

**RESPONSE TO PUBLIC COMMENTS**

**for  
Source-Specific Federal Implementation Plan for  
Four Corners Power Plant; Navajo Nation**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
SAN FRANCISCO, CA**

**April 30, 2007**

**ABBREVIATIONS AND ACRONYMS**Pollutants

CO <sub>2</sub>	Carbon dioxide
NO <sub>x</sub>	Nitrogen oxides
O <sub>3</sub>	Ozone
PM	Particulate matter
SO <sub>2</sub>	Sulfur dioxide

Units

MW	megawatt
TPY	tons per year

Acronyms

APS	Arizona Public Service
ASTM	American Society for Testing and Materials
BART	Best Available Retrofit Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAMR	Clean Air Mercury Rule
CEM	Continuous Emissions Monitor
EDF	Environmental Defense Fund
EGU	Electric Generating Unit
EIA	Environmental Impact Assessment
EPA	United States Environmental Protection Agency
FCPP	Four Corners Power Plant
FIP	Federal Implementation Plan
GHG	Greenhouse Gas
NAAQS	National Ambient Air Quality Standards
NGS	Navajo Generating Station
NPS	National Park Service
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
TAR	Tribal Authority Rule
TIP	Tribal Implementation Plan
WELC	Western Environmental Law Center

In an accompanying Federal Register notice, the Environmental Protection Agency (EPA) is finalizing a source-specific Federal Implementation Plan (FIP) to regulate emissions of several air pollutants from the Four Corners Power Plant (FCPP), a privately owned and operated coal-fired power plant located on the Navajo Indian Reservation near Farmington, New Mexico. Based on lease agreements signed in 1960, FCPP was constructed and has been operating on real property held in trust by the federal government for the Navajo Nation. The facility consists of five coal-fired electric utility steam generating units with a total capacity in excess of 2000 megawatts (MW). FCPP burns coal mined from the adjacent Navajo Coal Mine.

In 1999, EPA initially proposed to promulgate a FIP to regulate emissions from FCPP. At that time, FCPP had historically followed certain emissions limits which had been approved by EPA into the New Mexico SIP. See 40 CFR 52.1640. However, because the New Mexico SIP is not approved to apply on the Navajo Indian Reservation, and because the Navajo Nation did not have a federally applicable tribal implementation plan (TIP), EPA proposed to promulgate a FIP to remedy the existing regulatory gap. 64 FR 48,731 (September 8, 1999). The proposed FIP would have, in essence, federalized the requirements applicable to FCPP contained in the New Mexico SIP. In explaining the basis for its proposed action, EPA stated that given the magnitude of emissions from the plant, the Agency believed the proposed FIP provisions were necessary and appropriate to ensure

the protection of air quality on the Reservation. 64 FR at 48,733.

Before EPA took final action on the 1999 proposed FIP, a stakeholders group of environmental organizations (Environmental Defense, Western Resource Advocates, and New Mexico Citizens for Clean Air and Water), the National Park Service (NPS), and Arizona Public Service (APS, the operating agent for FCPP) convened to discuss the facility. The stakeholders group negotiated substantial additional sulfur dioxide ( $\text{SO}_2$ ) emissions reductions which FCPP believed it could achieve by enhancing its  $\text{SO}_2$  scrubber efficiency. After testing the program, the Navajo Nation and the stakeholders group requested that EPA include these negotiated, additional  $\text{SO}_2$  emissions reductions in the FIP. FCPP agreed to increase the amount of  $\text{SO}_2$  emissions it was eliminating from its exhaust stream from 72 percent to 88 percent, thereby reducing its annual emissions of  $\text{SO}_2$  to the atmosphere by about 25,000 tons per year.

EPA did not finalize the proposed 1999 FIP after the stakeholders group began negotiations. Instead, after the stakeholders group had finished its work, EPA proposed a new FIP on September 12, 2006. 71 FR 53631 (September 12, 2006) (2006 proposed FIP).

