

Illinois Environmental Protection Agency
Bureau of Air
January 2015

Responsiveness Summary for
Public Comments on the
Revisions to the Construction Permits for the
Coker Refinery Expansion (CORE) Project at the
Wood River Refinery in Roxana, Illinois and the
Terminal Expansion Project at the
Hartford Terminal in Hartford, Illinois

Facility Identification and Permit/Application Nos.:
Refinery: 119090AAA, 06050052
Terminal: 119050AAN, 06110049

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DECISION

On January 23, 2015, the Illinois Environmental Protection Agency (Illinois EPA), Bureau of Air, issued revised construction permits to: 1) Phillips 66 Company (Phillips) for the Coker Refinery Expansion (CORE) Project at the Wood River Refinery (WRR), and 2) Phillips 66 Carrier LLC (Phillips 66 Carrier) for the associated Terminal Expansion Project at the Hartford Terminal (Terminal). At the same time, the Bureau of Air issued this Responsiveness Summary to address comments on the issuance of the revised permits submitted during the public comment period.

BACKGROUND

The objective of the CORE Project is to install units and equipment to increase both the total crude oil processing capacity of the WRR and the percentage of heavier crude material to be processed at the WRR. The original design of the project assumed that the heavy crude oil would contain a large fraction of “heavy gas oil” and additional capacity for fluid catalytic cracking would be needed. For this reason, the original design of the CORE Project included elements to process the large fraction of heavy gas oil in the heavy crude oil, including reactivation of Fluid Catalytic Cracking Unit 3 (FCCU-3), an existing, but idled, fluid catalytic cracking unit at the WRR.¹ Since the issuance of the original permits for the CORE Project, the heavy crude oil that is available, and is received by WRR from third-party producers, contains less “heavy gas oil” and more “light gas oil.” This has necessitated changes to certain aspects of the CORE Project.

The revised permit issued to Phillips for the CORE Project addresses the changes to the CORE Project at the WRR that will enable Phillips to process the heavy crude oil that is now available to the WRR. As authorized by the revised CORE Project Permit, certain additional units and equipment will be installed to process more light gas oil. This will include additional fractionation equipment (two new fractionating columns) and a new gas-fired boiler. This boiler will provide steam that otherwise would have been provided by heat recovery steam generators on FCCU-3, which unit is no longer needed and will not be restarted. Also, increased utilization of certain existing units will be necessary to process the heavy crude oil received by WRR

¹ Although this idled FCC unit was authorized to be reactivated by the original CORE Project Permit, the relevant permit conditions reflected specific restart criteria as contained in a Consent Decree between the WRR, the United States, and the State of Illinois. Consent Decree, United States of America, State of Illinois, State of Louisiana, State of New Jersey, Commonwealth of Pennsylvania and Northwest Clean Air Agency v. Phillips 66 Company, WRB Refining LP, Monroe Energy, LLC, entered in the United State District Court for the Southern District of Texas, Civil Action No. H-05-0258, on December 5, 2005 and amended May 1, 2007, August 11, 2008, April 13, 2012 and September 21, 2012 (Consent Decree). Per Paragraphs 40, 60, and 81 of the Consent Decree, idled FCC Unit 3 had to be permitted as a *new* emission source, and installation of a wet gas scrubber was required to control PM and SO₂ emissions. Phillips ordered and took delivery of a wet gas scrubber for FCC Unit 3 before determining that this unit no longer needed to be restarted.

because it contains less heavy gas oil. As a general matter, the revised permit results in lower overall permitted emissions for the CORE Project.²

The revised permit issued to the WRR for the CORE Project also includes corrections, clarifications and updates to the original permit.

The revised permit for the Terminal Expansion Project includes revisions to respond to the changes in the CORE Project. In particular, three new storage tanks will be constructed, rather than five new tanks. Also, physical changes would no longer be made to the truck loading rack. Like the revised permit for the WRR, the changes included in the revised permit for the Terminal Expansion Project stem from crude oil containing less heavy gas oil and result in lower overall permitted emissions at the Terminal.

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 the applications, the Illinois EPA made a preliminary determination that the applications met the standards for issuance of construction permits and prepared draft permits for public review and comment.

