the plant. This exemption for violations of the SO2 emission limit is contrary to minimal legal requirements. In particular, under Condition 1.5.1(b)(i), if the sampling and analysis of the coke oven gas during months 5 through 16 of resuming operation shows that a different level of organic sulfur is present in the coke oven gas than historically, Chicago Coke must apply for a revision to the permit. As drafted, any exceedance of the SO_2 limitation in the draft permit would not be considered a violation until the revised permit is issued or month 27, whichever is first. Moreover, under Condition 1.5.1(b)(ii), regardless of how far SO_2 emissions exceed the significance threshold during this period, the resumption of operation of the plant would not be subject to permitting as a major modification. Simply, the plant could be operating far in excess of the SO_2 limitation and significance threshold, for more than two years, and not be subject to enforcement or PSD.**

This comment misrepresents this condition of the draft permit. The condition at issue does not allow a significant increase in SO2 emissions from the plant. The condition clearly provides that an exceedance of the SO2 limitation would not be considered a violation only if this project still does not constitute a major modification for purposes of the PSD rules. The condition also provides that an exceedance would not to be considered a violation only if it is also attributable to the organic sulfur content of the coke oven gas, that is, the exceedance is not a consequence of the hydrogen sulfide content of the gas.

This condition is an appropriate response to the nature of information that is available for the past actual emissions of SO2 from the plant attributable to the organic sulfur content of coke oven gas. The data for organic sulfur content of the coke oven gas does not approach the quality of the data for the hydrogen sulfide content of the gas, which is based on actual sampling and analysis on a daily basis of the clean coke oven gas produced at the plant. Instead, the data for organic sulfur content relies upon a small amount of data for the organic sulfur content of the coke oven gas at other similar plants. Thus, the permit requires Chicago Coke to apply for a revised permit if the organic sulfur content of the coke oven gas is different, either higher or lower, than the data in the application used for the organic sulfur content of the coke oven gas.

The approach in the permit to emissions of SO2, as noted in this comment, is not the same as that for nonattainment pollutants. However, the approach to SO2, which is attainment pollutant governed by the PSD rules, is still technically sound as Chicago Coke is required to conduct a program of regular sampling and analysis of coke oven gas to determine its sulfur content, and thus the SO2 emissions from the plant, which occur almost entirely from burning of coke oven gas. Equally important, the approach to SO2 emissions in the permit is consistent with applicable requirement of the PSD rules, which do not require explicit limits on future emissions when permitting modifications. The format and approach to limiting SO2 emissions in the permit is consistent with the requirements of the PSD rules, 40 CFR 52.21(b)(2) and (r)(6).

25. **Condition 2.2.6-2(a)(i) of the draft permit requires Chicago Coke to determine the level of overall mercury control <u>after</u> it begins operation, not as part of the application. This determination will be made 4 to 9 months after the plant resumes operations, and will be submitted by the 12th month of operation. If the evaluation discloses that more than 10 percent of overall mercury emissions are being released to the environment, then Chicago Coke must consider whether lower mercury emissions from the source may be reliably achieved without unacceptable consequences. Only if this evaluation reveals more than 20 percent of overall mercury emissions are being released to the environment is Chicago Coke required to perform an engineering review of possible physical changes to the source to enhance the level of control of mercury emissions. Chicago Coke then has potentially 48 additional months (24 months initially, with possible 24 month extension) to submit this evaluation. After this three to five year period, if the plant is still emitting 15 percent or more of its mercury, then the "permittee shall proceed to expeditiously implement the physical changes to the source to enhance control of mercury emissions..." a determination required as part of the application process will instead be conducted over a several year period after the plant resumes operation. Control requirements for mercury should be established in the permit, not five years later.**

It is not possible to definitively determine whether additional controls measures are needed at the plant for mercury emissions in the absence of empirical testing or measurement. Certain general information provided in the application indicates that emissions of mercury will be well controlled, which is sufficient for issuance of the permit. However, the permit

requires this general information to be corroborated by actual, empirical data. Until this empirical data is gathered, which can only occur after the plant resumes operation and has completed shakedown, it is not possible to determine whether any additional control measures are needed at the plant for mercury emissions. It is also not possible to set an appropriate schedule for implementation of any operational or physical changes at the plant to better control mercury emissions.

In the event that actual testing and measurement shows that additional control measures are needed at the plant for mercury, the permit contains an appropriate schedule for evaluation and implementation of such measures given the current state of knowledge concerning mercury emissions from coke ovens. The permit provides a reasonable time (12 months from resumption of operation) to conduct the necessary sampling and analysis for mercury, given the complexity of analyses for mercury. If control measures specifically for mercury are required, the permit then provides a reasonable time (12 months) for Chicago Coke to evaluate and select such measures. While the permit does provide that this period of engineering analysis may be extended by 12 months, Chicago Coke must proceed with an initial set of additional control measures at the same time that it conducts any extended analysis. Thus additional control measures for mercury, if required, will begin to be implemented at the plant within two years after resumption of operation.

26. **The emission factors in the draft permit are different than the factors used in the Sources CAAPP permit and the application for this project. As the factors in the application are used to calculate the emission limits in Attachment 1, the factors in the draft permit should reflect those in the application.**

The Illinois EPA generally agrees with the commenter and the appropriate changes have been made to the emission factors in the permit. In addition, the Permittee is generally obligated to use a more accurate factor or emission rate should one become available.

27. **As a general matter, the nearly five pages of recordkeeping requirements are overly burdensome and unnecessary for these relatively simple units. These recordkeeping requirements should be streamlined to dramatically reduce the administrative burden imposed.**

The purpose of the recordkeeping requirements is to allow the Illinois EPA to accurately calculate the emissions from the emission units affected by the section at issue. The relevant section contains several provisions that are applicable to emissions during malfunction and breakdown. These provisions must be maintained if the source wishes to obtain the ability to operate during malfunction and breakdown of these units. Therefore, the recordkeeping requirements are neither overly burdensome nor unnecessary.

28. **Several facets of the recordkeeping requirements imposed throughout this permit would require the Permittee to utilize specific technical documents to support their recordkeeping calculations (e.g., material published by USEPA). This practice improperly precludes the use of alternative valid sources of information that might be**

preferable. These requirements limiting reference to specific subsets of technical materials should be deleted.

As a general matter, a site specific emission factor established through emissions testing or other means is a preferred method for determining compliance with applicable regulatory or permit requirements. However in the absence of a site-specific emission factor, the Illinois EPA often relies on USEPA emissions factors, as it has done in this instance.

29. **The permitted facility is not a "new" facility that is under construction, but rather is a historic coke plant that will be restarted. Because the Permittee may not have installed the dust collection equipment at issue, it may not have all of the "supporting documentation" associated with this equipment. To recognize this fact, these provisions should only require the retention of "any available" supporting documentation for existing equipment.**

The information required to be maintained by the relevant permit conditions is essential to the operation of the dust collection equipment in accordance with good operating practices. The Illinois EPA has not been prescriptive in what supporting documentation must be maintained, however, some level of supporting information is clearly necessary to establish or support the performance specifications for filter material, the maximum design particulate matter emissions and the maximum operating capacity.

30. **Permittee should have the flexibility to keep records to demonstrate compliance with its annual limits based on emission units or groups of similar emission units or fuel use, or coal throughput, or any other reasonable method. The groupings in Attachment 1 should be deleted and should not be enforceable emission limits or a reference point for recordkeeping.**

The provisions in the permit generally addressed by this comment are necessary for practical enforceability of permit conditions, as specifically addressed by USEPA policy and guidance related to practical enforceability of emission limits.

31. **The permit should acknowledge that records and logs can be readily accessible in an electronic form even when they may not be located at the source. Further, some records and plans are best controlled when they are not able to be modified or revised on site, but made available via an intranet to a computer on site when access is needed. Paper records should not be required in response to an agency request if the request can more efficiently be fulfilled by transferring the data requested in a portable electronic format.**

The permit would not preclude electronic records or logs so long as they are readily accessible at the source. However, paper records may be required during the course of a source inspection.

32. **As there are no applicable hourly limits for NO_x and CO emissions from the combustion stack, there is no need for performance testing of these pollutants.**

Therefore, performance testing is misguided and the emission factors used to establish baseline emissions should continue to be used to demonstrate compliance with the annual Attachment 1 limits after the restart.

The plant is subject to limitations on annual emissions of NOx and CO, which necessitates compliance procedures to confirm compliance with those limitations. As the combustion stack is a significant source of NO_x and CO emissions, it is appropriate to periodically perform stack tests to confirm the rates of emissions from the combustion stack, as they are a factor in the determinations of actual emissions.

33. **The draft permit does not require testing of the mercury content of coal used at the plant or set limits on the mercury content. As a result, changes in mercury emissions from use of different coal than that used during the initial 6-month assessment period would not be identified.**

The permit requires sampling and analysis of the coal supply for mercury content. (Refer to Condition 2.1.9(a)(ii).)

34. **Why does the permit paraphrase certain regulations rather than copying the specific regulation verbatim?**

It is not appropriate to include in the permit all regulations verbatim. Furthermore, if a lengthy regulation or group of regulations can be referenced and followed by a short summary, the Illinois EPA has done so. This method of permit writing gives the Permittee and other persons the appropriate reference for additional details and provides a summary of what is required. As the detailed regulations govern, it is important that parties be familiar with and follow those regulations.

35. **When a federal rule such as the NESHAP contains references to the Administrator or reviewing authority, the corresponding permit condition should contain the same reference, rather than USEPA and Illinois EPA.**

This comment fails to recognize the reasons why the Illinois EPA did not simply restate verbatim the federal regulation at issue. The Illinois EPA did not repeat the relevant federal text as it wanted to make clear which agency or agencies possessed particular responsibilities. Further, regarding reporting issues, it wanted to make clear that federal reports should be submitted to both agencies in certain specified instances

36. **The permit conditions which define what affected units are (e.g., Condition 2.1.3(a), 2.2.3(a), 2.3.3(a), etc.) appear to inadvertently expand the scope of affected units to include other sources in the broad descriptions. Furthermore, if the units are not subject to any applicable rules, such as the NESHAP, they should not be included in the permit except for a facility wide emissions cap.**

An affected unit does not necessarily include *all* equipment mentioned in the Description section as the Description is intended to be a broad overview of the units, how they operate and how they interact with other components.

Because the rebuild of the coke oven battery affects many operations at the plant, the Illinois EPA must evaluate each unit at the plant to ensure that a significant emissions increase has not occurred. This evaluation may involve new emission limitations and other requirements that make the limits and conditions enforceable as a practical matter.

37. **Why does the permit appear to expand the NSPS and NESHAP applicability and compliance obligations to units not subject to the these federal provisions (e.g., startup, shutdown and malfunction plan for the transfer of collected dust from the pushing baghouse).**

The permit does not expand the NESHAP or NSPS obligations. However, it does utilize the requirements described in the NESHAP for affected units that are not subject to these federal provisions. Rather than develop different and potentially conflicting requirements for the units not subject to the NESHAP or NSPS, the permit "borrows" the terms of the NESHAP and NSPS.

38. **Why does the Permit require compliance with 40 CFR Part 63 Subpart CCCCC now when the compliance date is not until April 14, 2006?**

Since the plant is currently not in operation and given the nature of coke ovens, it is appropriate to implement the necessary control measures required by the NESHAP as part of the padup of the battery. The permit does clarify (at Condition 2.1.3(b)(ii)(C)) that a violation of a particular permit condition would not constitute a violation of the NESHAP until after the NESHAP compliance date.

39. **Many of the limits in the draft permit go well beyond what is necessary to ensure that the plant restart does not trigger New Source Review requirements under PSD, 40 CFR 52.21, or MSSCAM, 35 IAC Part 203. In particular, the draft permit would improperly limit the annual emissions of individual units and groups of units (Attachment 1), which would unnecessarily restrict operational flexibility. For each pollutant, the permit should set a single annual limit, which reflects the baseline actual emissions plus a less than significant increase in emissions. The plant would then have the flexibility to operate in any configuration that assures compliance with that annual limit.**

The provisions in the permit generally addressed by this comment are necessary for practical enforceability of permit conditions, as specifically addressed by USEPA policy and guidance related to practical enforceability of emission limits.

40. **While coal consumption should be one option for demonstrating compliance with emission limitations and to ensure that insignificant sources are not operating significantly above historic levels, it should not be the only option. An increase in coal**

consumed does not always result in an increase in emissions. If the plant is able to improve the process so that coal use and coke production increase without increasing annual emissions, the permit should not create an unnecessary obstacle to increasing production efficiency. The permit should allow the plant the opportunity to submit emission calculation protocols to the Illinois EPA, which after review could supplement the coal usage approach without reopening the permit. This would provide the plant with maximum flexibility in demonstrating compliance with its annual emission limits. Short-term coal usage limits unnecessarily restrict operational flexibility.

With the exception of the short-term coal usage limit, the extent of operational flexibility requested by this comment for the plant is not available. The short term and the annual coal limitations are to ensure that the plant does not exceed the emission limits in the permit, for which compliance will be calculated based on the amount of coal used at the plant. In its application, Chicago Coke has not demonstrated any change in the emission factors reflected in the permit based on the amount of coal charged to the battery.