In the 2006 proposed FIP, EPA again explained that the Agency was proposing to remedy an existing regulatory gap with a source-specific FIP for FCPP. EPA proposed to establish federally enforceable emission limits for NOx and PM, based on

the New Mexico SIP limits, and to add opacity limits and control measures for dust. In addition, the 2006 proposed FIP included a requirement for FCPP to comply with the stakeholder's negotiated SO<sub>2</sub> limit, which significantly lowered the SO<sub>2</sub> emissions from FCPP. Therefore, the primary difference between EPA's 1999 proposed FIP and our 2006 proposed FIP is our inclusion of requirements for FCPP to comply with the stakeholders negotiated, additional SO<sub>2</sub> emissions reductions.

## **II. Responses to Significant Comments:**

EPA received 43 comment letters on the proposal. The Navajo Nation EPA in a letter before our proposal strongly supported promulgating the FIP. See Letter from Stephen Etsitty to Deborah Jordan, December 6, 2005. In comments after our 2006 proposal, one individual and one environmental organization provided comments generally in support of the proposed FIP. Other commenters focused on general concerns about air quality and health in the Four Corners area, more specific comments about the emission limits and control requirements in the proposed FIP, EPA's jurisdiction over FCPP and our exercise of FIP authority, and questions as to whether FCPP's SO<sub>2</sub> emissions reductions were close to or equivalent to those achievable through best available retrofit technology (BART) .

EPA held a public informational workshop and public hearing on the proposed FIP in Farmington, New Mexico, on October 5, 2006. EPA received approximately 36 written and email comments and 7 oral comments. Many of those commenting at the public

hearing also submitted their comments in writing.

A. Concerns About Air Quality, Public Health and Other Environmental Media

**Comment:** The majority of commenters stated that EPA should require FCPP to install the most stringent or best available air pollution controls because the air quality in the Four Corners region is generally poor, visibility is deteriorating, and there are high rates of cancer, asthma and other respiratory and public health problems. (See, e.g., Hottell, Kerr, Rhodes, Cone, Wolff, McCord/Anderson, Hoffman, Hamilton, Barnes, C. Caine, R. Caine, Sykes, Ryan, Loev, Babcock, Edwards, Velose, LeMoine, WELC, Rees, Patton, Halterman, McNall, Nicholas, Wenzel, Eisenfeld).

**Response:** EPA disagrees that we are required to impose more stringent emission limits for FCPP than those contained in the FCPP FIP. EPA is exercising its discretion to close the regulatory gap that exists with respect to FCPP. There is no approved implementation plan covering FCPP or the Navajo Nation, and in this action, EPA is not promulgating a reservation-wide FIP. EPA's exercise of authority in issuing this FIP is based on the Agency's conclusion that it is necessary or appropriate to protect air quality on the Reservation by remedying the lack of federally enforceable limits applicable to this facility. As such, our action is making enforceable those emissions limits FCPP has historically followed, or in the case of SO<sub>2</sub>, an emission limit with which FCPP has agreed to comply based on a successful test program to determine if the existing scrubbers at

FCPP could be improved.

As described in more detail below, the Four Corners area is designated attainment for each of the NAAQS, including the secondary standard for PM<sub>2.5</sub> which was determined by the Administrator to be "requisite to protect the public welfare from adverse visibility effects under section 109 of the CAA. In addition, visibility in the mandatory Class I areas in the region is being separately addressed through EPA's nationally applicable Regional Haze Rule at 40 CFR 51.308-309. These two issues are discussed separately below.