The Illinois EPA held a public hearing on the planned revisions to the construction permits for the CORE Project and Terminal Expansion Project. The public comment period opened with the publication in the Alton Telegraph on September 29, 2014 of a notice for the comment period and hearing. Notices were published again in the Alton Telegraph on October 6 and 13, 2014. The hearing was held on November 13, 2014, at the Wood River-Hartford School District Board Room in Wood River. The written comment period remained open until December 13, 2014.

AVAILABILITY OF DOCUMENTS

The revised construction permits issued to Phillips and Phillips 66 Carrier and this responsiveness summary are available by the following means:

1. On the Illinois Permit Database on the internet:
<http://www.epa.gov/reg5oair/permits/ilonline.html> (find the documents under All Permit Records (sorted by name), Construction Permit Records).
2. By contacting the Illinois EPA:

² Emissions of CO and VOM are lower for the CORE Project as revised as compared to the original CORE Project. The changes in emissions for other pollutants after considering these revisions, continue to be minor for purposes of the federal rules for PSD, 40 CFR 52.21, and the state rules for Major Stationary Sources Construction and Modification (MSSCAM), 35 IAC Part 203.

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APPEAL PROVISIONS

The revised construction permits issued for the CORE Project and related Terminal Expansion Project³ grant approval to construct pursuant to the federal rules of Prevention of Significant Deterioration of Air Quality (PSD), 40 CFR 52.21. Accordingly, individuals who filed comments on the draft permits or participated in the public hearing may petition the United States Environmental Protection Agency (USEPA) to review the PSD aspects of these permit actions. In addition, as comments were submitted on the draft permits that requested a change in the draft permits, the issued permits do not become effective until after the period for filing of an appeal has passed. The procedures governing appeals are contained in the Code of Federal Regulations, “Appeal of RCRA, UIC and PSD permits,” 40 CFR 124.19. If an appeal request will be submitted to USEPA by a means other than regular mail, refer to the Environmental Appeals Board website at http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/General+Information/Frequently+Asked+Questions?OpenDocument for instructions. If an appeal request will be filed by regular mail, it should be sent on a timely basis to the following address:

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
Mail Code 1103M
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

³ For purposes of responding to comments, in this responsiveness summary, the Illinois EPA refers to the overall project as the “CORE Project,” which includes both the CORE Project at the WRR and the associated Terminal Expansion Project at the Terminal.

COMMENTS WITH RESPONSES BY THE ILLINOIS EPA

Comment 1. The current project is a separate project and, therefore, a different change from the construction that began in 2008. Phillips states in its permit application that the construction beginning in 2008 continues at this time, meaning that the old construction includes this new proposed refinery change. To this end, Phillips seeks to add on the proposed refinery expansion as a mere revision to the 2008 construction permit. According to Phillips, the refinery expansion is not a physical change separate from the 2008 construction.

The USEPA addresses the meaning of the “physical change” in its memorandum regarding a proposed project by Cyprus Northshore Mining Corporation at its facility in Silver Bay, Minnesota (Cyprus Memorandum).⁴ The USEPA noted that Cyprus’ proposal to install two new furnaces and make all necessary changes to operate the new additions constituted a physical change. “This is not a case where the source is reactivating a shut-down facility and making only ‘routine’ changes to bring it back on line. For this reason, there is no dispute that this new construction constitutes a physical change.” *Id.*

Applying the USEPA’s guidance in the Cyprus Memorandum to the matter at hand, Phillips’ proposed refinery expansion constitutes a physical change, separate from the 2008 change upon which the existing construction permit is based. Here, Phillips has proposed to change the Wood River Refinery (WRR) to accommodate the crude oil now available. The change will include installing “additional fractionation equipment, a boiler, and other associated emissions units to process the lighter fraction of the heavy crude oil now received at WRR.” Phillips 66 Request to Revise CORE Project Construction Permit at E-1 (August 2013). Like Cyprus’ proposal to install two new furnaces, Phillips’ proposal to install the aforementioned equipment constitutes a physical change. This proposed physical change is separate from the original physical change upon which the 2008 CORE permit is based and should be treated as such.