Additional operational flexibility has been added to the permit for the short-term limit by changing the daily limit averaged weekly to a daily limit averaged monthly.

41. **The permit should afford operational flexibility with respect to the units subject to the Benzene Waste Operations NESHAP (40 CFR Part 61, Subpart FF), specifically the plant should be allowed have any level of annual benzene quantity without revision to this construction permit if it complies with the requirements of Subpart FF.**

The flexibility requested has not been included in the issued permit. A new or revised permit may be required where the annual benzene quantity fall outside the range authorized in the permit. Specifically, reducing the annual benzene quantity below 1 Mg/year would likely require physical changes for which a construction permit may be required. Likewise, if the plant were to achieve an annual benzene quantity greater than 10 Mg/yr, more stringent control requirements would be required triggered again requiring a construction permit.

42. **The permit should specify that the plant is an "existing participating source" for the purposes of the Emissions Reduction Market Trading System (ERMS), 35 IAC Part 205, and will receive seasonal allocation of allotment trading units (ATUs) based on its baseline emissions under ERMS. While the plant's CAAPP permit is the appropriate place for further details about ERMS, this construction permit is an appropriate place for the determination that the plant is an existing source under ERMS. In addition, the construction permit should not include the obligation to hold ATUs and other substantive requirements of the ERMS without also including relevant provisions of the ERMS for a participating source, especially provisions for seasonal allocations of ATUs.**

The status of the plant under ERMS, i.e., an existing participating source, is already addressed in the source's existing CAAPP permit. As a "participating source," all of the

obligations of the ERMS program are already applicable to the source. This construction permit can not change this.

43. **Condition 1.6.b should be revised to specify that implementation of the inspections, testing, monitoring and recordkeeping begins when the units resume *normal* operation.**

This change will not be made. It is appropriate for implementation of inspections, testing, monitoring and recordkeeping to commence immediately upon resumption of operation. First, tying the specified provisions to startup of a unit provides a clear indication of the date on which the requirements are triggered. Second, in order to have complete and accurate information for compliance status with applicable emissions standards and limits, it is imperative that the referenced requirements commence with the startup of a unit, not after debugging, not after reaching typical operating mode, and not after reaching maximum operating mode.

44. **Condition 1.3.3 should state that Boiler 4B has been allocated 60 tons of NO_x Allowances under the NO_x Trading Program. This is important because 35 IAC Part 217, Appendix E (where the allocations of NO_x Allowances for Non-Electrical Generating Unit are listed), does not include an allocation for Boiler 4 but instead indicates that the allocation will be entered when USEPA makes an allocation to Boiler 4B. USEPA has made this allocation in 2001, allocating 60 tons of NO_x Allowances to Boiler 4B (66 FR 56452). This condition is an appropriate place to record this allocation for Boiler 4B.**

While an allocation of NO_x allowances has been made for Boiler 4B (see also Condition 2.4.3(a)), the requested change cannot be made because it is unclear whether LTV has transferred this allocation over to Chicago Coke.

45. **180 days after resuming operation of the coke plant operations is not enough time to submit a complete application to amend the CAAPP permit to incorporate new requirements established by this permit.**

The permit has been revised to extend the time to submit the application to amend the CAAPP from 180 days to 270 days.

46. **These provisions would require the Permittee to submit both a test plan to the Illinois EPA 60 days in advance of testing and a separate notification of intent to test at least 30 days in advance of testing. These requirements are duplicative. Rather than requiring two separate notifications, the Permittee should be permitted (at its option) to submit a single notification specifying the testing plan that will be used and the date such testing will occur.**

This comment reflects a flawed understanding of the two conditions. These requirements are not duplicative. Rather, not later than 60 days in advance of a test event, the source must submit a test plan for Illinois EPA review. Not later than 30 days in advance of the

test event, the source must submit notification of the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test.

47. **Condition 1.8.1(a) of the permit does not define "deviations" sufficiently for the Permittee to know when a reporting requirement is triggered for Section 1. Also, the reporting obligation should be 30 days after *discovery* of a defined "deviation" to account for events that may not immediately indicate a deviation has occurred. The permit should also define the proper contact person and method for notifying Illinois EPA.**

Deviations, which are periods of time when the actual operations differ from the permit terms, are self explanatory and do not require a definition in the permit. The word "discovery" will not be added as it is the deviation event itself that triggers the reporting obligation, not the "discovery" of the event. The permit has been revised to include the applicable reporting addresses.

48. **Condition 1.8.2 of the permit does not contain sufficient information for the Permittee to determine its compliance obligation. The term references an annual emission report pursuant to 35 IAC Part 254, but it does not direct the Permittee to submit one, nor does the permit indicate where to submit the report or when the report is due**

The permit has been clarified to direct the Permittee to submit an annual emissions report by a specific date to a specific location.

49. **Condition 1.6(a) inappropriately requires submittal of required reports for equipment that is not operating. The reporting requirements should become effective when the equipment starts operating.**

The change will not be made. Some reports are required by specific programs that apply to the facility (ERMS, NESHAP, NSPS, CAAPP, etc.) and other reports are required to allow the Illinois EPA to monitor progress during the pad-up rebuild.

50. **What kind of hazardous air pollutants will the plant emit? What are "coke oven emissions?"**

The coke oven battery would emit a hazardous air pollutant known as coke oven emissions. Benzene, toluene, xylenes, cyanide compounds, naphthalene, phenol, and polycyclic organic matter (POM) are constituents in coke oven emissions. The byproducts plant would emit benzene, POM, cyanides, phenols, and light oils and aromatics.

51. **What heavy metals are emitted and in what quantities?**

The heavy metals present in coal in trace amounts, including arsenic, cadmium and nickel, are present in coke oven emissions at levels that are generally measured in fractions of parts per million.

52. **There is not a legal basis for the requirements in the draft permit related to mercury emissions, including requirements for sampling and analysis of coke oven gas and coal for mercury content and requirements to enhance control of mercury, if more than 10 percent of the mercury in the coal is lost to the environment. It is expected that the plant, like other by-product recovery coke plants, will emit an insignificant amount of mercury. With the expected emissions of mercury being as low as few pounds per year, measurements become highly variable and unreliable, making it impractical to require quantification of mercury reduction as a permit requirement.**

It is unquestioned that the Illinois EPA has legal authority, pursuant to Section 39(a) of the Environmental Protection Act and the Pollution Control Board regulations at 35 IAC 201.156, to place conditions in a permit that require a source to take reasonable measures to quantify emissions of regulated pollutants, including mercury. While there will likely be technical challenges to quantifying mercury emissions from the plant, the conditions of the permit are crafted to address these challenges. The conditions do not presume that the current analytical methods will immediately be able to produce reliable data for mercury emissions. They also allow adequate time for methods to be adapted and refined so that the level of mercury emissions from the plant can be accurately determined.

The Illinois EPA also believes that it has the authority to impose the requirements for control of mercury contained in the permit. In particular, these control requirements reasonably address emissions of a pollutant of significant concern to the environment that are not otherwise subject to explicit standards, to assure that the actual emissions of the pollutant are minimized by good air control practices and are consistent with representations made in the application. The permit would only require Chicago Coke to take significant action to further control emissions of mercury if emissions are not inherently well-controlled by the plant, contrary to the representation made by Chicago Coke in its application.

53. **Since mercury would be emitted from the plant, why is there no limit on mercury emissions?**

At this time, there is not adequate information on the levels of mercury emissions from coke oven batteries to set a quantitative limit. However, information that USEPA has assembled on mercury emissions shows that by-product recovery coke oven batteries are not significant sources of mercury emissions, presumably because the byproduct recovery operations are also effective in controlling mercury emissions. Accordingly, as there is no legal requirement to set a mercury limit, the draft does not do so. There is no legal requirement to set a mercury limit. Instead, mercury emissions of the plant are addressed qualitatively with a requirement that the plant control at least 90 percent of mercury and if it doesn't achieve 90 percent control of mercury emissions that provision for corrective or mitigation actions come into play.

54. **How would one know if the level of mercury being emitted from the plant is safe or unsafe?**

There is adequate information to conclude that mercury emissions from this plant or sources generally are not a direct threat to air quality or public health. The environmental concern for mercury is consumption of mercury-contaminated foods, that is, certain fish that may contain relatively high levels of mercury. This contamination is the result of the overall loading of mercury to the environment on from many sources on both a national and international basis and the "bio-magnification" of mercury levels as one moves up the food chain.

At the present time, public health officials generally recommend that people, because of potential health affects of mercury, be moderate in the amount of certain types of fish that they eat. For example, the Illinois Department of Public Health issues specific advisories for how frequently predatory fish caught in different bodies of water in Illinois should be eaten. More stringent advisories are set for young children and women who are or may become pregnant, to protect the unborn. At the same time, the public is reminded that fish is generally an excellent source of protein and has an appropriate place in a balanced diet.

55. **This project is described as a minor modification. How can Chicago Coke restart this coke oven battery as a state-of-the-art plant with only minor modifications?**

The classification of this project as a "minor modification" does not refer to the amount of work that Chicago Coke must undertake to restart this coke oven battery. Rather, this is a classification under applicable regulations, related to the changes in emissions from the project comparing future emissions to the historic emissions from the plant. In particular, because the project, as restricted by the construction permit, will involve at most increases in emissions that are not significant compared to the old operations at the plant, it is classified as a minor modification.

56. **What will be the effect of the emissions from the plant on air quality, the quality of life in the neighborhood and the health of the children and elderly in the area?**

Emissions from the plant should have no adverse effect on air quality, the quality of life in the neighborhood or the health of the children and elderly in the area. Air quality standards are set by USEPA to be protective of sensitive portions of the general population including both the young and the old. The application was reviewed against the requirements that were promulgated to ensure the air quality standards are met. The permit incorporates provisions that will ensure compliance with these air quality standards will be met.

57. **Did the Illinois EPA require Chicago Coke to perform air quality modeling or did the Illinois EPA do its own modeling? The Illinois EPA should be requiring comprehensive modeling to ensure that pollutants that come from Chicago Coke will not degrade air quality in this community or in other communities.**

For a project of this type, air modeling is not required. However, the Illinois EPA did its own modeling. The Illinois EPA conducted dispersion modeling to assess the impacts of coke oven emissions, arsenic, benzene, cadmium and nickel from the source on the

community. From the modeling, the Illinois EPA concluded that the plant is not likely to pose a significant risk to human health. Specifically, the risks posed by emission from the coke ovens (80 in a million) are significantly below the acceptable risk level established by the USEPA (200 in a million). In fact, the actual risk is likely a third of the modeled value as the modeling is based on the maximum emissions that could be emitted under the construction permit whereas USEPA has indicated that coke ovens typically emit only 80% of their allowable emissions levels.

Additionally, the Illinois EPA conducted SO_2 and NO_x dispersion modeling. Such modeling indicated that the emissions from the source would not cause any NAAQS violations.

Further, the plant is in an area that was already designated nonattainment for particulate matter, measured as PM10, prior to the recent action by USEPA with respect to the standard for particulate matter expressed as PM2.5. Ambient monitoring data from 2000 through 2002 was relied upon for the designations for PM2.5, so that the past emissions of the plant were "addressed" in that data.

58. **I request that the Illinois EPA analyze how the air quality impacts of the plant would be altered if best available technology and lowest achievable emissions rates were imposed on the plant.**

The comment calls for an analysis of air quality impacts from a hypothetical scenario. No legal or technical basis for such analysis exists. However, the Illinois EPA did perform an analysis of the air quality impacts of the plant as proposed and this analysis showed no violation of the NAAQS for SO_2.

59. **Why is it that the modified plant would actually emit more than the old plant? This is a worse performer than the plant it is replacing.**

The permit would allow an insignificant increase in emissions from the plant. This is because the permit is based on historical operation for the period of time before the plant shut down, at which time the plant was not operating at maximum capacity levels.

60. **All of the permitted levels of annual emissions would be very close, within a half a ton, of the thresholds for a major modification. If the plant emitted much more, it would be considered a major modification.**

Although it is true that the emission rates are set close to the significance thresholds, nonetheless, these rates are below the significance thresholds and thus legally and technically appropriate. In the event the significance thresholds are exceeded, appropriate enforcement action would be initiated.

61. **What is BACT for recovery coke plants? I request that the Illinois EPA do a BACT determination and answer this question in the Responsiveness Summary.**

The Illinois EPA cannot in this instance articulate what would constitute BACT for this recovery coke plant. This is because the applicant was not obligated to submit a BACT analysis as the project is neither a major modification nor a new major source. The Illinois EPA does not perform unilateral BACT analyses, particularly where there is no regulatory basis for such BACT analysis.

62. **Would this proposal be considered BACT (if the project were major)? Are there other technologies that would have less emissions? Could there be a better technology?**

There are two types of coke plants. There are recovery coke plants and nonrecovery coke plants. The type of plant at issue, is a recovery-type coke plant. At this juncture, the Illinois EPA believes there can be incremental improvements in how it is operated and maintained, but it is fundamentally constrained by the fact it is a recovery-type coke plant. However, many of the requirements in the permit exceed MACT or are BACT-like.