#### 1. Concerns About Visibility.

Under EPA's regulations, States are required to submit implementation plans addressing regional haze in December 2007. Although the purpose of EPA's visibility program is to protect visibility in national parks and wilderness areas, the measures adopted to improve visibility in these areas will likely result in improved visibility throughout the United States. All units at the FCPP along with the units at Navajo Generating Station are considered eligible for Best Available Retrofit Requirements under the regional haze rules. Considering the quantity of emissions of visibility impairing pollutants from these two facilities, EPA believes some or all of the units at FCPP may be subject to evaluation for application of Best Available Retrofit Technology. EPA, at this time, believes BART eligibility will

apply only to NOx and PM emissions from these units. The operators of FCPP will be required to submit an analysis of the potential control alternatives for NOx and PM, and their potential effectiveness for reducing visibility impacts, in the area. EPA expects to begin working with FCPP in late 2007, resulting in a subsequent rulemaking to establish the appropriate NOx and PM BART limits for the units.

2. General Air Quality and Public Health Concerns.

EPA appreciates that the Four Corners region has been a center of energy development during the past several years. However, we also recognize that the Four Corners region is currently designated as being an attainment area for all criteria air pollutants which EPA currently regulates under the CAA. Please see [http://www.epa.gov/region09/air/maps/maps\\_top.html](http://www.epa.gov/region09/air/maps/maps_top.html) for Region 9 air quality designations.

Section 108 of the CAA directs the Administrator to identify and list "air pollutants" that "in his judgment, may reasonably be anticipated to endanger public health and welfare" and whose "presence . . . in the ambient air results from numerous or diverse mobile or stationary sources" and, if listed, to issue air quality criteria for them. These air quality criteria are intended to "accurately reflect the latest scientific knowledge useful in indicating the kind and extent of identifiable effects on public health or welfare which may be expected from the presence of [a] pollutant in ambient air. . ." Section 109, in

turn, directs the Administrator to issue "primary" and "secondary" NAAQS for pollutants identified under section 109. The CAA defines a primary standard as one "the attainment and maintenance of which is the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." A secondary standard must "specify a level of air quality the attainment and maintenance of which, in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of [the] pollutant in the ambient air.

EPA's NAAQS regulations further provide: "The promulgation of national primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of any State or Indian country" (See 40 CFR 50.2(c)).

In setting a primary NAAQS, EPA takes into account the effects of an air pollutant on individuals who are particularly sensitive to the effects of pollution, such as children or those with respiratory problems. See *Lead Industries v. EPA*, 647 F.2d 1130, 1153 (D.C. Cir. 1980). EPA's evaluation for setting the secondary standards, used to protect public welfare, includes the pollutant's "effects on soils, water, vegetation, man-made materials, animals, wildlife, weather, visibility, climate, damage and deterioration to property,

hazards to transportation, as well as effects on economic values and personal comfort and well-being." 42 U.S.C. 7602(h).

There are six air pollution monitors within a radius of 100km from the site of FCPP. Three of these monitors are operated by Colorado Department of Public Health and Environment. The other three are operated by New Mexico Environment Department. All six monitors meet the EPA State and Local Air Monitoring Stations network design and siting requirements. See 40 CFR 58, Appendices D & E. All six monitors measure ozone, five monitor NO<sub>2</sub> and the two monitors located closest to FCPP also monitor SO<sub>2</sub>. The information provided by these monitors demonstrates that the air quality in the Four Corners area is better than the levels established by the primary and secondary NAAQS for all criteria pollutants, including SO<sub>2</sub>, ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The following websites contain information on the monitored air quality for the area.

<http://www.nmenv.state.nm.us/aqb/4C/>

<https://web.ead.anl.gov/fourcorners/index.cfm>

<http://apcd.state.co.us/>

<http://www.nmenv.state.nm.us/aqb/monitor/index.html>

**Comment:** A few commenters stated that there are already high ozone levels in the Four Corners region and indicated that the area may soon be non-attainment for the ozone standard.