Response: The new construction activities are physical changes. At issue is how these changes are to be treated for purposes of New Source Review. This comment suggests that, pursuant to USEPA’s Cyprus Memorandum, the changes to the CORE Project should be treated as a separate project instead of a revision of the original CORE Project. However, as will be discussed later, USEPA’s decision in Cyprus is not relevant to this matter. Treating the changes to the CORE Project as a continuation of the original project is consistent with USEPA’s policy on aggregation. Moreover, treating the changes to the CORE Project as a separate project would lead to less stringent permitting requirements for the additional units that would be constructed pursuant to the revised CORE Permits. The original CORE Project and the changes to the CORE Project are appropriately addressed as a single project pursuant to USEPA’s historical policy on project

⁴ Memorandum, “Proposed Netting for Modifications at Cyprus Northshore Mining Corporation, Silver Bay, Minnesota,” from John Calcagni, Director, USEPA, Air Quality Management Division to David Kee, Director, Air and Radiation Division, Region V, USEPA, August 11, 1992 (Cyprus Memorandum).

aggregation.⁵ Addressing the requested changes to the CORE Project as revisions to the permits for the original CORE Project (i.e., the original CORE Permit and the original Terminal Expansion Permit) is appropriate since the requested changes are intrinsically related to the originally permitted activities, necessary to achieve the overall original purpose of the CORE Project, and occur on a timeline that links them to the original CORE Project.⁶

First, the requested changes are intrinsically related to the activities authorized in the original construction permits both operationally and economically. Specifically, the purpose of the original CORE Project was to increase the processing of heavy crude at the WRR. The design of the CORE Project assumed that the heavy crude oil received by WRR would have a significant percentage of heavy gas oil, and, thus, included additional catalytic cracking capability, with the restart of FCCU-3 and its associated emission units. Phillips explained in its application that since the CORE Permit was issued, the heavy crude oil available to WRR from third-party heavy crude producers has contained less heavy gas oil and more light gas oil. Thus, FCCU-3 will not be needed to implement the goals of the project, but the WRR will instead require additional distilling columns and associated emission units to process the light oil fraction of the heavy crude oil that is received.⁷ Further, a new boiler will be needed to provide steam that would have otherwise been provided by FCCU-3. Thus, changes to the CORE Project are necessary to fulfill the original objectives of the CORE Project, which were to enable the refinery to increase the processing of heavier crude utilized at the refinery.⁸ Further, these changes would not be

⁵ Memorandum from John B. Rasnic, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards, USEPA, to George T. Czerniak, Chief, Air Enforcement Branch, USEPA, Region V regarding Applicability of New Source Review Circumvention Guidance to 3M – Maplewood, Minnesota (Jun. 17, 1993); *see also* Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Aggregation; Reconsideration, 75 FR 19567, 19570 (Apr. 15, 2010) (discussing historical policy and explaining that the 3M Maplewood determination is “widely cited for its discussion of objective factors that could support a conclusion that nominally-separate changes should be treated as one project”).

As background, on January 15, 2009, USEPA issued a final rule amending the PSD and nonattainment NSR regulations to address when a source must combine nominally-separate physical changes and changes in the method of operation for purposes of determining whether they are a single change and result in a significant emissions increase. 74 FR 2376 (Jan. 15, 2009). The effectiveness of these amendments was subsequently stayed, and USEPA convened a proceeding for reconsideration to respond to a petition from the Natural Resources Defense Council (NRDC). 74 FR 7193 (Feb. 13, 2009). NRDC also filed a petition for review of the amendments in federal court. *See NRDC v. EPA*, No. 09-1103 (D.C. Cir.). USEPA has delayed the effective date of the amendments until judicial review is no longer pending or USEPA completes the reconsideration process. 75 FR 27643, 27644 (May 18, 2010). Accordingly, the policy outlined by USEPA that addresses the 3M Maplewood facility remains applicable.