63. **If this plant were treated as a major new source, an entirely different kind of permitting would take place that would be much more protective. This plant would have to meet the standards for its emissions equivalent to the best performing plant anywhere in this country. In addition, if this project were determined to be a major new source by the Illinois EPA, Chicago Coke would have to acquire emission offsets from existing sources, so that there would actually be cleaner air with the restart of the plant.**

This source is not considered a new major source because the source was not permanently shut down. In particular, the source made considerable efforts when operations were temporarily discontinued to ensure the minimum effort and cost of resuming operations at the facility. These efforts included, but were not limited to, operating the coke oven battery in a hot idle mode for a period of time, maintaining and not dismantling or demolishing equipment, and preserving the operating permit. These efforts support the intent of the Permittee and its predecessors to resume operations at this facility.

64. **If it was determined that the plant was major, then we could take it to an independent board to decide which is best available control technology for this plant.**

The comment correctly points out that construction permits issued under the PSD program (new major sources or major modifications of existing major sources for PSD pollutants) are appealable to the Environmental Appeals Board.

65. **This project is in an area that USEPA recently designated as nonattainment for the PM2.5 air quality standards. This alters how the net change in PM2.5 emissions should be calculated for the project, compared to the emissions of the former LTV plant. According to 35 IAC 203.208(a), for the past emissions of the plant to be available for the netting exercise, the emissions must be contemporaneous and "...must also occur after either April 24, 1979, or the date the area is designated by the**

United States Environmental Protection Agency as a non-attainment area for the pollutant, whichever is most recent." However, emissions when LTV last operated the plant occurred before the USEPA made its nonattainment designations for PM 2.5. Consequently, those PM 2.5 emissions are not contemporaneous with the future operation of the plant. There is no indication that the Illinois EPA correctly analyzed the contemporaneous time period for PM 2.5 emissions related to the new nonattainment designations.

This comment is based upon a flawed understanding of the proposed project and its circumstances. The project was evaluated as a possible major modification, considering the consequences of the project for emissions, without reliance on or consideration of other unrelated decreases in emissions as occurs with netting. When reviewing a proposed project to determine whether it is a major modification for a pollutant, the first step is generally to determine whether the project would result in a significant increase in emissions. A netting exercise is a possible second step in the review of a project, which can be pursued if a proposed project would result in a significant increase in emissions. With a netting exercise, the applicant can show that, notwithstanding the fact that a project would result in a significant increase in emissions, the project would still not result in a significant net increase in emissions, so as to not be considered a major modification. This second step was not pursued for this project because the project will not cause a significant increase in emissions.

In addition, the plant is in an area that was already designated nonattainment for particulate matter, measured as PM_{10}, prior to the recent action by USEPA with respect to the standard for particulate matter expressed as $PM_{2.5}$. Ambient monitoring data from 2000 through 2002 was relied upon for the designations for $PM_{2.5}$, so that the past emissions of the plant were "addressed" in that data.

66. **In the absence of any contemporaneous decrease in emissions, and in light of the extensive physical changes to the plant, the Illinois EPA must determine if any emissions from the project should be regarded as significant for purposes of PM2.5. There is USEPA guidance that can be used for this purpose. In the PSD program, USEPA defines criteria for significant net emissions increases for various pollutants. (Refer to 40 CFR 52.21(b)(23)(i).) However, for a pollutant like PM 2.5, which is subject to regulation under PSD but for which a significance threshold is not set, the default threshold is "any emissions rate." (Refer to 40 CFR 52.21(b)(23)(ii).) Under the USEPA's Emission Offset Interpretative Ruling, 40 CFR Part 51, Appendix S, which addresses proposed projects in areas designated nonattainment, the "particulate matter" significant level set by USEPA for a net emissions increase or the potential emissions of a source of 25 tons per year.**

This comment does not provide legal support to evaluate the change in PM2.5 emissions with this project in a way that is different than the way it was evaluated. The emissions of PM2.5 from the plant are equal to or less than the emissions of PM10 from the plant, as PM2.5 is a subset of PM10. Accordingly, a demonstration that this project is not significant for particulate matter emissions, measured as PM10, also assures that this project is not

significant for particulate matter emissions, measured as PM2.5. In this regard, a reasonable and legally justifiable criterion for a significant emission increase for PM2.5 is 15 tons/year, identical to the formally adopted criterion for PM10. Alternatively, the relevant threshold should be the higher threshold contained in 40 CFR Part 51, Appendix S, i.e., an increase of 25 tons/year.

The PSD rules do not provide relevant guidance on this subject, as they are applicable for attainment pollutants, not nonattainment pollutants. They also do not support application of an "any increase" criterion to this project, as this stringent criterion was established in the PSD program by rulemaking. Moreover, assuming for purposes of argument that the PSD rules could be relied upon for the proposed project, it would also be appropriate to rely on other relevant elements of the PSD rules for proposed modifications. This would include the provisions of the PSD rules that allow a source to determine whether a project is a major modification, i.e., will be accompanied by a significant increase in emissions, based on the difference between the past actual emissions and projected future actual emissions after the project, rather than potential emissions after the project.

67. **In the present case, the plant has a potential to emit more than 100 tons per year of both "particulate matter" and PM10. There is no PM2.5 emissions estimate or limitation in the permit. In order to conduct adequate permitting, Illinois EPA must determine – in the absence of any contemporaneous emissions decrease and in light of the major physical reconstruction of the plant – if this plant will have any PM2.5 emissions and, if so, if these emissions exceed the appropriate significance level. If so, the project is a major source in a PM2.5 non-attainment area and should be permitted accordingly.**

A recent letter from Steve Rothblatt, Director of the Air and Radiation Branch, USEPA Region 5, to the Indiana Department of Environmental Management, underscores the immediate effect of the new nonattainment designations. Mr. Rothblatt states:

> **The nonattainment NSR requirements apply to newly designated nonattainment areas upon the effective date of the designation. After this effective date, permits issued in these areas must satisfy the part D nonattainment NSR requirements, as required by 40 CFR 52.24(k) and 40 CFR Part 51, Appendix S...**

The present permit review and the draft permit are legally inadequate because there is no indication that the effects of the new PM2.5 nonattainment designations have been considered. In light of the reconstruction of the plant, the lack of contemporaneous emission decreases, the potential emissions of the plant, and the New Source Review obligations now imposed on Illinois EPA, a detailed applicability determination is required for this project due to the PM2.5 nonattainment designations. If this determination is not performed or not performed correctly, it would be a basis for challenging the resulting permit decision.

Emissions of PM2.5 from the plant have been adequately and appropriately addressed, as PM10 emissions have been addressed. The relevant guidance from USEPA on the subject of PM2.5 emissions indicates that it is appropriate to use particulate matter emissions, measured as PM10, as a surrogate for particulate matter emissions, measured as PM2.5. It is also appropriate to continue to use 15 tons/year as the applicable threshold for a significant emissions increase. Relying on this guidance, the Illinois EPA assumed that emissions of PM10 and PM2.5 from the plant are identical.

Incidentally, Mr. Rothblatt's letter addressed the effect of the recent nonattainment designations for the 8-hour ozone standard. In addition, as Illinois' New Source Review rules differ from Indiana's, certain details in Mr. Rothblatt's letter, e.g., the reference to 40 CFR Part 51, Appendix S, are not applicable to Illinois.

68. **The analysis for possible applicability of New Source Review to this project for emissions of PM2.5 should account for the plant's emissions of both filterable and condensable particulate.**

The Illinois EPA's analysis for possible applicability of New Source Review for emissions of PM10, as also applicable for emissions of PM2.5, has been updated to also address emissions of condensable particulate matter. Consideration of condensable particulate adds an estimated 3.5 tons/year to the permitted increase in annual emissions of PM10, so that the project is still not a major modification for PM10 or PM2.5.

69. **For the 8-hour ozone standard, past volatile organic material (VOM) and nitrogen oxides (NOx) emissions from the plant cannot be used in making the net emissions determination for the proposed project. Emissions from the plant last occurred before USEPA designated nonattainment areas for the 8-hour ozone standard. The plant is in the greater Chicago area, an area that is now designated as moderate nonattainment for the 8-hour ozone standard. This designation alters how the net emissions changes from the proposed project must be calculated. According to 35 IAC 203.208(a), for the past emissions of the plant to be available for the netting exercise, the emissions must be contemporaneous and "...must also occur after either April 24, 1979, or the date the area is designated by the United States Environmental Protection Agency as a non-attainment area for the pollutant, whichever is most recent." Although this provision does not apply in serious and severe ozone nonattainment areas, it does apply for this project, because the area is moderate nonattainment for the 8-hour ozone standard.**

No emissions from the plant have occurred after the USEPA made the 8-hour ozone nonattainment designation for the area. Consequently, VOM and NOx emissions from the past operation of the plant are not contemporaneous with this project. There is no indication in the draft permit or related materials that Illinois EPA correctly analyzed the contemporaneous period for emissions related to this new nonattainment designation.

In the absence of any contemporaneous decrease in emissions, and in light of the major physical changes to the plant, the Illinois EPA must determine if VOM and NOx emissions from this project should be regarded as significant. Under 35 IAC 203.206(b)(3)(A), in a moderate nonattainment area for ozone, a major stationary source is a stationary source which emits or has the potential to emit 100 tons per year of NOx. Consequently, in order to conduct a legally adequate permitting, the Illinois EPA must conclude – in the absence of any contemporaneous emissions decrease and in light of the extensive physical reconstruction of the plant – that the plant's NOx emissions greatly exceed the significance level. Consequently, the plant is a major new source for NOx in an ozone nonattainment area and should be permitted accordingly.

This comment is based on a flawed evaluation. As previously discussed for emissions of PM2.5, this project must be and was reviewed as a modification to the plant, under 35 IAC 203.207. The result of this review is that this project is not a major modification because it does not result in a significant increase in emissions. This project is not one for which a netting exercise under 35 IAC 203.208 is required, to show that there is not a significant net emissions increase.

In addition, this comment ignores the fact that the greater Chicago Area was already nonattainment for ozone, in terms of the 1-hour ozone standard, before the area was designated nonattainment for the 8-hour standard. In addition, ambient monitoring data from 2000 through 2002 was relied upon for the designations for the 8-hour ozone standard and the past emissions of the plant were "addressed" in that data.

70. **For purposes of the 1-hour ozone designation, it does not appear Illinois EPA used its own guidance for calculating net emissions to determine if the project's VOM and NOx emissions are significant. In making its calculations, the Illinois EPA relies on the last two years of the plant's operations, which ended in December 2001. However, in its own "Assistance Document for Nonattainment Area New Source Review and Prevention of Significant Deterioration", available at www.epa.state.il.us/air/new-source-review/index.html, Illinois EPA indicates that any contemporaneous period in a severe ozone non-attainment area is the "beginning of calendar year, which is 4 calendar years prior to the calendar year in which the proposed source project is scheduled to commence operation." See – Flow Chart 6 "Contemporaneous Period Determination for Severe Ozone Nonattainment Area." *Because of formatting difficulties in printing this document, I am formally requesting the Illinois EPA to place a true and accurate copy of this entire document in the record.***

In order for the plant's calendar year 2000 emissions to be contemporaneous under Illinois EPA's published guidance, Chicago Coke would have to commence operations – not merely begin construction – in calendar year 2005. Similarly, in order for the plant's calendar 2001 emissions to be contemporaneous, Chicago Coke must commence operations in calendar year 2006. Because plant's emissions following 2001 are effectively zero, and because it is virtually impossible for Chicago Coke to commence operations in 2005 and highly unlikely it will in 2006, it appears that Illinois EPA acted against its own guidance in allowing the plant's 2000 and 2001

emissions to be regarded as contemporaneous. For this reason, and in light of pad-up reconstruction of the coke oven battery, the Illinois EPA should perform a new applicability analysis for the 1-hour ozone designation using the contemporaneous period as described in this comment. Unless this applicability determination is performed and performed correctly, this could form a basis for challenging the resulting permit decision.

The change in VOM emissions associated with this project is properly calculated, as related to the 1-hour ozone standard. The change in VOM emissions has been determined by comparing the actual VOM emissions of the plant when it last operated and the potential emissions of the plant in the future, as limited by the permit. For this purpose, the relevant question is the level of actual emissions of the plant when it last operated, i.e., the average annual emissions during 2000 and 2001. As noted by the comment, these were the years used to assess the past emissions of VOM from the plant, and formed the basis for the determination that this project would not result in a significant increase in VOM emissions.

This comment misapplies the cited guidance, which addresses a different aspect of applicability of nonattainment New Source Review in serious and severe ozone nonattainment areas, as relevant to emissions of VOM and the 1-hour ozone standard. For this purpose, when determining whether a proposed project would be a major modification, in addition to determining the change in emissions accompanying the particular project, one must also consider the increases in emissions from other contemporaneous projects at the source, as addressed by the cited guidance. However, there have been no other projects with contemporaneous increases in VOM emissions at the plant.

With respect to emissions of NOx, the guidance cited in this comment has no relevance. This is because in the Greater Chicago area, emissions of NOx are not regulated under nonattainment New Source Review for purposes of the 1-hour ozone standard.