**Response:** Because of concerns over ozone levels in the Four Corners area, during 2002-2004 the State of New Mexico undertook the development of a Clean Air Action Plan to ensure that the

ozone NAAQS would be met. This plan included air quality modeling of four ozone episodes, to assess the impact of emissions from sources over a large area, including the Four Corners Power Plant. The area is projected to remain well below the 8-hour ozone standard through at least 2012, even with the hypothetical addition of two new power plants and with substantial oil and gas development in the area. (See section 4.2 of "Air Quality Modeling Analysis for the San Juan Early Action Ozone Compact: Maintenance for Growth and Control Strategy Modeling", Alpine Geophysics, LLC and ENVIRON International Corporation, Inc., 26 February 2004, available as attachment 4 to the Clean Air Action Plan, on New Mexico's "Four Corners Ozone Task Force" web site

<http://www.nmenv.state.nm.us/aqb/ozonetc/index.html> .) EPA approved this New Mexico plan into the State Implementation Plan (70 FR 48285 August 17, 2005), since it provides for attainment and maintenance of the ozone NAAQS through the year 2012.

Since this planning incorporated the impacts of the Four Corners Power Plant and showed continued attainment of the ozone NAAQS, EPA believes that the Four Corners Power Plant does not jeopardize the ozone NAAQS. Should ozone monitors in the area record a violation of the ozone NAAQS in the future, that would trigger a new nonattainment designation and planning process to address it, including any emission reductions that might be needed at that time.

**Comment:** Numerous commenters requested EPA to take action

reducing greenhouse gases emissions from this power plant.

**Response:** As many commenters may be aware, on April 2, 2007, the U.S. Supreme Court held that greenhouse gases are air pollutants under the Clean Air Act. Massachusetts v. EPA, 127 S.Ct. 1438 (2007). Importantly, the Court did not hold that EPA was required to regulate greenhouse gas emissions under Section 202, or any other section, of the Clean Air Act. Rather, the Court merely concluded that greenhouse gas emissions were "air pollutants" under the Clean Air Act, and, therefore, they could be regulated under Section 202 by the EPA subject to certain determinations.

EPA is exploring and studying the issues raised by the Supreme Court's decision, including potential ramifications on numerous provisions of the Clean Air Act. The Agency fully recognizes the decision as one of the most important environmental law decisions in years--accordingly, we are trying to assure that the Agency is in the best possible position to address its ramifications. However, given the complexity of the decision and the very short time that has elapsed since the Court issued the opinion, at this early date it is impossible today to understand and explain fully how the decision may have any specific impact. Because this FIP is narrow in scope, and primarily meant to make enforceable those emissions levels that FCPP has historically followed, it is not the appropriate venue for first addressing the complex issues raised by the Supreme

Court's decision, especially given the short amount of time that has passed since the Court's decision.

**Comment:** One commenter requested that EPA eliminate FCPP in order to clean up the air.

**Response:** EPA does not agree that it would be appropriate for EPA to require FCPP to shutdown in order to improve air quality in the Four Corners area. Although EPA may bring suit in district court to immediately restrain any person "causing or contributing" to pollution that "is presenting an imminent and substantial endangerment to public health or welfare, or the environment" under 303 of the CAA, there is no evidence that such pollution is occurring in the Four Corners area.

**Comment:** A few commenters criticized the location of the monitors that EPA relies on for determining air quality in the Four Corners region.

**Response:** EPA disagrees with the comment and believes that the existing air monitors in the area are sufficient for determining air quality in the Four Corners area. As discussed in more detail above, there are six air quality monitoring sites within 100 km for FCPP. Three of those monitors are located in New Mexico and operated by the New Mexico Department of Public Health and Environment, while the other three are operated by Colorado Department of Public Health and Environment. All six of the monitors meet EPA's network design and siting requirements for State and Local Air Monitoring Stations, set forth at 40 CFR Part 58, Appendices D and E. All six monitor ozone levels. Five also

monitor NO<sub>2</sub>, and the two monitors located nearest to FCPP also monitor SO<sub>2</sub>. Based on this information, EPA is satisfied that the location of the monitors is appropriate to determine the air quality in the area near FCPP and that the monitors are accurately recording the area's air quality.