⁶ Phillips also points out in its application materials that this permitting approach is consistent with USEPA guidance addressing revisions to PSD permits. WRB Refining LP Wood River Refinery, Request to Revise CORE Project Construction Permit, Appendix A (Aug. 2013) (citing PSD Permit Modifications: Policy Statement on Changes to a Source, a Permit Application, or an Issued Permit and on Extensions to Construction Schedules, USEPA (Jun. 1985), available at www.epa.gov/region7/air/nsr/nsrmemos/permmmod.pdf; Guidance Document for Prevention of Significant Deterioration Permit Modifications, USEPA (Jun. 11, 1991)).

⁷ WRB Refining LP Wood River Refinery, Request to Revise CORE Project Construction Permit, Appendix A (August 2013).

⁸ Original CORE Permit issued by Illinois EPA, Permit No. 06050052 (August 5, 2008).

needed but for the original CORE Project. These changes to the CORE Project involve many of the units that were the subject of the original CORE Project. Accordingly, the changes to the CORE Project are related to the original permitted activities both operationally and economically.

Second, construction activities authorized by the original permits are still ongoing; therefore, the overall emission increases authorized in the original permits has not been fully realized. This further supports addressing the requested changes as a continuation of the original CORE Project. When construction of the CORE Project began, it was recognized that construction activities would stretch over a number of years. That has proven to be the case and construction of the CORE Project still continues.

Finally, if the changes were considered a separate project, the new units would not have been required to undergo any review for Best Available Control Technology (BACT) under the PSD rules, 40 CFR 52.21(j). This is because the additional units in and of themselves, without any reliance on netting, would not be considered a major modification under the PSD rules.⁹ In particular, as new Boiler 19 was considered part of the CORE Project, it is subject to BACT for emissions of carbon monoxide (CO), like the new and modified units that were originally part of the CORE Project. This is because the CORE Project originally triggered PSD for CO. Boiler 19 is also subject to BACT for greenhouse gases (GHG). This is because GHG are now a regulated pollutant under the PSD rules, PSD is being applied to Boiler 19 for CO, and the potential GHG emissions of this boiler are more than the significant emission rate for GHG in the PSD rules.^{10, 11} Therefore, addressing the changes to the CORE Project as a revision to the original CORE Project has resulted in a

⁹ As provided by Condition 4.13.6(d) of the Revised CORE Permit, the permitted emissions of Boiler 19 are not significant for any pollutants other than greenhouse gases. In particular, the permitted emissions of CO, nitrogen oxides (NO_x), sulfur dioxide (SO₂) and particulate matter/particulate matter₁₀ (PM/PM₁₀) are only 35.5, 35.5, 27.4, and 13.1 tons/year, respectively. As all of these emission rates are below the applicable significant emission rates in the PSD rules (40 CFR 52.21(b)(23)), this boiler would not be considered a major modification for purposes of PSD if it were considered by itself, separately from the original CORE Project.

¹⁰ On June 23, 2014, the United States Supreme Court issued a decision addressing the application of stationary source permitting requirements, including PSD, for emissions of GHG. *Utility Air Regulatory Group (UARG) v. Environmental Protection Agency (EPA)* (No. 12-1146). In brief, the Supreme Court found that the USEPA may not treat GHG as an air pollutant for purposes of determining whether a PSD approval (or Title V permit) is needed. However, it did find that a PSD approval could be required for GHG emissions if a PSD approval were otherwise required based on emissions of pollutants other than GHG from a proposed project, with limit(s) for GHG emissions then set in such approval based on the application of BACT if the project has more than *de minimis* emissions of GHG.

With respect to such “anyway” sources and projects, the USEPA subsequently determined that it would continue to address applicability of PSD for GHG emissions using a significant emission rate of 75,000 tons per year, as carbon dioxide equivalents. Memorandum, July 24, 2014, “Next Steps and Preliminary Views on the Application of Clean Air Act Permitting Programs to Greenhouse Gases Following the Supreme Court’s Decision in *Utility Air Regulatory Group v. Environmental Protection Agency*, by Janet G. McCabe, USEPA, Acting Assistant Administrator Office of Air and Radiation.

