

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

January 12, 1989

Mr. Michael J. Hayes, Manager
Division of Air Pollution Control
Illinois Environmental Protection Agency
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Hayes:

This is in response to your letters of August 17, 1988 and September 9, 1988, requesting guidance on several issues related to determining applicability of new major source regulations in the granting of construction permits to sources of air emissions. These issues arose as a result of CPC International's "Argo II Rebuild Project Phase II" in Bedford Park, Illinois.

The questions you asked concern the following issues:

1. What definitions should be used to determine whether the CPC Phase II Rebuild Project is a major modification?
2. If the Phase II project in and of itself does not represent an increase in emissions, much less a significant increase, should contemporaneous and creditable emission increases and decreases determine whether a major modification has occurred?
3. How would netting provisions in the regulations apply to the CPC situation?

These questions were discussed in a telephone conversation on August 17, 1988, in which Gary McCutchen of my office concurred with the positions previously taken by the Environmental Protection Agency (EPA), Region V, but stated that he would consider the matter further upon receipt of a written request for guidance. The Office of Air Quality Planning and Standards (OAQPS) had a chance to review your letters. As a result, this office reiterates the positions we have taken before.

Background Information

Before responding to your specific questions, it may be helpful to summarize key modifications at CPC that resulted in changes in particulate matter emissions. In 1981, CPC reportedly decreased its particulate emissions by 262 tons per year (tpy). In 1985, it constructed the "Phase I Rebuild Project" which increased particulate emissions by 49.5 tpy. This increase was netted against the prior 262 tpy decrease achieved in 1981, so that the Phase I project was not subject to major new source permitting requirements (i.e., the net emissions increase was less than the de minimis emission rate of 25 tpy).

Construction of the Phase II project began in 1986, but the company did not get a construction permit until June 1988. The permit that was issued was a minor source permit. Prior to the Phase II project, CPC emitted approximately 600 tpy of particulate matter. It was, therefore, a major stationary source. In Phase II, certain pieces of obsolete equipment were shut down, reportedly reducing emissions by about 600 tpy, but new equipment was added at the same time. The new equipment resulted in an increase in emissions of approximately 600 tpy.

Question 1:

What definitions should be used to determine whether the CPC Phase II Rebuild Project is a "major modification"?

As a preliminary matter, when making a major source applicability determination, a permitting agency must base the determination on "major" source definitions, not on "minor" source definitions. The specific definitions to use in making an applicability determination are found in the specific new source review (NSR) regulations under which the proposed new construction or modification is reviewed. The area of Bedford Park, Illinois, is nonattainment for total suspended particulate (TSP), and Illinois does not have approved Part D NSR requirements in its State implementation plan. For this reason, 40 CFR Part 51, Appendix S, Emission Offset Interpretative Ruling, applies to new major stationary sources and major modifications to existing sources of TSP in that area.

The CPC also emits PM₁₀. Since Bedford Park is attainment for PM₁₀, prevention of significant deterioration (PSD) requirements found at 40 CFR Part 52.21 also apply. Therefore, CPS is subject to the definitions contained in Appendix S (for TSP purposes) and in Part 52.21 (for PM₁₀ purposes).

Question 2:

If the Phase II project in and of itself does not represent an increase in emissions, much less a significant increase, should contemporaneous and creditable emissions

increases and decreases determine whether a major modification has occurred?

Because the Phase II Rebuild Project was to result in an increase in emissions of approximately 600 tpy of particulate matter, the change is "significant" (i.e., greater than 25 tpy) and should be scrutinized for applicability to new source requirements using the definitions of "major modification" in 40 CFR Part 51, Appendix S and Part 52.21. Whether a change is "significant" is determined before any netting calculation is done.

A determination as to whether a significant change is a "major modification," as defined at 40 CFR Part 51, Appendix S, II.A.10, requires a decision as to whether the change has resulted in a "significant" net emissions increase (i.e., greater than or equal to 25 tpy for particulate matter). The definition of "net emissions increase" in Appendix S mandates a calculation of all creditable increases and decreases which occurred during the contemporaneous time period and specifies that time period. It begins 5 years before the date construction "commenced" on the project and ends on the date the emissions increase from the particular modification occurs (if after the commencement date). A necessary condition for establishing the commencement date is that the owner or operator has all necessary preconstruction approvals or permits. The Phase II Project was permitted in June 1988; consequently, the contemporaneous time period began in June 1983. How each of the increases and decreases in emissions is taken into account to determine if the change will result in a major modification is discussed in the response to your third question.