**Comment:** A few commenters stated that FCPP should measure emissions from the stack of the power plant rather than by measuring components in the coal. (see, e.g., Wood, C. Caine)

**Response:** FCPP has continuous emission monitors that measure SO<sub>2</sub> and NOx concentrations, and emission rates, on all five units at the facility. The measurement of sulfur in the coal is used to determine the percent sulfur removed. This is further explained in the following response to comment.

**Comment:** One comment stated that FCPP's emissions are worse at night than they are during the day. (See, e.g. Kerr)

**Response:** The emission limits set for FCPP are effective at all times except limited start-up and shutdown periods. Often the emissions from power plants can appear to be worse in the early morning, thus leading to the conclusion that facilities turn off their control devices at night. This is often caused by temperature inversions that occur at night and trap the exhaust from plants at certain elevations in the atmosphere. These inversions tend to prevent the dispersion of the exhaust during the nighttime hours. Once the sun comes out and raises the ground level temperature these inversions usually breakdown.

The three smaller units at FCPP use venturi scrubbers to

control particulate matter and SO<sub>2</sub> at all times. These units are equipped with SO<sub>2</sub> monitors in each stack. If there was any diurnal difference in the way FCPP used its scrubbers it would show up in the plants SO<sub>2</sub> monitoring data. This data is recorded on an hourly basis and reported to EPA's Clean Air Markets Division electronically each calendar quarter. Generally this information is available to the public within 60 days of the end of each calendar quarter. Anyone concerned with any changes in emissions at night could evaluate this data at the following website: <http://cfpub.epa.gov/gdm/>. EPA has had no indication that there is any difference in the treatment of pollutants by FCPP between the night and day times at the plant. Units 4 and 5 are equipped with opacity monitors and SO<sub>2</sub> monitors. The SO<sub>2</sub> data is reported to EPA as discussed previously and any problems would be evident in this hourly data. Opacity monitors would indicate whether or not there was improper operation of the baghouses on these units. When this rule is finalized, all excess emissions, including opacity, will be reported to EPA and the Navajo EPA on a semi-annual basis. If there are excess emissions, EPA may take appropriate action to ensure compliance. The reports can be obtained from EPA under a Freedom of Information Act request.

All units at the FCPP use burner technology to control the generation of NOx. All five units at the FCPP are equipped with NOx monitors and this data is also reported electronically to the EPA on a quarterly basis and can be accessed by the public

after the data has been quality assured.

**Comment:** Many commenters objected to construction of the Desert Rock power plant. (See, e.g., LeMoine, Sykes, Wood) One commenter asked that Desert Rock be built to replace FCPP and other existing coal fired power plants. (See, e.g. Nicholas) Another stated that we should not allow any pollution increases - presumably from Desert Rock because the FCPP FIP does not allow any pollution increases. (See, e.g., Johnson)

**Response:** EPA notes that this rulemaking action does not take the place of a reservation-wide implementation plan. The limited scope of this rulemaking is promulgation of the source-specific FIP for FCPP.

EPA is fully aware of the impacts that are projected to occur if Desert Rock Energy Facility is constructed and begins operation. That facility is subject to PSD permitting. EPA's proposed approval of a PSD permit authorizing construction of Desert Rock Energy Facility is based on finding that the facility will install and operate BACT and that its emissions will not cause a violation of any NAAQS or applicable increment. EPA received approximately 1000 comments on the proposed PSD permit for that facility, most of which raised concern with air quality in the Four Corners area. EPA will be responding to those comments in its final PSD permitting action. Our responses to those comments will be posted to our website and should be available to the public at:

<http://www.epa.gov/region09/air/permit/desertrock/>.

3. Concerns about Public Health.

**Comment:** Some comments requested EPA to conduct a health study and stated that rates for cancer, asthma and other public health problems were worse in the Four Corners region than elsewhere. (See, e.g., Rees, Velose, Edwards, R. Caine, Cone).