71. **The draft permit is inadequate because the plant's future potential emissions have not been determined in accordance with applicable regulatory requirements. Instead, for each regulated pollutant, the future potential to emit has been determined as the plant's historic actual emissions plus the significant rate threshold minus one-half ton. With this approach, the draft permit would allow the plant to emit 24.5 tons per year (TPY) more PM including 14.5 TPY more PM10, 39.5 TPY more S02, 24.5 TPY more VOM, 39.5 TPY more NOX and 99.5 TPY more CO than the plant previously emitted, while at the same time avoiding New Source Review. These emission increases occur despite several enhancements that Chicago Coke and the Illinois EPA assert will improve the plant's environmental performance. Furthermore, the draft permit limits the amount of coal that can be charged to the battery to "only slightly more than historical levels." At no point does the Illinois EPA relate the plant's potential to emit to the emission factors for individual units.**

Applicable regulations define "potential to emit" as:

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. 40 CFR 51.165(a)(1)(iii) and 52.21(b)(4),

The Illinois EPA does not assert there is any rational relationship between limits in the draft permit for any regulated pollutant and the physical and operational design of the plant and the emission factors for its constituent units. The resulting "blanket emission limits" are unrelated to the factors that should be evaluated in establishing specific emission rates and a corresponding potential to emit, and are accordingly legally inadequate. See United States v. Louisiana-Pacific Corporation, 628 F. Supp. 1122 (D. Colo. Oct 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988).

The approach in the permit to limiting the plant's emissions is consistent with regulatory requirements. As noted in the comment, the permit for this project has been developed to prevent significant increases in emissions from the plant. The permit also contains an operational limitation on the capacity of the plant, i.e., a limitation on the amount of coal processed by the plant. In this regard, as set forth in the definition of potential emissions, operational restrictions, such as restrictions on the amount of material processed by a source, must be considered in calculating the potential emissions of a source. The limitation on the coal usage of the plant acts to restrict emissions from the plant both the plant as a whole and the individual units at the plant. In addition, the permit contains provisions setting forth applicable emission factors for different units at the plant as necessary to determine future emissions of the plant. In summary, the permit is appropriately developed to constrain the future emissions of the plant.

The fact that the improvements being made to the plant have not resulted in reductions in the permitted emissions of the plant, as compared to its past actual emissions, is not relevant to the future potential emissions of the plant, as set by the permit. It also does not demonstrate that these improvements will not act to reduce the actual emissions of the plant. Chicago Coke has applied for a permit that would allow use of more coal than was used at the plant in the baseline time period. This is because the plant was operating below its "design capacity" at that time and Chicago Coke does not want to be constrained to that level of operation. As demonstrated in the application, some increase in operation above that historical level is possible without a significant increase in emissions. Chicago Coke is also making changes to the plant to improve its environmental performance. These improvements facilitate the increase in operation. They also increase Chicago Coke's ability to operate with a reliable compliance margin, so as to consistently comply with the emissions and operational limitations set in the permit, which reflect past actual levels of performance of the plant in the past, which are now made enforceable.

72. **The emissions limitations contained in the draft permit, as they are based on past actual emissions plus major source threshold minus one-half ton, for every regulated**

pollutant, are confounding because Chicago Coke proposes several changes that should result in improvements in the environmental performance of the plant. These include a pad-up rebuild of the battery, the installation of the PROVEN system on the battery, the replacement of doors and lids, and the installation of low-NOx burners. Despite these enhancements and coal charging limitations, the draft permit would allow the plant to emit more than it actually emitted in the past. This confounding result is the manifestation of an inadequate review that fails to characterize the plant's potential to emit based on any technical, engineering or empirical basis as mandated by regulation.

As already discussed, this is a logical consequence of the permitting process for this project. As a consequence of this project, the levels of control voluntarily achieved in the past, when the plant was operating in compliance with a margin of safety, are now generally becoming enforceable, as future emissions from the plant cannot increase significantly above past actual levels of emissions.

73. This project is a major modification because it follows a prolonged idle period of the plant. LTV shut down this plant in December 2001 and ended natural gas firing for the coke oven battery, putting the plant into cold idle, in February 2002. At that time, LTV was in bankruptcy, and there is no indication it intended to operate the plant. The current owners bought the plant in December 2002, but did not apply for a permit to restart the plant until January 22, 2004, almost two years after LTV shut down the plant. According to the draft permit, the Chicago Coke submitted the current application on May 3, 2004, more than two years after the plant was placed in cold idle.

By May 2004, both Illinois EPA and Chicago Coke had every reason to know that under longstanding USEPA policy, any attempt to restart the plant would be subject to new source permitting. Under these circumstances, the USEPA maintains a policy that "temporary shutdowns are considered to be of two-year duration or less. [This policy] also establishes that the credit which can be given for offset purposes must be the emissions of the last one or two year period. Thus, a source which has been shut down for more than that length of time could not be used for offset even though it might physically be capable of operating. It then follows that a source which has not operated for in excess of two years and is not in the air quality baseline would be considered a new source if operation is commenced." (Letter from William Spratlin, Chief, Air Support Branch, Air and Hazardous Materials Division, USEPA to Harvey Shell, October 9, 1979).

Reiterated in 1987, "A shutdown lasting for two years or more...should be presumed permanent. The owner or operator proposing to reopen the source would have the burden of showing that the shutdown was not permanent, and of overcoming any presumption that it was." (Memo from John Seitz, Director Stationary Source Compliance Division, Office of Air Quality Planning and Standards, USEPA, to David Howekamp, May 27, 1987, ALAMC Exhibit F). In light of the fact that more than three years have elapsed, the presumption should be that the shutdown was

permanent, and that any new operations should be subject to New Source Review. This is especially true in light of the physical reconstruction that is now necessary at the coke oven battery. In light of the elapsing of time, the lengthy idling of the plant, the replacement of major plant components and emission increases, the project should be considered construction of a major new source.

The project meets the USEPA guidance and policy cited in this comments. The first element of this guidance is the actions that have occurred with respect to the source. The information submitted by Chicago Coke indicates that reasonable actions were taken to preserve the plant, especially given the particular circumstances of LTV as it went bankrupt. These actions are also sufficient to indicate a continuing intent to resume operations of the plant if this could be accomplished. The factors identified in the comment, i.e., duration for the idle period and the planned actions accompanying resumption of operation, do not diminish the sufficiency of the actions that have occurred for the plant that preserved its status as an existing source. The other aspect of this policy is that appropriate administrative actions are taken to maintain the status of the source as existing. LTV and Chicago Coke have taken these actions, including maintaining the existing CAAPP permit for the plant. In addition, the plant was maintained in the Illinois EPA's records.

Furthermore, as part of recent revisions to the PSD rules, 40 CFR 52.21, USEPA amended the definitions so that the classification of the plant as a new or existing source may not even be relevant to the applicability of New Source Review to the project. A replacement unit is now defined as an existing unit. A replacement unit is defined as an emission unit that completely takes the place of an existing emissions unit; is identical to or functionally equivalent to the replaced emissions units; does not alter the basic design parameters of the process unit; and the replaced emission unit is permanently removed from the major stationary source.

74. **Restart of an idle source may also trigger New Source Review if it meets the definition of a major modification. <u>In re Monroe Electric Generating Plant, Entergy Louisiana, Inc. Proposed Operating Permit, Petition 6-99-2</u>, USEPA Administrator, p.10. If the activities required as part of the restart "...collectively appear to be part of a large non-routine effort..." then restart would qualify as a physical change for purposes of determining whether a major modification has occurred. The USEPA went on to state, "The mere fact that the plant is changing from a lengthy "non-operational" and unmanned" condition, to one in which the plant is fully operational, fits the common sense meaning of a "change in the method of operation." The USEPA concluded the mere restart of units following a protracted idle period constituted a major modification triggering new source review.**

In the present case, there is much more occurring than restarting the plant after a protracted idle period. According to the application, as part of this project, a pad-up rebuild of the coke oven battery will be performed. A new charging system will be installed, and doors and lids will be replaced. Existing boilers will be retrofitted. Despite these changes, under the draft permit, the plant will be allowed have higher

emission limits than it actually emitted in the past for every regulated pollutant. In light of the replacement of major plant components and emission increases, the project should be considered construction of a major modification.

The Illinois EPA agrees that the Monroe decision provides a relevant precedent for the review of this project as it addresses the circumstances which the resumption of operation of a source may constitute a major modification. This is because this portion of the Monroe decision is based directly on the provisions of USEPA's PSD rules. In this decision, USEPA finds that when a restart of a source would occur following an idle period, it is necessary to consider whether there would be physical or operational changes occurring in conjunction with the restart that should be considered as modifications of the source, i.e., activities that would not qualify as routine maintenance, repair and replacement of components. In this case, it is then necessary to determine whether the change in emissions of different PSD-pollutants from the project would be such that the project qualifies as a major modification. This is the approach that the Illinois EPA has followed in reviewing this project.

75. **Please describe the legal basis for the emission baselines in the Chicago Coke permit, including a description of whether these estimates reflect a PSD/BACT or non-attainment NSR/LAER analysis of the facility.**

For the non-attainment pollutants (VOM, NO_x for the 8-hour standard and PM_{10}), 35 IAC 203.104 defines actual emissions as:

> "the actual rate of annual emissions of a pollutant from an emissions unit as of a particular date. Actual emissions are equal to the average rate in tons per year, at which the emissions unit actually emitted the pollutant during the two-year period which immediately precedes the particular date or such other period which is determined by the Illinois Environmental Protection Agency (Agency) to be representative of normal source operation..."

35 IAC 203.104 formed the legal basis for the Illinois EPA's determination of the baseline emissions.

For the attainment pollutants (NO_x for the 1-hour ozone standard, SO_2 and CO), 40 CFR 52.21(b)(48)(ii) defines baseline actual emissions as:

> "the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990."

40 CFR 52.21(b)(48)(ii) formed the legal basis for the Illinois EPA's determination of the baseline emissions.

The Illinois EPA has not determined whether the emission baselines reflect a PSD/BACT or non-attainment NSR/LAER analysis as the Illinois EPA does not comprehend what is meant by this comment.

76. **It is unclear how LTV's emissions for NO_x and VOM in the Chicago Coke permit compare and contrast to the mandated state inventories produced since the issuance of the 1979 permit. Please identify the NO_x and VOM emission estimates for the LTV facility as reflected in state emission inventories since the issuance of the 1979 construction permit.**

The Illinois EPA has verified that the NOx and VOM emissions have been included in the state emission inventory since the issuance of the 1979 construction permit. The exact emissions levels for these years are not relevant.

77. **Please describe the legal basis to allow Chicago Coke to exceed BACT/LAER emission limits imposed on Republic/LTV.**

The permit does not allow relaxation of the requirements established for Republic/LTV pursuant to New Source Review. In fact, the construction permit incorporates provisions of the PSD permit and this PSD permit is an attachment to the construction permit for case of reference.

78. **The Illinois EPA should identify whether the use of a coke side shed, an enclosed unit or a moveable hood system would be likely to reduce emissions from pushing operations at Chicago Coke and, if so, whether the use of either of these approaches would be required if the Chicago Coke were characterized as major source subject to BACT or LAER.**

The Illinois EPA investigated the possibility of requiring additional enclosure on the coke-side of the operation. The Agency determined that additional enclosure would not significantly aid in accomplishing the purposes of the Act. The reasons for the Illinois EPA's decision follow.

The concentration of emissions within such an enclosure would significantly increase the occupational risk to workers within the enclosure. In addition, as discussed earlier, the current construction permit is for a pad-up rebuild of an existing plant. The pad-up rebuild involves re-bricking and certain renovations that would not require a change to the foundations or general "footprint" of the facility. The addition of a coke-side shed would require a change to the "footprint" of the facility.

The commenter also requested that the Illinois EPA describe its reasons for not requiring some type of movable enclosure system. Such movable enclosure systems have been installed at other facilities but their use has later been discontinued because the systems have been determined to have a high failure rate and are unreliable (Dofasco Incorporated in Canada, the former ACME plant in Chicago, and others). Such systems have also caused

damage to the quench tower at other facilities. In the USEPA publication entitled National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching, and Battery Stacks - Background Information for Proposed Standards - Final Report, February 2001 (the "Final Report"), the USEPA specifically investigated "traveling hood systems such as Envirotech's 'Trav-L-Vent' and Dravo Corporation's 'Minister Stein.'" Final Report section 3.1.3. The USEPA found that "despite the capability of traveling hoods, in practice they do not regularly travel to the quench tower at most facilities that use them for pushing emissions control." Id. In summary, the Illinois EPA determined that such movable enclosure systems have not been demonstrated to be effective in practical use and requiring such a system would not aid in accomplishing the purposes of the Act.

The project is a pad-up rebuild of an existing plant not a new major source or major modification. The Illinois EPA would make decisions regarding any new major source or major modification based on the specific parameters involved with any such new major source or major modification. It would not be appropriate for the Illinois EPA to speculate as to what could be required if a different set of regulations were applicable.

79. **This plant could reduce its emissions of hazardous air pollutants like benzene by changing from a recovery to a nonrecovery plant. A nonrecovery plant eliminates hazardous air pollutants. Most coke ovens that are subject to best available control technology in this day and age are nonrecovery facilities.**

The project that must be addressed when evaluating an application for permit is that for which an application has been submitted, i.e., an existing recovery coke oven battery. To require an evaluation of an alternative type of plant, as suggested by this comment, would constitute a fundamental change to the project.