¹¹ A revised air quality analysis was also conducted for the CORE Project for CO. It showed that the maximum CO impacts of the project were 1073 and 248 µg/m³ on a 1-hour and 8-hour average, respectively. These impacts are not significant as they are below the significant air quality impact levels adopted by USEPA for CO.

more stringent approach than permitting the changes as a stand-alone project, as recommended in this comment.¹²

Comment 2. Allowing Phillips to net emissions from 2008 would undermine USEPA's net emissions guidelines. The proposed Refinery and Terminal change falls outside of the five-year contemporaneous period.

Phillips obtained a construction permit and PSD approval from the Illinois EPA for the CORE project on August 5, 2008 and commenced construction under the permit on September 8, 2008. Phillips' proposed revisions to the permit will address planned changes due to differences in the composition of crude oil available to the refinery. The available crude oil contains less heavy gas oil and more light oil than the crude oil Phillips frequently received from producers and, thereby, requires different facilities for processing. As a result, Phillips has proposed certain changes to the WRR and terminal to process this different crude oil. In its permit application Phillips states that the construction beginning in 2008 continues at this time, highlighting that the proposed refinery expansion is a revision of the 2008 permit rather than a separate change altogether. Phillips argues, therefore, that the refinery expansion is contemporaneous with the construction that began six years ago in 2008 and the emissions reduction claimed for that project.

The USEPA allows a party to claim or net emissions reductions that occur within the five-year period preceding a proposed change:

- (ii) An increase or decrease in actual emissions is *contemporaneous* with the increase from a particular change only if it occurs between:
 - (a) The date five years before construction on a particular change commences; and
 - (b) The date that the increase from the particular change occurs.

40 CFR 52.21(b)(3)(ii) (emphasis added).

Therefore, if the reduction occurred more than five years before the commencement of construction of the proposed change, it is not contemporaneous. Cyprus Memorandum.

¹² Boiler 19 and other new units that would now be part of the revised CORE Project are also subject to the Lowest Achievable Emission Rate (LAER) for emissions of VOM pursuant to 35 IAC 203.301. If the changes to the CORE Project had been addressed as a stand-alone project, it is likely that LAER would not have been required for these unit. This is because the increase in VOM emissions would not have been significant, i.e., 40 tons/year or more. In particular, the permitted VOM emissions of Boiler 19, as would have been allowed by Condition 4.13.6(d) of the draft of the revised permit for the CORE Project, were only 7.4 tons/year. (The permitted VOM emissions allowed by the revised permit that has been issued are only 5.3 tons/year.)

The reductions Phillips seeks to claim come from as far back as 2002, which is outside the five-year window. The Illinois EPA should not allow Phillips to unlawfully expand the contemporaneous netting window by reaching more than five years prior to construction for emission reductions to offset future emissions increases from the proposed refinery expansion. Furthermore, Phillips should not be allowed to claim for this refinery change, PSD emissions reductions claimed for a construction that commenced six years ago. By tagging the proposed refinery expansion onto the old permit as a revision, Phillips is doing just that: attempting to claim an emissions reduction that took place more than five years ago. Phillips states in the permit application that the construction beginning in 2008 continues at this time, meaning that the old construction includes this new proposed refinery expansion and any emissions are contemporaneous with reductions that took place even five years before the 2008 construction began. However, as the USEPA regulations and guidance explain, if the reduction occurred more than five years before the commencement of construction of the proposed change, it is not contemporaneous. Cyprus Memorandum.

Response: This comment confuses the scope of the contemporaneous period. The requirements of PSD apply to the construction of a new major stationary source or a major project at an existing major stationary source.¹³ PSD applicability for a proposed project is determined through a two-step process. The first step considers whether the increase in emissions from the project will be significant by itself. The second step, which is taken only if the first step indicates a significant emissions increase, may consider changes in emissions for the project, as well as all contemporaneous changes in emissions at the source.¹⁴

Physical changes to or changes in the method of operation of a source, that is, projects, often involve changes to more than one emission unit. Here, the CORE Project involves the construction of numerous new and modified emissions units and control systems. It would be unreasonable, and in some cases impossible, to expect all construction activities that are part of a project to commence simultaneously. Construction must occur in steps. So, for projects that involve construction of multiple emission units, only one date is used when establishing a contemporaneous period. Indeed, given the definition of the term “project” in the PSD rules, it is longstanding practice to define a contemporaneous period for an overall project and not the individual emission units that make up a project. To fulfill the objectives of the PSD program,¹⁵ the PSD rules provide that sources are required to not only commence construction within a reasonable period of time but also to then carry out a continuous program of construction. In particular, a PSD approval is only valid if the source commences construction within 18 months of receipt of the approval and construction is not discontinued for a period of 18 months or more.¹⁶ Phillips has met these requirements.