**Response:** As discussed more fully above, EPA regularly evaluates public health in the context of promulgating nationally applicable standards such as the NAAQS. Moreover, as noted in response to the comment above, EPA determined that mercury emissions from power plants remaining after implementation of CAIR, and more so after CAMR, are not reasonably anticipated to result in hazards to public health. Importantly, Native American subsistence fishers were one of the groups specifically considered as part of this analysis. Additional information on this study can be found on EPA's website at [http://www.epa.gov/mercury/control\\_emissions/decision.htm](http://www.epa.gov/mercury/control_emissions/decision.htm).

4. Comments on Other Environmental Media.

**Comment:** Several comments requested EPA to conduct a cumulative impacts analysis to evaluate air pollution levels as well as water pollution in the Four Corners region. (See, e.g., Hottell, Cone, LeMoine).

**Response:** EPA does not agree that we need to conduct a cumulative impacts analysis as part of this source-specific FIP. As EPA has discussed in its final rulemaking, we are not promulgating a

reservation-wide implementation plan at this time. Rather, we are filling a regulatory gap that exists with respect to FCPP. We are promulgating this FIP as a first step to ensure that the emissions limits for NOx and PM from the New Mexico SIP, which FCPP has historically followed but which are not approved for the reservation, become federally enforceable in this FIP. This FIP will also make FCPP's significant SO<sub>2</sub> reductions permanent and enforceable. In addition, we have added some opacity limits in the FIP as well as some dust control measures.

We particularly note that this FIP will not allow any increased air pollution from FCPP. For these reasons, we do not believe that a cumulative impact analysis will provide us with additional technical information relevant to this rulemaking and we do not think a cumulative impact analysis would lead us to a different decision.

**Comment:** Several commenters urged EPA to take regulatory action to regulate or to reduce mercury emissions from the air and water. (See, e.g. Kerr, Wolff, Sykes, LeMoine, Rees, Estelle, McNall). Commenters indicated that fish populations were being destroyed by the mercury and that it was no longer safe to eat fish from local water bodies.

**Response:** In March 2005, EPA finalized the Clean Air Mercury Rule (CAMR), the first ever rule to directly regulate mercury emissions from coal-fired power plants. FCPP will be subject to the requirements of CAMR, which will result in nationwide reductions of mercury emissions from coal-fired power plants of

70 percent once CAMR is fully implemented. Also in March 2005, in a separate rulemaking decision under section 112(n) (1) (A) of the Clean Air Act, EPA determined that mercury emissions from power plants remaining after implementation of the Clean Air Interstate Rule (CAIR), and more so after CAMR, are not reasonably anticipated to result in hazards to public health. Nonetheless, because the vast majority of mercury deposited in the United States is from the global pool of mercury, EPA and the Food and Drug Administration have issued a Joint Federal Advisory for Mercury in Fish. (See

<http://www.epa.gov/waterscience/fishadvice/advice.html>).

B. Comments on Emissions Limits.

1. Comments On Emissions Limits For Pollutants Other Than SO<sub>2</sub>.

**Comment:** Several commenters urged EPA to take regulatory action in addition to the proposed FIP to require reductions of NO<sub>x</sub> and PM emissions from FCPP. In particular, several commenters urged EPA to undertake a BART determination for FCPP's NOx emissions.

**Response:** As we have stated in our accompanying FRN, EPA agrees that it may be necessary or appropriate in a future rulemaking to require FCPP to reduce its NOx or PM emissions below those levels which were historically contained in the New Mexico SIP or which are necessary to comply with the Acid Rain program. EPA is not addressing the requirements of EPA's nationally applicable Regional Haze rule, codified at 40 CFR 51.308-309, in this rule.

<sup>1</sup> EPA's Regional Haze rule contains specific implementation plan requirements regarding BART determinations for sources such as the FCPP which was put into operation between 1962 and 1977.