80. **I would like Chicago Coke to install a fence line monitoring system for the plant so that the community can know exactly what kinds of emissions are escaping into the community.**

A fence line monitoring system would not provide the data sought by this commenter. However, the Illinois EPA has numerous monitors in the Chicago area that collect ambient air quality data. Such information is available to the public. In addition, the permit requires periodic emissions testing, monitoring and recordkeeping which would appropriately quantify the emissions from the units at the plant.

81. **Air modeling should be conducted and empirical data should be analyzed to determine the impact of different types of coal on mercury emissions and appropriate standards and controls should be established in the permit, before the plant begins operating.**

The types of analysis requested by this comment are neither feasible nor necessary. As neither testing nor measurements of the mercury emissions from the plant were not conducted when the plant last operated, empirical data is not available for the plant's mercury emissions. Air modeling does not generate emission data. Emission data is an

input to air modeling, which then predicts the pollutant concentrations in the atmosphere that occur with the given emission data.

82. **Multi-pathway human health risks from mercury emission should be assessed and considered prior to resuming operation at this plant. Neither the Illinois EPA nor Chicago Coke have conducted such an assessment or an ecological risk assessment, which is important because of the proximity of the plant to Lake Michigan, in which mercury is a toxic contaminant of concern. In a thorough review, both wet and dry deposition of mercury from the plant would be modeled, build-up of mercury in aquatic systems, wetland areas, and wildlife areas and their related watersheds would be determined, and the toxicological effects of such mercury and related dose-pathways would be evaluated.**

As already explained, such an analysis would not be a productive exercise. USEPA is addressing mercury emissions on a national basis, as is most appropriate for mercury given the nature of the environmental problems that it poses. In this regard, USEPA recently adopted rules for control of mercury emissions from coal-fired power plants, which are the category of stationary sources now considered most important for emissions of mercury to the environment. The USEPA's new rules are expected to achieve greater than a 70 percent overall reduction in the mercury emissions of power plants.

83. **I am concerned about the effects of emissions of this project on regional air quality and on the communities immediately adjacent to the plant. These concerns include the effect of the plant's emissions on ambient air quality for pollutants for which this region currently fails to meet federal public health standards. I am also concerned that this plant could degrade air quality for pollutants for which this region now meets such standards.**

The pollutants for which the Greater Chicago area is now nonattainment, i.e., $PM_{2.5}$ and ozone (8-hour average), are the result of general background levels of pollutants in the air entering the Chicago area combined with the overall loading of pollutants from the Chicago area itself. As such, the plant is another source that contributes to the loading of pollutants that will have to be considered in the development of the attainment strategy for the PM2.5 and ozone air quality standards. It is expected that the critical categories of sources for further control of emissions for purposes of attainment will be power plants and mobile sources, for which USEPA has adopted national control programs that will result in substantial improvements in air quality. The question for the attainment strategies for the Chicago area will then be what further local reduction in emissions are needed for attainment. For this purposes, the plant is one of many sources of emissions that will have to be considered and is already in the baseline inventories used by the Illinois EPA for development of the attainment strategies.

Given the current air quality for pollutants for which the Greater Chicago area is attainment and the fact that the emissions of the plant are not increasing significantly above past levels, this project is unlikely to have a noticeable effect on air quality for pollutants for which the area is currently attainment.

84. **What are the interstate effects of this plant's emissions on acid rain and ozone air quality conditions in downwind regions?**

As related to acid rain, the plant is a relatively small source of emissions of acid rain precursors so that no particular effect on acid rain should be assumed from the plant. The major category of source implicated in acid rain is coal-fired power plants, as specifically regulated by the federal Acid Rain Control program.

Given the magnitude of emissions from the plant, this project, by itself, is unlikely to have a noticeable effect on air quality in downwind regions. Rather it is simply one of the many sources that contributes to the emissions of the Chicago area.

85. **Potentially affected endangered species and their critical habitat should be inventoried, and the impact of mercury emissions from the plant on these species and their habitat should be assessed. The Illinois EPA must consult on these issues with USEPA and, in turn, the U.S. Fish and Wildlife Service, prior to issuing any permit for the project.**

The actions requested by this comment are not appropriate or necessary. The coke plant is an existing source. The emissions allowed by the permit will not be significantly different than the past emissions of the plant. In fact, as provided by the permit, the emissions of mercury from the plant will be less than the past emissions, if Chicago Coke must implement specific measures to reduce the plant's emissions of mercury, as required by the provisions of the permit to specifically address mercury emissions. Further, other actions are occurring that are reducing the overall loading of mercury to the environment, notably with respect to control of emissions from coal-fired power plants. Moreover, in these circumstances, the issuance of a state construction permit for resumption of the plant does not pose a potential new threat to endangered species of animals or plants in the area, of a type for which consultation with the U. S. Fish and Wildlife Service is required.

86. **This is an environmental justice community of concern. The Illinois EPA has the duty and the authority to initiate the maximum public process.**

This project was of a type for which notice to the public is required. The governing regulations do not require a hearing. Notwithstanding, the Illinois EPA afforded the public a hearing on the matter. The public comment period began on December 11, 2004, with the publication of a notice in the Daily Southtown. Additional notices were published in the Daily Southtown on December 18 and 25th, 2004. A public hearing was held on January 25, 2005, at The Zone, Youth and Community Center, 11731 South Avenue O in Chicago, to receive oral comments and respond to questions regarding the project and draft air permit. The comment period originally was scheduled to close on February 24, 2005, to receive written comments. The comment period was extended twice with the comment period ultimately closing on March 25, 2005. In addition, prior to the hearing the Illinois EPA conducted outreach to interested environmental organizations.

87. **The Illinois EPA has not considered the potential for a significant, adverse, and disproportionate impact on the surrounding neighborhood. This is an environmental justice issue. The Illinois EPA should conduct comprehensive modeling of plant emissions including emissions of hazardous air pollutants, to determine if this plant, as proposed, will result in a significant adverse impact on the disproportionately minority community that surrounds it.**

The commenter asserts that there is no evidence in the permit record that Illinois EPA undertook any affirmative activity to ensure that the plant would not cause a significant, adverse, and disproportionate impact on low-income and/or minority residents living in the surrounding community. The Illinois EPA generally refers to such concerns as "environmental justice." The Illinois EPA conducted demographic analysis with the United States Environmental Protection Agency's EJ Geographic Assessment Tool ("EJ GAT"), confirming that the area surrounding the plant is a potential Environmental Justice ("EJ") community. USEPA considers an "community" as "a minority or low-income community that bears disproportionately high and adverse human health or environmental effects." (Executive Order 12898)

88. **As part of its Environmental Justice analysis of this project, the Illinois EPA should also conduct a comparison of the differences in applicable requirements between treating this project as a minor modification and as a major modification source for purposes of New Source Review. This request is made because it appears the Illinois EPA's discretionary decision to characterize this pad up rebuild of this plant as a minor modification allows it to avoid many of the requirements that would be triggered by new source review, including an analysis of Best Available Control Technology, modeling and opportunities for third party appeal to the Environmental Appeals Board under the PSD program, as well as an analysis of Lowest Achievable Emissions Rate, offset requirements, an alternatives determination under non-attainment NSR. If implemented, many of these requirements would directly benefit nearby residents. The decision to avoid these activities by characterizing this as a minor modification is a discretionary agency decision that may create a defined, significant, adverse and disproportionate impact.**

As noted by this comment, the regulatory circumstances of the plant would be very different if Chicago Coke were proposing to construct a new coke oven battery, rather than to make improvements to an existing coke oven in conjunction with resuming operation. However, as previously discussed, the Illinois EPA has not made a "discretionary decision" on the applicability of New Source Review, as suggested by this comment. This decision was bound by applicable New Source Review regulations, which do not provide for different treatment of projects depending upon whether a project is located in an Environmental Justice area or not. However, the Illinois EPA has used its administrative authority to develop and issue a permit that carefully addresses and minimizes the emissions of this plant.

Consistent with the Illinois EPA's Interim EJ Policy (available at http://www.epa.state.il.us/environmental-justice), the Illinois EPA considered information

provided by the commenter and other available information to assess whether there are potential significant adverse environmental impacts. The Illinois EPA conducted dispersion modeling to assess the impacts of coke oven emissions (The Illinois EPA did not separately model the constituents of coke oven emissions as USEPA has addressed coke oven emissions as a distinct pollutant.), arsenic, benzene, cadmium and nickel from the source on the community. From the modeling, the Illinois EPA concludes that the plant is not likely to pose a significant risk to human health. Specifically, the risks posed by emission from the coke ovens (80 in a million) are significantly below the acceptable risk level (200 in a million) established by the USEPA in its residual risk promulgation.. In fact, the actual risk is likely a third of the modeled value as the modeling is based on the maximum emissions that could be emitted under the construction permit whereas USEPA has indicated that coke ovens typically emit only 80% of their allowable emissions levels.

Additionally, the Illinois EPA conducted SO_2 and NO_x dispersion modeling. Such modeling indicated that the emissions from the source would not cause any NAAQS violations.

Significantly, the final permit reflects a number of additional conditions protective of the health of the surrounding community and the environment. First, during construction and operation of the plant, the Illinois EPA is requiring the use of ultra low-sulfur diesel fuel in all diesel vehicles owned and operated at the plant by Chicago Coke and all diesel vehicles operated at the plant that Chicago Coke has the direct right to control. This condition explicitly recognizes the potential for particulate matter ("PM") from diesel emissions to adversely impact the surrounding community. In addition to reducing the emission of PM, the use of ultra low-sulfur diesel fuel will also reduce the emissions of sulfur dioxides.

Second, the Illinois EPA included a condition requiring testing for metals during the emissions test for PM from pushing at the baghouse. The Illinois EPA recognized that metals are of great concern to the public given the potential health ramifications. The required testing will generate improved information on the nature and amount of metal emissions from the pushing operations, providing the Illinois EPA with desirable information for further assessment of any potential adverse environmental impacts.

Third, commenters expressed concerns for mercury emissions and the lack of an emissions limit for mercury. Currently, there is no legal requirement supporting the imposition of a limit on mercury. Information that USEPA has assembled on mercury emissions shows that by-product recovery coke oven batteries are not significant sources of mercury emissions, presumably because the by-product recovery operations are also effective in controlling mercury emissions. There is adequate information to conclude that mercury emissions from this plant or other sources generally are not a direct threat to air quality or public health. However, the plant is required to gather information on the levels of mercury emissions from the coke oven batteries to determine if the plant is achieving a 90 percent control of mercury emissions. If the plant does not achieve a 90 percent reduction in mercury emissions, the plant is required to evaluate whether lower mercury emissions may be achieved without unacceptable consequences and depending upon the results of this evaluation may be required to undertake mercury minimization measures.

Fourth, and most significantly the Illinois EPA issued the permit to include operational limitations based on the best controlled facilities for the following emission units or processes: coke oven charging, leaks from doors, leak from lids, leak from offtakes, coke oven pushing, coke quenching, and the combustion stack (battery stack). Generally, these limits are more stringent that the Prevention of Significant Deterioration ("PSD") permit issued to the plant in 1979 and/or the NESHAPs for coke oven batteries (40 CFR Part 63, Subparts L and CCCCC). Further, requirements of Subpart CCCCC are imposed earlier than the compliance date of April 14, 2006.

89. **Where was the notice for the public hearing published? I didn't see it in the Observer, which is the local paper,**

The public notice was published in the Daily Southtown on December 11th, 18th, and the 25th.

90. **Because of the strong likelihood of a permit challenge, and in order to create a record upon which an appeal will be based, I request that my comments be reproduced verbatim in the Responsiveness Summary, followed by the Illinois EPA's response.**

The Illinois EPA will not be reproducing any comments verbatim. A Responsiveness Summary is a document that is prepared to explain the Illinois EPA's actions to all interested members of the public. This objective would not be achieved by repeating lengthy comments verbatim nor is this needed to create a "record," as suggested in this request. The applicable regulations simply require a response to all significant comments. These regulations do not require a response to each comment individually. However, the Illinois EPA has responded to all significant comments that were received.

91. **Does the Beemsterboer family, which owns Chicago Coke, participate in the "good neighbor dialogues" organized by the Southeast Environmental Taskforce? This organization conducts these dialogues between businesses and local residents to address community concerns and to try to work together. If so, what improvements or changes have the Beemsterboers' made in their businesses for the community, because I don't know of any.**

Chicago Coke indicated that members of the Beemsterboer family are part of and have worked closely with the Southeast Environmental Taskforce with respect to their existing businesses.

Other Comments

The Illinois EPA acknowledges the comments that follow. However as they are not germane to the permitting decision, the Illinois EPA declines to comment.

92. **State-of-the-art technology is to be incorporated into this project, which will set the bar on a national basis.**

93. I'm against the plant getting a permit unless it is the best there is.

94. Even if you support the reopening of this plant, local residents deserve the best level of environmental protection that is achievable. That is how everybody wins, a good plant, well-controlled. This permit is not even close to that standard.