¹³ Project means a physical change in, or change in the method of operation of, an existing major stationary source. 40 CFR 52.21(b)(52).

¹⁴ 40 CFR 52.21(b)(3), (23), and (40).

¹⁵ While the commenter focused its comments on PSD pollutants, this project involves both PSD and nonattainment NSR pollutants. See Attachment 1a to the Revised CORE Project Permit.

¹⁶ 40 CFR 52.21(r)(2); see also 35 IAC 203.113 for nonattainment NSR pollutants.

This means that the contemporaneous period for a proposed project is established in the initial permitting for a project even if the project involves many emission units and takes many years to complete. Moreover, the PSD rules do not require, as suggested by this comment, that the contemporaneous time period must be re-established if revisions to a permit are necessary to address changes to a project during the ongoing construction of the project. When changes to a project arise and revisions to a permit are necessary and where those changes are appropriately considered a continuation of the original project, the contemporaneous period does not need to be “re-set.”

In this case, as discussed, the planned changes are still part of the CORE Project and are not a separate project. Construction commenced and has continued on the CORE Project, as authorized by the original permits. Notably, construction continues on the Ultra-Low Sulfur Diesel No. 2 Unit. Additionally, the changes now covered by the revised permits involve substituting equipment for certain equipment addressed by the original permits. Therefore, the beginning of the contemporaneous period for the original CORE Project, as established in the initial permitting for the CORE Project continues to apply for these changes to the CORE Project.^{17, 18}

As such, the approach that has been taken to the revisions of the permits for the CORE Project does not violate the PSD rules or USEPA guidance regarding netting. In fact, taking a different approach and permitting the revisions to the CORE Project as a separate project would have avoided BACT, as already explained in the response to Comment 1.

Comment 3. As previously discussed in an earlier comment, USEPA guidance in the Cyprus Memorandum is applicable to the project here. This guidance illustrates why the change here is not contemporaneous and why the proposed refinery expansion constitutes a physical change, separate from the 2008 change upon which the existing construction permit is based.

Like Phillips, Cyprus sought to reach back beyond five years to claim an emissions reduction, and the USEPA rejected that request. Cyprus Memorandum. In 1992, Cyprus proposed to modify its existing source by installing two new hearth furnaces. To prevent this physical change from resulting in increased emissions, which would subject the source to the PSD process as a “major modification,” Cyprus sought to claim emissions reduction credit for the shutdown of several existing West Plant furnaces that would be replaced as part of the proposed change. The furnaces that Cyprus intended to shut down had not operated since 1982. Cyprus sought to

¹⁷ In the issued permits, a typographical error in the description of the contemporaneous periods in the drafts of the revised permits was corrected. This error occurred when the various tables in the original CORE Permit describing the net changes in emissions were consolidated into a single table in the drafts of the revised permits. Footnote b to the new tables inadvertently repeated the description of the contemporaneous periods for a project at another source. In the revised permits, as issued, the starting dates for the contemporaneous periods identified in this footnote are the starting dates from the original CORE Permits. Ending dates are no longer provided because the contemporaneous period will end when construction is completed and all increases from the project occur.

¹⁸ Refer to Attachments 2a through 8 in the original CORE Permits.

use the 1981 and 1982 actual emissions of those furnaces to establish the netting credit for the proposed work. The USEPA indicated that the answer was a resounding “no”:

Cyprus’ proposed interpretation of EPA’s regulations conflicts with the plain meaning of the contemporaneity requirement. Moreover, allowing credit for very old emissions reductions undermines the purpose of the contemporaneity requirement by enabling new construction activity to burden the environment with levels of air pollution higher than they have been for many years. The EPA has already given sources a generous 5-year window to aggregate any decreases to net out of review. Since the reduction in actual emissions at the West Plant occurred before the 5-year period, it cannot be used to net out of review.