EPA does not currently have sufficient technical and economic information to apply the BART requirements to FCPP to achieve a reduction in its NOx or PM emissions or to otherwise ensure compliance with the Regional Haze Rule. Therefore, EPA will begin gathering information from FCPP to determine what measures, if any, are appropriate for the facility to implement to reduce its NOx and PM emissions to comply with the Regional Haze Rule's requirements for BART.

2. Comments On Emission Limit For SO<sub>2</sub>

**Comment:** A number of commenters requested EPA to promulgate a FIP that would require FCPP to reduce its SO<sub>2</sub> emissions to greater than 88% SO<sub>2</sub> removal from the exhaust gas. Some comments questioned the method which EPA specified FCPP should use to determine how much SO<sub>2</sub> was being removed or that removal efficiency should be determined by SO<sub>2</sub> CEMs located before and after the scrubber. The commenters thought FCPP should not be able to count as "removed" sulfur that is retained in bottom and fly ash.

**Response:** EPA is not requiring FCPP to achieve a higher rate of SO<sub>2</sub> removal (higher than 88 percent) because we have determined

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<sup>1</sup> Such implementation plans are not required from the States until December 17, 2007. Tribes are not subject to any mandatory deadlines to submit regional haze implementation plans. See 40 C.F.R. § 49.4; 64 Fed. Reg. at 35758 ("For example, unlike States, tribes are not required by the TAR to adopt and implement CAA plans or programs, thus tribes are not subject to mandatory deadlines for submittal of implementation plans.")

that 88 percent is the highest rate that is achievable with FCPP's existing equipment on a long term basis. A higher rate of SO<sub>2</sub> removal could only be reliably achieved if FCPP made significant capital investments in new equipment. We note that FCPP's data shows that the facility is typically achieving a better removal rate than 88 percent. However, we set the emission limit at 88 percent removal to ensure some margin for consistent compliance. The removal efficiency that FCPP historically met (72 percent) and the increased efficiency required in this FIP (88 percent) are based on comparison of the percent sulfur in the coal that FCPP is combusting and the outlet concentration of sulfur expressed as SO<sub>2</sub>. The commenters are correct that some of the sulfur is retained in bottom and fly ash. However, comparing coal sampling for sulfur content to the SO<sub>2</sub> emitted at the stacks remains the most technically appropriate method of demonstrating compliance. FCPP uses a coal sampling tower that meets American Society of Testing and Materials (ASTM) specifications for obtaining a representative sample of the coal for sulfur analysis prior to combustion.

EPA agrees with one commenter that the regulatory language establishing the 88 percent removal efficiency should be clarified in the final FIP. Instead of stating the limit as "12 percent of that which is produced by the coal burning equipment...", EPA will change the FIP to reflect that the SO<sub>2</sub> limit is based on limiting emissions to 12 percent of the sulfur in the coal.

3. Comments On Whether FCPP's 88 Percent Reduction of SO<sub>2</sub> Emissions Is Close To Or Equivalent To BART.

**Comment:** EPA received several comments regarding our statement in the preamble to the 2006 proposed FIP that "EPA believes that the SO<sub>2</sub> controls proposed today for FCPP are close to or the equivalent of a regional haze BART determination for SO<sub>2</sub>. This takes into consideration the early reductions that this action will achieve and the modifications to the existing SO<sub>2</sub> scrubbers." One commenter called upon EPA to conduct a full SO<sub>2</sub> BART analysis before taking final action. Another commenter disagreed with our statement that 88% control of SO<sub>2</sub> for FCPP is "close to or the equivalent of" BART and called upon EPA to require FCPP to meet what it characterized as the applicable presumptive BART requirement. In contrast, other comments supported EPA's statement or echoed the importance of achieving SO<sub>2</sub> emissions reductions from FCPP now rather than on the schedule anticipated for BART determinations.

