

**NPS Comments on ADEQ BART Exemptions
December 1, 2010**

Arizona Public Service (APS) West Phoenix

ADEQ states: On October 7, 2007, APS West Phoenix submitted a second letter to ADEQ. In that letter, APS West Phoenix explained that it agreed with ADEQ's assessment that the Combined Cycle Units CC1, CC2 and CC3 were BART-eligible. APS West Phoenix stated, however, that after correcting the air dispersion modeling analysis using the assumptions identified above, the 98th percentile visibility impacts that ADEQ had predicted in the Superstition Wilderness and the Mazatzal Wilderness areas dropped from 0.69 dv and 0.64 dv, to 0.24 dv and 0.31dv respectively.

Based on the revised air dispersion modeling analysis that was submitted on October 7, 2007, APS West Phoenix stated that it did not cause or contribute to regional haze in a Class I area, and therefore was not subject-to-BART. Based upon its review of the information that has been submitted, and a review of the conditions in Maricopa County Air Quality Permit V95-006, ADEQ concurs that this facility is not subject-to-BART.

NPS: Please provide the revised air dispersion modeling analysis that was submitted on October 7, 2007 and was the basis for exemption.

Arizona Portland Cement Company

ADEQ states: In 2003, during its review of a proposed Title V permit that would have provided APCC with the flexibility to choose between three operating scenarios, including the construction of Kiln 5, EPA identified an error in APCC's fugitive dust emissions calculations. According to EPA's calculations, the modifications that were completed in 1998 should have gone through New Source Review. As a result, EPA issued a Notice of Violation to APCC, alleging that the company avoided New Source Review when completing modifications to Kiln 4 in 1998. EPA also objected to the issuance of the proposed Title V permit, but later lifted its objection after ADEQ removed the alternative operating scenarios that would have allowed for further modification of the facility. A consent decree is being finalized between APCC and EPA to resolve the issue.

In 2008, ADEQ issued a new permit to APCC which would have allowed the facility to stop operations at all four existing kilns and construct and operate a new Kiln 6. The 18 month construction window ended in June 2010 and APCC has since reapplied for a permit for the Kiln 6 expansion.

Based upon the consideration of the history of this facility, and the maximum 98th percentile three-year average impact from all pollutants is less than 0.5. dv, ADEQ concurs that APCC is not subject-to-BART.

NPS: We disagree with the exemption based on "the maximum 98th percentile three-year average impact from all pollutants is less than 0.5 dv". The BART exemption criteria should be that any 98th percentile impact from all pollutants in any of the three modeled years is less than 0.5 dv. Further, as discussed in our technical comments, because the WRAP modeling did not use the upper air observations, the FLM recommended that the WRAP states use the maximum impact value with the annual average natural background conditions rather than the 8th highest impact value. In this case, the maximum impact exceeded 0.5 dv at Saguaro NM, Galiuro WA, Superstition WA, and Mazatzal WA.

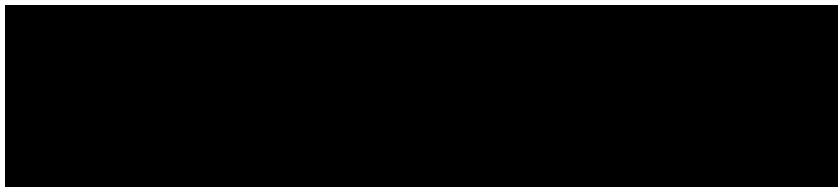
With regard to the "history of this facility," until the retirement of kiln #4 is made federally enforceable, it will remain BART-eligible, and, as explained above, subject to BART.

Chemical Lime Company – Nelson Lime Plant

ADEQ states: On September 21, 2007, CLC submitted a letter to ADEQ along with a new modeling analysis indicating that "...the 3-year average of the 8th highest visibility change is less than 0.5 dv in all Class I areas." Based upon its review of the new modeling analysis, Chemical Lime concluded that the Nelson facility did not cause or contribute to visibility impairment in any Class I area, and that the emissions units were, therefore, not subject-to-BART.