Cyprus Memorandum, page 5.

The USEPA rejected Cyprus’ interpretation as inconsistent with both the meaning of contemporaneity and the intention of the statute. The USEPA also noted, “...a period of contemporaneity must have some definite boundaries.” *Id.* (citing *Alabama Power Co. v. Costle*, 636 F.2d 322 (D.C. Cir. 1979)).

Likewise, Phillips cannot be allowed to stretch the meaning of contemporaneous beyond the clear language of the statute limiting the period to five years in order to claim PSD emissions reductions from activities that took place as many as twelve years ago. The actual emissions reductions Phillips is claiming occurred before the 5-year period and, therefore, may not be used by Phillips to net out of review. The proposed refinery expansion falls outside of the contemporaneous period. Allowing Phillips to net emissions that fall outside the five-year window would undermine USEPA’s net emissions guidelines.

Response: The comment’s reliance on the Cyprus Memorandum is misplaced. The case at hand differs from the one addressed by USEPA in the Cyprus Memorandum. Most significantly, the project proposed by Cyprus involved a facility that had been shut down. Phillips is not reactivating a shutdown facility with these changes, and, as such, it is not appropriate to draw the same conclusion here as in the Cyprus Memorandum.

As background, to avoid the planned physical changes resulting in significant increases in emissions, Cyprus sought to take credit for emission decreases from furnaces at its West Plant, which had been shut down and not operated for approximately ten years, well outside the contemporaneous period set by the PSD rules. The previous owner of the facility had ceased operation of the West Plant in 1982 because of poor market conditions but continued to operate the East Plant at the source and maintained equipment at the West Plant until 1986, when the previous owner went bankrupt. Cyprus purchased the source in 1989 and resumed operations at the East Plant in 1990. Cyprus proposed to resume manufacturing at the West Plant by installing two new rotary hearth furnaces and netting the emission increases from the new furnaces against emission decreases from the

of the three existing furnaces that had been shut down, which were to be physically removed as part of the renovation of the West Plant.¹⁹

USEPA found that these decreases were neither contemporaneous nor otherwise creditable.²⁰ USEPA explained that Cyprus was essentially arguing that the creditable decreases do not occur when the emission decreases actually occur, but instead, when the source elects to take credit for the decrease. USEPA set the contemporaneous period as a five year period “plus time for construction” but declined to expand the contemporaneous period to any decreases that occurred before the five-year period before construction commenced.²¹ However, the decreases involved in the proposed Cyprus project occurred before the contemporaneous period began, so they could not be used for a netting analysis. USEPA concluded that the approach proposed by Cyprus was contrary to the limited contemporaneous period set by the PSD rules. The approach taken by Cyprus would have allowed sources to take credit for any prior emission decreases as long as the source retained the right to return to previous emission levels.²²

In this instance, Phillips is making changes to the CORE Project. As part of these changes, Phillips is not attempting to reactivate a facility that has been shut down. Further, differing from Cyprus, the existing contemporaneous period is not being extended back earlier than the beginning of the contemporaneous period established for the original CORE Project, as reflected in the original permits. Accordingly, the circumstances addressed by the Cyprus Memorandum are not analogous to circumstances presented with the changes to the CORE Project. In fact, if the interpretation of Cyprus taken in this comment were applied for the revised permits, it would result in less stringent permits. This is because it would allow Boiler 19, an additional emission unit that would now be part of the CORE Project, to avoid BACT for CO even though the emission units that were part of the original CORE Project were subject to this requirement.

¹⁹ The description of the proposed Cyprus project, as provided here, reflects the factual background for that project provided by USEPA in the Cyprus Memorandum.

²⁰ *Id.*, at 5.

²¹ *Id.*, at 6.

²² *Id.*, at 7.