95. The residents of the community are owed a state-of-the-art plant by Chicago Coke.

96. The project is important for the jobs it would create, which are important at a time when jobs, especially good-paying union jobs, are leaving not only the area but the entire country. This plant will provide jobs where and when they are most needed. The impact on the community will be significant with several hundred union construction jobs and about 200 permanent jobs. There will also be off-site related jobs, which could also number into the hundreds.

97. Local and state revenues resulting from this project come at a time when our city and state are facing significant budget challenges. Additionally, the economic benefits for the community over the long run could reach into the hundreds of millions of dollars.

98. The East Side Little League can rest assured that its field, which is now owned by Chicago Coke, will remain a recreational facility for the community to enjoy.

99. The reopening of this plant will produce over 200 new, well-paying, permanent union-jobs.

100. This coke plant has been in this community for decades. The Beemsterboer family, which now owns the plant, has been in this community for decades and plans to utilize the local work force for this new venture.

101. As Chicago Coke will recognize that its workers will naturally seek collective bargaining rights, which workers at the plant previously enjoyed, I see an opportunity for workers to be paid a livable wage and have the substantial benefits that members of the United Steelworkers Union enjoy.

102. This project is crucial to the overall steel industry because Chicago Coke would produce metallurgical coke. This is a raw material that is needed for the integrated steel mills just across the state line in Indiana, at which many residents of the southeast Chicago area work.

103. The investment that Chicago Coke proposes is crucial for the impact it will have in the Calumet Area business community.

104. The Beemsterboer family, which owns Chicago Coke, doesn't live in this area. If this project is going to provide such a great opportunity to the local community, they should bring their families back here and let them breathe the same air the local community is breathing.

105. I know quite a few people who have moved out of this area, they didn't do so because there were no jobs here. They did so because it's dirty, it's polluted, and it's industrial.

106. I support the approval of the requested permit and strongly endorse the redevelopment of the coke plant. The investment will have a substantial positive impact on the area.

107. The Chicago Coke project is an opportunity to create incentives for other businesses to come in the area. Investment is contagious and this project will, without doubt, bring additional development to the area.

108. As bringing coal to the plant by barge, truck traffic will be minimized in the neighborhood.

109. If the permit were issued as drafted, the permit should be challenged until it is remedied or until every appeal option is exhausted.

110. One thing we haven't heard is Illinois EPA say that they are going to guarantee clean air.

FOR ADDITIONAL INFORMATION

Questions about the public comment period and permit decision should be directed to:

Bradley Frost, Community Relations Coordinator
Illinois Environmental Protection Agency
Office of Community Relations
1021 North Grand Avenue, East
P.O. Box 19506
Springfield, Illinois 62794-9506
217-782-7027 Desk line
217-782-9143 TDD
217-524-5023 Facsimile
brad.frost@epa.state.il.us

Exhibit 5

217/782-2113

CONSTRUCTION PERMIT - NESHAP SOURCE - NSPS SOURCE

PERMITTEE

Chicago Coke Co., Inc.
Attn: Simon A. Beemsterboer
11400 South Burley Avenue
Chicago, Illinois 60617

Application No.: 04010037 I.D. No.: 031600AMC
Applicant's Designation: Date Received: May 3, 2004
Subject: "Pad-Up Rebuild" of Coke Oven Battery
Date Issued: April 28, 2005
Location: 11400 South Burley Avenue, Chicago, 60617

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of changes to the existing coke oven battery which will enable the plant to resume operations as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 OVERALL SOURCE CONDITIONS

1.1 Source Description

1.1.1 The coke oven battery, by-product plant and ancillary operations, which were previously owned and operated by LTV Steel, Inc., were in operation until December 2001. In December 2001, the facility discontinued coke production and was put into hot idle mode. In February 2002, the facility was placed into cold idle-mode. On December 30, 2002, the facility was sold to Calumet Transfer Company, LLC and Chicago Coke Company was designated to operate the facility on Calumet Transfer's behalf.

The company has decided that for long-term operation, a "pad-up rebuild" is necessary. The most appropriate time to perform a "pad-up rebuild" is during the cold idle mode. This "pad-up rebuild" involves rebricking the coke oven batteries from the pad up, i.e., it does not involve changes to the existing deck slab or coke oven battery footprint. However, the source will be making various enhancements to the battery and ancillary operations during the "pad-up rebuild" that should improve its operation, including installation of a PROven System in the gas collection system from the battery and improvements to the existing staged combustion system to reduce NO_x emissions. The facility will also be subject to tighter operating and emission limitations such that a significant increase in emissions will not occur.

1.2 PSD/NAA NSR Non-Applicability

1.2.1 Pollutants

Chicago Coke is located in a non-attainment area for PM10 and ozone. The location of the plant is designated attainment for all other pollutants. The PSD pollutants of concern are CO, NO_x and SO_2 and the nonattainment NSR pollutants are PM_{10}/PM, NO_x (8-hour ozone standard) and VOM.

1.2.2 Discussion

a. The Permittee has addressed the applicability of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM) to this project. The limits in this permit are intended to ensure that the project addressed in this construction permit does not constitute a major modification pursuant to these rules, as further explained in Attachments 1 through 3, which address emissions of PM, PM_{10}, SO_2, VOM, NO_x and CO from the significant emission units at the source. Emissions of insignificant activities should not increase as a result of this project as the amount of coal that can be charged to the battery is limited to only slightly more than historical levels. Emissions of other PSD pollutants, e.g., sulfuric acid mist, reduced sulfur compounds and fluorides, are indirectly addressed by the provisions for the principal pollutants.

b. This permit is issued for the modification and restart of an existing source. This source is not considered a new major source because the source was not permanently shut down. In particular, the source made considerable efforts when operations were temporarily discontinued to ensure the minimum effort and cost of resuming operations at the facility. These efforts included, but were not limited to, operating the coke oven battery in a hot idle mode for a period of time, maintaining and not dismantling or demolishing equipment, and preserving the operating permit. These efforts support the intent of the Permittee and its predecessors to resume operations at this facility.

1.3 Applicable Regulatory Requirements for the Source

1.3.1 Benzene Waste Operations NESHAP

a. i. This permit is issued based on the source having an total annualized waste level for benzene that is less than 10 megagrams per year (11 tons per year), so that waste operations are not subject to the control requirements of the NESHAP, 40 CFR 61, Subpart FF.

ii. Pursuant to 40 CFR 61.355(a)(4)(i), the Permittee shall comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357.

b. Pursuant to 40 CFR 61.355(a)(4)(ii), the Permittee shall repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in a process generating a waste that could cause the total annual benzene quantity from facility waste to increase to 10 megagrams/year (11 tons/year) or more.

1.3.2 Emissions Reduction Market System (ERMS)

a. This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

b. As will be further specified by the source's CAAPP permit, pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30) as calculated under the Part 205 rules (including 205.750), or the source shall be subject to "emissions excursion compensation."

1.3.3 NO_x Trading Program

a. Boiler 4B is considered a "budget unit" for purpose of the NO_x Control and Trading Program for Specified NO_x Generating Units, 35 IAC Part 217 Subpart U (NO_x Trading Program).

b. The Permittee shall comply with all applicable requirements of the NO_x Trading Program for Boiler 4B, as further addressed in Section 2.4 of this permit.

1.4 Source-Wide Operational Limitations

1.4.1 Coal Throughput

a. The amount of dry coal charged to the coke oven battery shall not exceed 2,765 tons/day (monthly average) and 900,000 tons/year.

b. Compliance with annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Exhibit 6

7012-002

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

CHICAGO COKE CO., INC., an Illinois corporation, Petitioner, v. THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent, NATURAL RESOURCES DEFENSE COUNCIL, and SIERRA CLUB, Intervenors.	)	PCB 10-75 (Permit Appeal--Air)

AFFIDAVIT OF SIMON BEEMSTERBOER

I, Simon Beemsterboer, having been duly sworn, state and affirm as follows:

1. I am the president of Chicago Coke Co., Inc.

2. Chicago Coke is the operator of the coke production facility ("Facility") located at 11400 South Burley Avenue, Chicago, Illinois.

3. I have personal knowledge of the operations at the Facility.

4. My personal knowledge includes knowledge of the Facility's operations in 2005, and knowledge of the Facility's operations in the period from April 2005 to February 2010.

5. There were no significant changes in operations at the Facility between April 2005 and February 2010.

FURTHER AFFIANT SAYETH NOT.

Simon Beemsterboer

SUBSCRIBED & SWORN to before me this 15th day of August, 2012.

DEBRA ALLEN
Notary Public
SEAL
State of Indiana
My Commission Expires June 26, 2018

Notary Public

Group Exhibit 7

HODGE DWYER & DRIVER
ATTORNEYS AT LAW

KATHERINE D. HODGE
E-mail: khodge@hddattorneys.com

January 15, 2010

VIA ELECTRONIC MAIL
(Original via U.S. Mail)

John J. Kim, Esq.
Chief Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276, Mail Code #21
Springfield, Illinois 62784-9276

RE: Emissions Reduction Credits
Chicago Coke Co., Inc
Facility I.D. No. 031600 AMC
Our File No. – COKE:001

Dear John:

This letter is to follow up on our discussions regarding the above-referenced matter. As you know, on behalf of Chicago Coke Co., Inc. ("Chicago Coke"), I have made repeated requests to the Illinois Environmental Protection Agency ("Illinois EPA") for recognition that certain Emission Reduction Credits ("ERCs") held by Chicago Coke are available for use as emission offsets for the permitting of major new sources and/or major modifications in the Chicago area. My prior correspondence to you in this matter is attached and incorporated herein by reference.

The Illinois EPA has refused to recognize that the ERCs held by Chicago Coke are available for use as emission offsets, citing orally to various (and apparently changing) reasons, none of which reasons are supported by law and/or regulation. Please see the attached letter, dated August 3, 2007, which addressed the initial concerns articulated by the Illinois EPA, and the attached letter, dated July 18, 2008, which addressed the Illinois EPA's apparent reason at this time, i.e., its mistaken reliance upon the so-called "five-year policy." Moreover, it is my understanding that representatives of the Illinois EPA have made representations, on multiple occasions, to potential buyers of the ERCs held by Chicago Coke, that these ERCs are not

available for use as emission offsets. Finally, the Illinois EPA has not provided any written response to Chicago Coke in this matter.

Based upon all of the above, by this letter, I am requesting that the Illinois EPA issue a final decision, in writing, responding to my request for recognition that certain ERCs held by Chicago Coke are available for use as emission offsets for the permitting of major new sources and/or major modifications in the Chicago area. Since my initial request was made nearly three years ago, I would appreciate prompt action by the Illinois EPA to issue the requested final decision. Please feel free to contact me if you have any questions.

Sincerely,

Katherine D. Hodge

KDH:amb
attachments
pc: Mr. Simon Beemsterboer (via U.S. Mail: w/attachments)
Mr. Alan Beemsterboer (via U.S. Mail: w/attachments)

COKE:001/Corr/John J. Kim Ltr3 – ERCs

HODGE · DWYER · ZEMAN
ATTORNEYS AT LAW
KATHERINE D. HODGE
E-Mail: khodge@hdzlaw.com

July 18, 2008

VIA ELECTRONIC MAIL
(Original via U.S. Mail)

John J. Kim, Esq.
Managing Attorney
Air Regulatory Unit
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276, Mail Code #21
Springfield, Illinois 62784-9276

RE: Emissions Reduction Credits
Chicago Coke Co., Inc
Facility I.D. No. 031600 AMC
Our File No. – COKE:001

Dear John:

This letter is to follow up on our prior discussions regarding the above-referenced matter. By way of background, in mid-2006, Chicago Coke Co., Inc. ("Chicago Coke") began negotiations with Chicago Clean Energy, LLC ("CCE") regarding the transfer of emission reduction credits ("ERCs") to be used as emissions offsets for a project under development by CCE. CCE intends to construct a coal gasification plant to be located at 11400 South Burley Avenue, Chicago, Illinois, the site of the Chicago Coke facility. Chicago Coke and CCE entered into a Letter of Intent wherein CCE will purchase 55.9 tons of VOM ERCs, 1067 tons of NO_x ERCs, and 156.9 tons of PM_{10} ERCs (to offset emissions of PM_{10} and as a surrogate for $PM_{2.5}$), all based upon the emissions baseline established by the Illinois Environmental Protection Agency ("Illinois EPA") in the construction permit issued to Chicago Coke for the pad-up rebuild of the coke battery on April 28, 2005.

As you may recall, we met with you and other Illinois EPA representatives, as well as CCE representatives, on June 1, 2007 to discuss the contemplated CCE project. At that time, the Illinois EPA indicated that it would be willing to consider recognition of the Chicago Coke ERCs for use by CCE. Thereafter, in a meeting between Chicago Coke and Illinois EPA (but not CCE) on July 11, 2007, the Illinois EPA expressed certain concerns with recognition of the

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TELEPHONE 217-523-4900 ▲ FACSIMILE 217-523-4948

ERCs. By letter dated August 3, 2007, we addressed all these concerns and asked that the Illinois EPA acknowledge its ability to recognize ERCs based on the potential shutdown of the Chicago Coke facility. (A copy of my August 3, 2007 letter is attached.) As you know, subsequent to that meeting, you informed us during a telephone conversation that, notwithstanding the information provided in our letter of August 3, 2007, the Illinois EPA "is not inclined to recognize these emission reduction credits."