Based upon its refined visibility change analysis, CLC determined that the visibility change attributable to the Nelson facility is below 0.5 dv, and it concluded that the facility does not significantly contribute to visibility impairment within the Grand Canyon National Park. As a result, CLC determined that the results of the analysis indicated that the 3-year average of the 8th highest visibility change was less than 0.5 dv in all Class I areas within 300 km of the facility, and concluded that its Nelson facility was not-subject-to-BART.

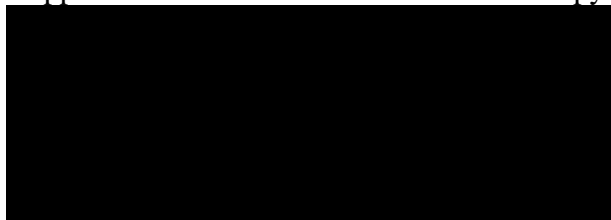
The company also recognized, however, that the predicted impacts within the Grand Canyon were marginally below 0.5 dv. As a result, the company stated that "[a]lthough the maximum visibility change obtained in the screening modeling analysis is not equal to or greater than the 0.5 dv contribution threshold, a refined analysis was performed in which light extinction in the Grand Canyon National Park was calculated using the CALPOST-IMPROVE implementation of the revised light extinction algorithm..." Based upon the refined analysis, the 98th percentile (8th highest) Visibility Change in the Grand Canyon was calculated to be as follows:



Based upon the consideration of the analysis performed for this facility, CLC's conservative approach for estimating emissions impacts during the meteorological period, and the maximum 98th percentile three-year average impact from all pollutants is less than 0.5. dv, ADEQ concurs that the Chemical Lime Company's Nelson Lime Plant is not subject-to-BART.

NPS: Please provide the September 21, 2007, CLC letter to ADEQ and the new modeling analysis by CLC.

It appears that CLC did not include the 154 tpy of PM emissions modeled by WRAP:



Why were the PM emissions not included? All emissions are to be included in the BART exemption modeling.

ADEQ incorrectly exempted the CLC Nelson Plant. The correct criteria for BART exemption is to determine whether any 98th percentile impact from all pollutants in any year is greater than 0.5 dv. The 98th percentile impact at Grand Canyon NP in 2003 exceeded 0.5 dv. Further, the FLM recommended that because the WRAP modeling did not use upper air observations, the maximum impact, rather than the 98th percentile impact, should be used with the annual average natural background visibility conditions.

We conclude that the Chemical Lime Company – Nelson Lime Plant is subject to BART.

TEP – Irvington Generating Station

ADEQ states: Regarding Unit I4, TEP stated that during the 1980s, Unit I4 was converted to burn coal in accordance with a prohibition order that was issued pursuant to Section 301(c) of the Power Plant and Industrial Fuel Use Act of 1978. The Final Prohibition Order became effective on September 21, 1981, as noted in Federal Register Vol. 46, p. 37960. In its January 2, 2007, letter, TEP stated that compliance with the Final Prohibition Order required TEP to reconstruct Unit I4. According to 40 CFR 51.301, *Reconstruction* is defined as follows:

Reconstruction will be presumed to have taken place where the fixed capital cost of the new component exceeds 50 percent of the fixed capital cost of a comparable entirely new source. Any final decision as to whether reconstruction has occurred must be made in accordance with the provisions of § 60.15(f)(1) through (3) of this title.

TEP stated that because Unit I4 was reconstructed after August 7, 1977, the Unit was not “in existence” before August 7, 1977, and, therefore, must be considered “not BART-eligible”.

ADEQ concurs that the cost of modifying TEP Irvington’s Unit I4 is greater than 50 percent of the fixed capital cost of a comparable, entirely new source, and that Unit I4 was reconstructed in the 1980s.