Question 3:

How would netting provisions in the regulations apply to the CPC situation?

The mechanics of performing the netting calculation, once the contemporaneous time period has been established, can be found in the definition of "net emissions increase" at 40 CFR Parts 51.165(a)(1)(vi); 51.166(B)(3); Appendix S, section II.A.6; and 52.21(b)(3). The definitions specifically state:

. . . an increase or decrease in actual emissions is creditable only if the Administrator has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs.

The preamble to the 1980 PSD regulations at 45 FR 52701 explains that the:

. . . prior increase or decrease is creditable only if the relevant reviewing authority has not relied upon it in issuing a permit under the relevant NSR program . . .

As such, EPA's policy is that any prior increase or decrease that has been used in issuing a previous major source permit has been "relied" upon, and therefore cannot be creditable to a subsequent increase. However, emissions increases or decreases that have been used by a source only to net out of review (versus those used in NSR review) have not been "relied" upon and are, therefore, still subject to further consideration. In other words, if a source is able to net out of review, the increase in emissions that triggered the netting action will not have been subject to NSR. Its effect on increments and ambient air quality would not have been determined, and it would only be determined if it happens to fall in a contemporaneous time period of a subsequent project that is determined to be a major new source or major modification. Once included in a major NSR action, the increase that originally netted out of review, but was later subjected to it, will not be subject to review again (i.e., the slate is wiped clean). Similarly, if no major modifications are made for 5 years after the source that netted out of review received its permit, then the slate is wiped clean.

For the reasons stated above, we reaffirm the guidance that Region V and OAQPS conveyed in previous discussions with you. Each netting transaction involves a "snapshot" of the creditable emissions increases and decreases within the applicable contemporaneous time period. Emissions reductions that have occurred prior to the current contemporaneous time period are not creditable, even though they may have been used to allow one or more individual increases which are still inside the current contemporaneous time period to net out of review. To consider netting transactions that involve emission increases and decreases which occur outside of the current contemporaneous time period would effectively lengthen the contemporaneous time period to greater than 5 years. This is contrary to the existing NSR regulations. Any increases that occur inside the current contemporaneous time period are not double counted as you have alluded, because they will never be subjected to NSR more than once.

The netting calculation for the Phase II project starts with the 600 tpy increase from the new equipment. It is not clear that the 600 tpy decrease that occurred simultaneously with the 600 tpy increase is creditable because of issues concerning the requirement that the decrease be federally enforceable at the time actual construction commenced, but if we assume that the 600 tpy decrease was creditable, the 600 tpy

increase and 600 tpy decrease essentially cancel each other out. However, these are not the only emissions changes within the 5-year contemporaneous time period, and the NSR regulations require that all such changes be totaled, not just certain ones. Therefore, the 49.5 tpy increase from Phase I must be added, because it occurred within the 5-year contemporaneous period. The 262 tpy decrease in particulate matter emissions in 1981, which had been used to net out of review the 49.5 tpy increase in 1985, cannot be used because it occurred outside of the five-year contemporaneous time period.

It would appear then that CPC has two options for resolving the permitting requirements for the Phase II project. The first option would be for CPC to determine if its emissions were reduced by at least 25 tpy due to other changes within the contemporaneous time period (in addition to the 600 tpy reductions associated with the Phase II Project) to net against the 49.5 tpy and enable the source to obtain a minor source permit. Of course, a second option would be for the source to go through NSR, (i.e., install LAER, obtain offsets greater than 1:1, etc.), and thereby "wipe the slate clean."

Please contact me at (919) 541-5586 or Gary McCutchen at (919) 541-5592 if you have additional questions regarding the matters discussed in this letter.

Sincerely,

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Noncriteria Pollutant Programs Branch
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cc: Richard Wagner, Region V
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