Thereafter, at an impromptu meeting held on January 17, 2008, Bureau Chief Laurel Kroack stated that the Illinois EPA would not recognize the ERCs because "the Agency has always had a policy that ERCs may only be generated from shutdowns that occurred within the past five years." In response, I reiterated the fact that the facility could not have been shut down before April 28, 2005, which was the date of the construction permit for the pad-up rebuild of the coke battery, so there would be no violation of the so-called "five-year policy." (See my August 3, 2007 letter for more details.) In addition, I expressed my concern regarding the arbitrary nature of this determination since it was based, not on law or regulation, but upon a mistaken understanding regarding prior Illinois EPA "policy." After some discussion, Ms. Kroack agreed that she would be willing to reconsider her determination in this matter if presented with information demonstrating that Illinois EPA has recognized ERCs from shutdowns in permit(s) issued more than five years beyond the shutdown (that generated the credits). Julie Armitage and Chris Romaine also were present at the January 17, 2008 meeting.

As we have discussed, a review of permits issued by the Illinois EPA that contain requirements for "offsets," and of related documents obtained from Bureau of Air records, reveal that Illinois EPA has, in fact, recognized ERCs from shutdowns in permits issued more than five years beyond the shutdowns. Please see attached to this letter a table that provides a list of permits issued by Illinois EPA that include requirements for emission offsets. Also shown on this table is information concerning the bases for the offsets and the dates of shutdowns (where that information is available). In particular, you will see that Illinois EPA has recognized ERCs from a shutdown at Viskase's Bedford Park facility that occurred in September, 1998 in several permits, all of which were issued more than five years beyond September, 1998, i.e., August 24, 2005 (Air Products), August 24, 2005 (ExxonMobil), and August 4, 2004 (SCA Tissue North America). In addition, you will see that Illinois EPA recognized ERCs from a shutdown at Sara Lee's Aurora facility (formerly owned and operated by Metz Baking Company) that occurred in 1996; this recognition was made in a permit issued to ExxonMobil on August 19, 2003.

These permits demonstrate that the Illinois EPA does not have a policy that ERCs may only be generated from shutdowns that occurred within the past five years. Moreover, these permits demonstrate that the Illinois EPA's initial determination to deny recognition of the Chicago Coke ERCs is arbitrary, capricious, and without authority. Thus, in accordance with Ms. Kroack's commitment in our January 17, 2008 meeting, I understand that the Illinois EPA will be reconsidering this determination. As you may know, CCE intends to submit its

application for a construction permit for its coal gasification plant in the very future. So, your timely response would be greatly appreciated. Please feel free to contact me with any questions.

Sincerely,

Katherine D. Hodge

KDH:ljl
attachments
pc: Mr. Simon Beemsterboer (via U.S. Mail; w/attachments)
Mr. Alan Beensterboer (via U.S. Mail; w/attachments)

COKE:001/Corr/John J. Kim Ltr2 – ERCs

Permits Issued by the Illinois Environmental Protection Agency that Contain Requirements for Emissions Offsets

Permittee	Application No.	Facility ID No.	Permit Issuance Date	Offsets TPY	VOM or PM	Offsets from	ID No.	Basis for Offsets	Date of Shutdown
A. Finkl & Sons Co.	07060075	031600GUC	05/23/08	347.00	NOx	Finkl plant (74.8) ADM (74.0) Corn Products (198.2)	 031600ATR 	shutdown/existing Finkl plant shutdown of ADM Boiler 10 Project at Corn Products (shutdown of boilers 1, 2, 3, 4 & 5)	
Air Products & Chemicals, Inc.	05020063	197800ACA	08/24/05[1]	23.00	VOM	Viskase or ASF Keystone	031012ABQ	permanent shutdown of facility permanent shutdown of facility	09/1998 01/2002
Brown Printing Company	97080012	111095ABU	12/23/02	75.40	VOM	Burrell-Leder Beltech Handy Button Hargro	031288AGR 031186AFR 031600CPO	process change (22.9 tpy) process change (32.0 tpy) shutdown of printing (20.5 tpy)	 IEPA reports no file
ConocoPhillips Company	06110049	119050AAN	07/19/07	440.10	VOM	JW Aluminum	St. Louis, MO	reduction in VOM emissions	
ConocoPhillips Company	06050052	119050AAN	07/19/07	440.10	VOM	JW Aluminum	St. Louis, MO	reduction in VOM emissions	
ExxonMobil Oil Corporation	03050050	197800AAA	08/19/03	5.00	VOM	Sara Lee	089005AEX	permanent shutdown of facility	1996
ExxonMobil Oil Corporation	03110060	197800AAA	08/24/05	23.00	VOM	Viskase or ASF Keystone	031012ABQ Hammond, IN	permanent shutdown of facility permanent shutdown of facility	09/1998 01/2002
ExxonMobil Oil Corporation	05030076	197800AAA	10/06/05[2]	753.00 106.00	NOx PM10	Midwest Generation	063806AAF	permanent shutdown of facility	2004
Indeck-Elwood LLC	02030060	1970035AAJ	10/10/03	140.40	VOM	Minnesota Mining & Manufacturing (3M)	031012AAR	shutdown of coating line 6H	1998, 1999, or 2000[3]
Quebecor World – Chicago Division	0090023	031440AAB	03/14/01	42.77	VOM	Bradley Printing Rock-Tenn Company	031063ABH 031600CMQ	shutdown of source owned by World Color Press (36.03 tpy) voluntary reductions (7.0 tpy)	03/1996 2000
Robbins Community Power LLC	07060081	031270AAB	06/23/08	278.00	NOx	Corn Products International	031012ABI	Boiler 10 Project at Corn Products (shutdown of boilers 1, 2, 3, 4 & 5)	
Tissue North America	02020043	031003ADF	08/04/04	75.00	VOM	Viskase	031012ABQ	permanent shutdown of facility	09/1998
tland Tube Company – go Division	02050066	031600FDI	10/09/02	93.60	VOM	ASF Keystone East	Chicago, IN 089-13946-00302	permanent shutdown of steel foundry	2001

Products & Chemicals, Inc. – revised permit dated 07-24-07
mMobil Oil Corporation – revised permits dated 02-26-08 and 06-26-08
s for these years not yet provided

COKE-001WiscOffsets Chart 7.18.08

HODGE · DWYER · ZEMAN
ATTORNEYS AT LAW

KATHERINE D. HODGE
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August 3, 2007

John J. Kim, Esq.
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RE: Chicago Coke Co., Inc.
Emission Reduction Credits
Our File No.: COKE:001

Dear John:

On July 11, 2007, representatives of Chicago Coke Co., Inc. ("Chicago Coke") met with representatives of the Illinois Environmental Protection Agency (the "Meeting") regarding the potential for the sale of certain emission reduction credits (the "ERCs") as offsets to be used by a purchaser of the real property of Chicago Coke, located at 11400 South Burley Avenue, Chicago, Illinois (the "Real Property"). The Illinois EPA expressed certain concerns with the transaction. In particular, the Illinois EPA had concerns with respect to 35 Ill. Admin. Code § 203.303. We have reviewed the Illinois EPA's areas of concern and related documents. Our findings are discussed below.

I. BACKGROUND

Chicago Coke purchased the Real Property in 2002. Chicago Coke acquired the existing Clean Air Act Permit Program ("CAAPP") permit (permit #96030032) associated with the Real Property on July 14, 2003. All appropriate fees have been paid and Chicago Coke continues to hold the valid CAAPP permit. Chicago Coke applied for a construction permit for a pad-up rebuild of the facility on May 3, 2004. Construction Permit No. 04010037 was issued to Chicago Coke on April 28, 2005 for a pad-up rebuild of the facility (the "Construction Permit"). Following issuance of the permit, Chicago Coke secured conditional financing and identified prospective purchasers of coke. The Construction Permit expired on October 28, 2006. Chicago Coke and Chicago Clean Energy, LLC ("CCE") began negotiations regarding a potential sale of the Real Property and certain emission reduction credits ("ERCs") in mid-2006, and are currently

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in the process of transferring the Real Property from Chicago Coke to CCE. As you are aware, CCE intends to construct a coal gasification plant on the Real Property. In addition to the Real Property, Chicago Coke and CCE wish to transfer ERCs from Chicago Coke to CCE for use as offsets by CCE. Chicago Coke and CCE have entered into a Letter of Intent wherein CCE will purchase 55.9 tons of VOM ERCs, 1067 tons of NO_x ERCs, and 156.9 tons of PM_{10} ERCs (to offset emissions of PM_{10} and as a surrogate for $PM_{2.5}$) as referenced in Attachment 3 of the Construction Permit (the "Attachment"). It is our understanding that the Illinois EPA has made a determination with regard to the accuracy of the emission totals listed in the Attachment and will not revisit these emission totals.

II. SECTION 203.303

The Illinois EPA's concern with the use of PM ERCs from shutdown sources as offsets under the State's New Source Review ("NSR") regulations, pursuant to the recent $PM_{2.5}$ nonattainment designation, is based on Section 203.303(b)(3) which states that offsets:

> 3) Must, in the case of a past shutdown of a source or permanent curtailment of production or operating hours, have occurred since April 24, 1979, or the date the area is designated a nonattainment area for pollutant, whichever is more recent, and, until the United States Environmental Protection Agency (USEPA) has approved the attainment demonstration and state trading or marketing rules for relevant pollutant, the proposed new or modified source must be a replacement for the shutdown or curtailment;

35 Ill. Admin. Code § 203.303. (Emphasis added.)

Section 203.303 includes two separate issues: 1) the timing of any past shutdown; and, 2) whether such shutdown credits may only be used as a replacement source for the shutdown. We address these issues separately below.

A. Timing of the Shutdown

As stated above, Section 203.303 provides that "in the case of a past shutdown of a source or permanent curtailment of production or operating hours, have occurred since April 24, 1979, or the date the area is designated a nonattainment area for the pollutant, whichever is more recent,..." *Id.* In the matter at hand, Chicago Coke clearly did not "shut down" before April 24, 1979. Therefore, the question is whether Chicago Coke "shut down" before April 5, 2005, the date that the $PM_{2.5}$ nonattainment designation became effective. *See* 70 FR 19844.

The shutdown of a source is not defined in the Illinois Environmental Protection Act (the "Act"), the associated Illinois environmental regulations, or in federal regulations regarding new source review. Therefore, it is not completely clear when, or if, Chicago Coke has "shut down." Chicago Coke holds an active CAAPP Permit. Chicago Coke's CAAPP fees are up to date, and Chicago Coke timely applied for a renewal of the permit. The permit allows the operation of coke ovens, a by-products plant, a boiler, and coal/coke handling operations. The coke ovens, by-products plant, and boiler have not operated since early 2002.

However, it is clear that Chicago Coke did not "shut down" in 2002. Again, Chicago Coke applied for, and obtained, the Construction Permit for a pad-up rebuild of the facility. During the hearing regarding the issuance of the Construction Permit, the Illinois EPA stated "[t]his facility is not considered a new major source because the source was not permanently shut down." Chicago Coke Construction Permit Hearing Transcript at p8. *See also* Responsiveness Summary for Public Questions and Comments on the Construction Permit Application from Chicago Coke Company at p24 ("This source is not considered a new major source because the source was not permanently shut down.") *Id.* at 31-32. The Illinois EPA issued the Construction Permit on April 28, 2005.

The Illinois EPA could not have issued the Construction Permit for a pad-up rebuild at Chicago Coke if Chicago Coke had been "shut down" as of the issuance date of the Construction Permit. The Illinois EPA would necessarily have considered Chicago Coke to be a new source and to have permitted it accordingly. Therefore, for purposes of NSR/PSD, the Illinois EPA is on record that Chicago Coke did not "shut down" prior to April 28, 2005.[1] Since any potential shutdown of Chicago Coke occurred after the date that the area including Chicago Coke was designated to be a nonattainment area for $PM_{2.5}$, and for every pollutant of concern, the first factor in Section 203.303 is clearly satisfied.