FOR ADDITIONAL INFORMATION

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

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**SIGNIFICANT CHANGES BETWEEN THE DRAFT
AND ISSUED REVISED PERMITS**

Permit No.: 06050052 (Refinery)

1. New Condition 3.2.4(c): The sulfur content of liquid fossil fuels is now limited to no greater than 0.05 percent by weight for all combustion devices at the refinery. The condition was added to the permit pursuant to the Consent Decree as it specifies that certain of its requirements be included in a federally enforceable permit. Paragraph 117(a) of the Consent Decree provides that fuel oil shall not be burned in any existing combustion device. For this purpose, the Consent Decree defines fuel oil as “any liquid fossil fuel with a sulfur content of greater than 0.05 percent by weight.”
2. New Condition 4.1.6(d): The NO_x emissions from Heater Alky HM-2, an existing heater at the refinery are now limited to 0.04 pounds/mmBtu, pursuant to the Consent Decree. Paragraph 95 of the Consent Decree provides that NO_x emission controls shall be installed on certain existing combustion units at the refinery as selected by Phillips. This heater is one of those units and is addressed by the permit for the CORE Project as it will experience an increase utilization and emissions due to this project,
3. New Condition 4.1.9(a)(v): Recordkeeping for NO_x emissions of Heater Alky HM-2 is now required to verify compliance with the limit in new Condition 4.1.6(d).
4. Revised Condition 4.13.5(a)(iii): The lowest achievable emission rate (LAER) limit for VOM emissions from the new boiler (Boiler 19) has been lowered to 0.003 pounds/mmBtu, high-heating value (HHV), 30-day average. In the draft permit, the proposed limit was 0.004 pounds/mmBtu, HHV, 30-day average. This change reflects the result of further review triggered by a discussion with staff of USEPA, Region 5. In this discussion, USEPA staff alerted Illinois EPA to a permit for Flopam, Inc., that included a small natural gas-fired boiler.²³ That permit limited VOM emissions of the new boiler to 0.003 pounds/mmBtu. Further review did not reveal any reasons why this lower limit could not be met by Boiler 19, notwithstanding the fact that Boiler 19 would be much larger (405 mmBtu/hour compared to 25 mmBtu/hour) and would burn refinery fuel gas, as well as natural gas.
5. Revised Conditions 4.13.2 and 4.13.6(a): The rated heat input capacity of Boiler 19 has been lowered from 420 mmBtu/hour to 405 mmBtu/hour. This reflects new information from Phillips.

²³ Flopam, Inc., Plaquemine, Louisiana, Permit PSD-LA-747/1280-00141-V0, issued by Louisiana Department of Environmental Quality on June 14, 2010.

6. Revised Condition 4.13.6(d): The hourly and annual emission limits of Boiler 19 have been lowered to reflect the reduction in the rated heat input capacity of this boiler and the lower LAER limit for VOM.²⁴
7. Revised Attachments 1a and 1b: These attachments have also been updated to reflect lower emissions from Boiler 19 due to the lower rated heat input capacity of this boiler and the revised LAER limit for VOM, as discussed above.
8. Revised Attachment 2: This attachment has been revised to reflect lower emission totals for the CORE Project. The changes are the result of lower emissions for Boiler 19, as discussed above. They also reflect greater permitted emissions from the Tier 3 Low Sulfur Gasoline Project, which is also addressed in Attachment 2. The permitted emissions of that project, which is a separate project from the CORE Project, are greater than were reflected in the draft of the revised permit for the CORE Project.²⁵

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9. Revised Attachments 1a and 1b: These attachments have also been revised to reflect lower emissions from Boiler 19 due to the lower rated heat input capacity of this boiler and the revised LAER limit for VOM, as already discussed above.
10. Revised Attachment 2: This attachment has been revised to reflect lower CORE Project emission totals. The changes are also due to lower emissions for Boiler 19 and greater permitted emissions for the Tier 3 Low Sulfur Gasoline Project, as already discussed above,

²⁴ The annual limit for SO₂ emission is unchanged because this limit considers the firing of both refinery fuel gas and natural gas.

²⁵ The construction permit for the Tier 3 Low Sulfur Gasoline Project, Permit 14050001, was finalized and issued during the comment period for the revised CORE Project Permit.