In Federal Register, Vol. 70, No. 128, Wednesday, July 6, 2005, pages 39110-39112, EPA discusses Step 2 in determining whether a facility is BART-eligible. According to the background statement in the guidance:

“Step 2 also addresses the treatment of ‘reconstruction’ and ‘modifications.’ Under the definition of BART-eligible facility, sources which were in operation before 1962 but reconstructed during the 1962 to 1977 time period are treated as new sources as of the time of reconstruction.”

The footnote attached to this statement goes on to state:

“However, sources reconstructed after 1977, which reconstruction had gone through NSR/PSD permitting, are not BART-eligible.”

ADEQ has reviewed 40 CFR Part 51 Appendix Y, Section II.A.2 and has determined that EPA has addressed this issue:

“What is a ‘reconstructed source?’

1. Under a number of CAA programs, an existing source which is completely or substantially rebuilt is treated as a new source. **Such ‘reconstructed’ sources are treated as new sources as of the time of the reconstruction.** Consistent with this overall approach to reconstruction, the definition of BART-eligible facility (reflected in detail in the definition of ‘existing stationary facility’) includes consideration of sources that were in operation before August 7, 1962, but were reconstructed during the August 7, 1962 to August 7, 1977 time period.

2. ...

3. ...

4. The ‘in-operation’ and ‘in existence’ tests apply to reconstructed sources. If an emissions unit was reconstructed and began actual operation before August 7, 1962, it is not BART-eligible. Similarly, any emissions unit for which a reconstruction ‘commenced’ after August 7, 1977, is not BART-eligible.” (emphasis added)

ADEQ has determined that EPA’s guidance does not specifically address situations where a facility was reconstructed after August 7, 1977, but was exempted from PSD review at the time that reconstruction occurred. ADEQ concludes, however, that the plain reading of EPA’s guidance is most appropriate, and has determined that it is appropriate to treat reconstructed sources as new sources as of the time of the reconstruction. As a result, ADEQ concurs that the reconstructed Unit I4 at TEP’s Irvington Generating Station was not “in existence” prior to August 7, 1977. Therefore, ADEQ has determined that there are no BART-eligible emissions units at TEP’s Irvington Generating Station.

NPS: The clear intent of EPA's BART Guidelines is to exempt a source that has gone through New Source Review (NSR) from a "second hit" by going through BART. Because TEP Unit I4 did not go through NSR, that exemption does not apply.

ASARCO Hayden Smelter

For SO₂, we participated in the WRAP group that reported that “[a] double contact acid plant is considered the appropriate retrofit control equipment” and agree with ADEQ’s conclusion that the installation and operation of the double contact acid plant with the New Source Performance Standard of 650 ppm constitutes BART for SO₂.

For PM₁₀, ADEQ concluded that the PM₁₀ emissions from the BART-eligible units are less than 250 tons per year. On this basis ADEQ determined that the smelter units are not BART-eligible for PM₁₀. However the BART Guidelines do not allow exception of a PM₁₀ source if its emissions exceed 15 tpy:

(ii) A determination of BART for each BART-eligible source in the State that emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area. All such sources are subject to BART.

(C) *Exception.* A State is not required to make a determination of BART for SO₂ or for NO_x if a BART-eligible source has the potential to emit less than 40 tons per year of such pollutant(s), or for PM₁₀ if a BART-eligible source emits less than 15 tons per year of such pollutant.

Please explain how "ADEQ determined that the emissions units at the ASARCO smelter are not BART-eligible for PM₁₀ emissions."

Freeport-McMoRan Miami Smelter

We concur with ADEQ’s conclusion that the NESHAP for Primary Copper Smelting constitutes BART for PM emissions.

We participated in the WRAP group that reported that “[a] double contact acid plant is considered the appropriate retrofit control equipment” and agree with ADEQ’s conclusion that the installation and operation of the double contact acid plant with the New Source Performance Standard of 650 ppm constitutes BART for SO₂.