B. Replacement Source

Section 203.303 also provides that "until the United States Environmental Protection Agency ("USEPA") has approved the attainment demonstration and state trading or marketing rules for the relevant pollutant, the proposed new or modified source must be a replacement for the shutdown or curtailment." 35 Ill. Admin. Code § 203.303. USEPA has not approved a $PM_{2.5}$ demonstration for Illinois. However, the area surrounding and including Chicago Coke (the "Lake Calumet Area") was designated as a nonattainment area for PM_{10} in 1990. *See* Maintenance Plan for Particulate Matter less than 10 Microns (PM10) for the Lake Calumet Moderate Nonattainment Area in Cook County, Illinois (Draft), Illinois EPA, June 25, 2005, at p3 and 5. "[US]EPA fully approved the Lake Calumet PM-10 nonattainment area SIP on July 14, 1999 (64 FR 37847). With this approval, Illinois had fulfilled all Clean Air Act

[1] It must be noted that the Construction Permit and a subsequent amendment did not expire until October 28, 2006, and it is likely that Chicago Coke did not, or will not, "shut down" for the purposes of NSR/PSD until sometime following that date.

requirements for Part D plans for the Lake Calumet moderate PM-10 nonattainment area."[2] 70 FR 55545, 55547. The Lake Calumet Area was redesignated as attainment for PM_{10} effective November 21, 2005. *See* 70 FR 55545. In discussing the redesignation and its effects on NSR/PSD, the USEPA stated as follows:

> The requirements of the Part D--New Source Review (NSR) permit program will be replaced by the Part C--Prevention of Significant Deterioration (PSD) program for major new sources of PM-10 once the area has been redesignated. Because the PSD program was delegated to the State of Illinois on February 28, 1980, and amended on November 17, 1981, it will become fully effective immediately upon redesignation. However, because this area is included within the Chicago PM[2.5] nonattainment area, the requirements of the Part D NSR permit program will also continue to apply to new or modified sources of particulate matter, with the exception that PM[2.5] will now be the indicator for particulate matter rather than PM-10.

70 FR 55545, 55547. (Emphasis added.)

In addition, the USEPA generally allows States to use an existing PM_{10} major NSR permitting program as an interim measure until a $PM_{2.5}$ program can be implemented. The USEPA recently reiterated its position on this issue and stated:

> Our current guidance permits States to implement a PM[10] nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM[2.5] NAAQS. A State's surrogate major NSR program in PM[2.5] nonattainment areas may consist of either the implementation of the State's SIP-approved nonattainment major NSR program for PM[10] or implementation of a major NSR program for PM[10] under the authority in 40 CFR Part 51, Appendix S. Appendix S generally applies where a State lacks a nonattainment major NSR program covering a particular pollutant.

70 FR 65984, 66045.

Illinois has a SIP-approved nonattainment major NSR program for PM_{10} for the Lake Calumet Area and the authority to use the PM_{10} program for $PM_{2.5}$ permitting at this time. Pursuant to the redesignation of the Lake Calumet Area to attainment, the USEPA mandated that requirements of the Part D NSR permit program would continue to apply to new or modified

[2] Also, *see generally*, 35 Ill. Admin. Code Part 203 (providing general requirements for new sources and providing specifically that, "[i]n any nonattainment area, no person shall cause or allow the construction of a new major stationary source or major modification that is major for the pollutant for which the area is designated a nonattainment area, except as in compliance with this Part for that pollutant.") 35 Ill. Admin. Code 203.201.

sources of $PM_{2.5}$. Therefore, NSR permits for $PM_{2.5}$ in Illinois will be legally issued pursuant to federal directive and guidance under Illinois' approved attainment demonstration for PM_{10}. Since any permit related to the matter at hand will be issued under an approved attainment demonstration, the replacement requirement of Section 203.303 is not applicable here.

C. **Additional Information Regarding Replacement Sources**

Section 203.303 became effective on April 30, 1993, and was "submitted to USEPA on June 21, 1993" for consideration for inclusion in the State Implementation Plan. 59 FR 48839, 48840. The USEPA accepted the language as consistent with the federal rule.

One month later, on July 21, 1993, USEPA issued a guidance document (July 21, 1993, Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards (MD-10) regarding Use of Shutdown Credits for Offsets ("Seitz Memo")), wherein USEPA changed its position with regard to the use of ERCs from shutdowns. Prior to the Seitz Memo, USEPA maintained that 40 CFR § 51.165(a)(3)(ii)(C)(2) required that "where a State lacks an approved attainment demonstration, emissions reductions from shutdowns or curtailments cannot be used as new source offsets unless the shutdown or curtailment occurs on or after the date a new source permit application is filed." Seitz Memo at 1. However, "a concern raised is that because the Clean Air Act Amendments of 1990 ("1990 Amendments") have created new schedules for submitting attainment demonstrations, the existing NSR rules restricting the use of so-called "prior shutdown credits" may be read as unnecessarily hindering a State's ability to establish a viable offset banking program for several years." *Id.* at 1. USEPA eventually concluded that, since attainment demonstrations were not even due at the time, "States should be able to follow, during the interim period between the present and the date when EPA acts to approve - - or disapprove an attainment demonstration that is due, the shutdown requirements applicable to areas with attainment demonstrations." *Id.* at 1. The Guidance also allows States to "interpret their own regulations. . . in accordance with this policy." Seitz Memo at 2.

Thereafter, USEPA proposed major reform to the NSR rules in 1996. *See* 61 FR 38249. While the specific rule in question here has not been finalized, it is clear that USEPA stands behind the positions taken in the Seitz Memo. In the proposed NSR reform, USEPA discussed the Guidance by stating that "the EPA took the position that such credits may be used as offsets until the EPA acts to approve or disapprove an attainment demonstration that is due." 61 FR 38249, 38313 (July 23, 1996). USEPA also stated that "EPA is proposing to adopt the policies reflected in the July 21, 1993 policy statement as regulatory changes. The EPA continues to adhere to its view in the July 31, 1993 policy statement that the 1990 Amendments' provisions for ozone nonattainment areas justify use of prior shutdown and curtailment credits as offsets in the interim period before the EPA approves or disapproves any required attainment demonstration. The EPA believes that the safeguards in the new requirements of the 1990 Amendments provide adequate assurance of progress toward attainment so that restrictions on the use of prior shutdown or curtailment credits is not necessary." *Id.* Among the reasons stated

for making the change to the shutdown ERC policy were that "EPA believes the interim period prior to approval or disapproval of attainment demonstrations for ozone nonattainment areas will continue after the promulgation of this final rule" and "areas may be designated as new ozone nonattainment areas in the future that will have future attainment dates, and if designated moderate or above will have future dates for submission of an attainment demonstration. *Id.* at 38312.

In summary, Illinois' rule requires that only replacement sources can use shutdown credits before USEPA has approved the appropriate attainment demonstration. USEPA has not approved an Illinois $PM_{2.5}$ or 8-hr. ozone attainment demonstration. However, standing USEPA guidance and federal register preamble discussion regarding this issue indicate that the rules applicable in areas having existing USEPA approved attainment demonstrations should apply until USEPA approves or disapproves any newly required attainment demonstration. Notably, areas with existing USEPA approved attainment demonstrations are not required to restrict the use of shutdown credits to replacement sources. Further, states are allowed to interpret their own rules in accordance with the guidance. Under the Guidance, Illinois may interpret its rule, in the interim before USEPA has approved its attainment demonstration, to read as if such a demonstration has been approved. We understand that the Illinois EPA has in the past interpreted its rules, in matters such as this, in a manner that did not restrict the use of shutdown credits to replacement sources. Therefore, shutdown ERCs may be used by any appropriate source, not merely by replacement sources.

III. 5-YEAR EXPIRATION PERIOD FOR ERCs

As you are aware, the Act and related Illinois regulations do not specifically mandate that ERCs may only be generated from shutdowns that occurred within the past five years. However, it has been indicated that the Illinois EPA has such a policy. In the matter at hand, for purposes of NSR/PSD, Chicago Coke could not have been shut down before April 25, 2005, the date that Construction Permit was issued. Therefore, the earliest that any 5-year expiration period could end would be April 28, 2010.[3]

A brief review of the expiration period for other states indicates that established ERCs are good for 10 years in Pennsylvania, New Jersey, and Massachusetts; 7 years in Colorado; 5 years in Texas, Michigan, and Washington; and, do not expire in Georgia. Each of these states has either a trading or an official banking/ERC recognition program.

There appears to be one federal guidance document that has addressed the expiration issue directly. That guidance document states:

11. Is there a time frame for offset expiration?

[3] However, it is likely that Chicago Coke could not be considered to be "shut down" during the period that it held the validly issued Construction Permit.

> In general, offsets can continue to exist as long as they are accounted for in each subsequent emissions inventory. They expire if they are used, or relied upon, in issuing a permit for a major stationary source or major modification in a nonattainment area, or are used in a demonstration of reasonable further progress.
>
> The State may include an expiration date in its SIP to ensure effective management of the offsets. For example, TACB's proposed banking rule would require each individually banked offset to expire 5 years after the date the reduction occurs, if it is not used. The rule also provides that a particular banked reduction will depreciate by 3% each year that it remains in the bank. EPA is supportive of the approach Texas has taken in its proposed banking rule to limit the lifetime of the offsets and to allow for an annual depreciation.

Stanley Meiburg, Director, Air, Pesticides and Toxics Division (6T), Interim Guidance on New Source Review (NSR) Questions Raised in Letters Dated September 9 and 24, 1992. November 19, 1992.

Therefore, there is apparently no absolute time limit or specific expiration period for generating or using ERCs. Further, since Illinois does not include any timeframe in its SIP, it need not use five years, or any other time limitation when determining whether an ERC generated from a shutdown may expire. However, even if the Illinois EPA should determine that a 5-year expiration period must be adhered to, the ERCs at issue here were not generated from a shutdown that occurred more than five years ago.

IV. USE OF CHICAGO COKE'S EMISSIONS IN AN ATTAINMENT PLAN OR FOR RFP

There does not appear to be any federal guidance regarding the use of properly permitted emissions from a source that is not currently operating for the purposes of an attainment plan or for reasonable further progress. However, there is guidance regarding shutdowns that may properly be used during the redesignation of an area to attainment. While we recognize that such guidance is not directly on point, the goal of any attainment plan or any demonstration of reasonable further progress is to ensure that a specific geographic area is moving toward an eventual redesignation of such area to attainment. In fact, the "term 'reasonable further progress' means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date." 42 USCS § 7501. (Emphasis added.)

Redesignation is achieved as a response to a request for redesignation. Permanent and enforceable emissions reductions from shutdown sources may be included in such a redesignation request. However, "[e]mission reductions from source shutdowns can be considered permanent and enforceable to the extent that those shutdowns have been reflected in the SIP and all applicable permits have been modified accordingly." 67 FR 36124, 36129-36130.

Further, a SIP must include "enforceable emission limitations and other control measures, means, or techniques..." 42 USCS § 7410. In the matter at hand, any emission reductions that the Illinois EPA believes may have occurred at Chicago Coke are not permanent or enforceable. Chicago Coke maintains its CAAPP permit. Chicago Coke could operate its plant, particularly its boiler, at any time. Therefore, any reductions that the Illinois EPA may claim for a shutdown of any source that still holds an active permit would not be applicable toward redesignation of a nonattainment area.

V. 2005 INVENTORY

The 2005 emissions inventory indicates that Chicago Coke had minimal emissions of VOM and a few tons of emissions of PM/PM_{10}/$PM_{2.5}$, but no other emissions. As discussed at the Meeting, it is our understanding that the 2005 inventory reflects "actual" emissions from the year 2005. A recent federal guidance document indicates that ERCs may be generated by a source when the underlying emissions are no longer in the state emissions inventory. In the matter addressed by the guidance, a facility shut down a unit before a certain NESHAP was implemented. The source requested credit for the full amount of the actual emissions from the unit rather than the amount of emissions that would have occurred if the unit had shut down after the implementation of the NESHAP. Stephen Rothblatt of Region V stated "Sonoco Flexible Packaging (Sonoco) shutdown its Tower 7 coating line in 2005, resulting in an estimated emission reduction of 507 tons per year of volatile organic compounds (primarily Toluene). It is our understanding that the Tower 7 coating line has been permanently shut down and removed from the emissions inventory as a source of emissions at the Sonoco facility." Letter from Stephen Rothblatt, Director, Air and Radiation Division, to Mr. Paul Dubenetzky, Assistant Commissioner, Office of Air Quality, Indiana Department of Environmental Management, February 14, 2006.

There, even though the unit had been removed from the emissions inventory, Mr. Rothblatt stated, "we find that all of the actual emission reductions should be available and creditable because the reductions resulting from the shutdown of the Tower 7 coating line were not 'required by the Act'." *Id.* Therefore, even though the 2005 Illinois inventory does not include emissions for many of Chicago Coke's emission units, the lack of emissions in the inventory should not be an impediment to Chicago Coke's ability to generate ERCs.

VI. CONCLUSION

The Illinois EPA has recognized that Chicago Coke had not shut down as of April 28, 2005. Since Chicago Coke did not shut down before the Chicago Area was designated as a nonattainment area for any pollutant, the first clause of Section 203.303 is inapplicable. The second clause of Section 203.303 is also inapplicable because the USEPA has approved the attainment demonstration under which permitting in the matter at hand will be accomplished. Further, Section 203.303 was promulgated to comply with federal intentions which have since been altered by federal guidance and by rule. Chicago Coke has an active CAAPP permit. The Illinois EPA continues to bill Chicago Coke for Title V fees and Chicago Coke continues to pay such fees. Any use of the emissions of Chicago Coke for an attainment demonstration or for RFP would not be permanent or enforceable so long as Chicago Coke maintains its CAAPP permit. For these reasons, and for the reasons discussed herein, Chicago Coke respectfully requests that the Illinois EPA acknowledge its ability to create ERCs based on the potential shutdown of its facility. As you are aware, this matter involves several transactions. A timely response would be greatly appreciated.

Sincerely,

Katherine D. Hodge

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COKE-001\Corr\John J. Kim Ltr - Offsets July 2007