**Response:** As explained in our accompanying FRN, EPA is not making a BART determination for FCPP today.

4. Comments On Opacity Emission Limits.

**Comment:** One commenter objected to the lack of a 20 percent opacity standard for Units 1, 2, and 3. Other comments objected to the FIP's exemption of water vapor from the 20 percent opacity standard on Units 4 and 5, and also criticized exempting the Units from compliance with the opacity limit during startup and shutdown when the units dropped below 300 MW. In contrast,

another commenter stated that the opacity requirements on these units are overly restrictive, especially as they pertain to periods of malfunction.

**Response:** Opacity limits are generally applied to ensure a source is meeting its PM emissions limit. For Units 1, 2, and 3, however, an opacity limit would not be an appropriate method for ensuring compliance with the PM emissions limits for these units. This is because Units 1, 2, and 3 use venturi scrubbers to reduce PM emissions, and these units controlled by venturi scrubbers are not capable of continuously meeting any opacity limit. In short, it is not technologically feasible to operate opacity monitors on these stacks, due to interference from steam in the exhaust. Given that opacity limits are not appropriate for these units, EPA continues to find, and is finalizing in today's action, that parametric monitoring of each venturi scrubber is the best method of assuring proper operation to minimize the emissions of PM.

Units 4 and 5 have always operated with an exemption from opacity limits during shutdown. The commenter has not provided any information demonstrating that exempting these units during shutdown harms the environment or public health.

With regards to comments requesting an exemption from the opacity limit during malfunctions, as explained in more detail in our accompanying FRN, EPA has provided an affirmative defense for these periods.

With regards to the comment on the phrasing for exempting water vapor, EPA agrees that this should be changed to uncombined

water droplets. With respect to the commenter requesting a demonstration that the opacity was caused by uncombined water droplets, EPA believes this is not necessary. The opacity limit for this facility is set to assure proper operation of the baghouse. The rule is requiring that the facility assure that there has been no bypass through the bypass damper during these periods of assumed water droplet interference. The facility will be required to report these as apparent excess emissions in their quarterly excess emissions report. If anything inappropriate shows up in the reports, EPA can follow up to get better clarification of the issue.

**C. Jurisdictional and Authority Issues.**

**Comment:** Several commenters raised issues regarding EPA's authority to promulgate a FIP for FCPP. Some commenters stated that EPA does not have the authority to promulgate the proposed FIP because FCPP's ongoing compliance with the emissions limits in the New Mexico SIP means that there is no regulatory gap for EPA to fill.

**Response:** EPA's authority to promulgate a source-specific FIP is based on Clean Air Act (CAA) Sections 301(a) and (d)(4) and the regulations implementing these provisions at 40 CFR Part 49. CAA section 301(d)(4) provides EPA with broad discretion to promulgate regulations directly for sources located in Indian country<sup>2</sup>,

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<sup>2</sup> "Indian country" is defined under 18 U.S.C. 1151 as: (1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation, (2) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (3) all Indian allotments, the Indian titles to which have not been extinguished, including

including on Indian reservations if we determine such Federal regulations are "necessary or appropriate" and the Tribe has not promulgated a TIP. Specifically, in 40 CFR 49.11, EPA interpreted CAA section 301(d)(4) to authorize EPA to promulgate "such Federal implementation plan provisions as are necessary or appropriate to protect air quality."

As explained in the 1999 and 2006 proposed FIPs, a regulatory gap exists with regard to FCPP. See 64 FR at 48732-48733; 71 FR at 53632. Although FCPP has historically followed the rules in the New Mexico SIP, EPA has not found that New Mexico had regulatory authority under the CAA on the Navajo Indian Reservation and has not approved the State's implementation plan for any area on the Reservation. Since the CAA was amended in 1990, EPA has been clear in its approvals of State programs that the approved State program does not extend into Indian country. It is EPA's position that, absent an explicit finding of jurisdiction and approval in Indian country, State and local governments lack authority under the CAA over air pollution sources, and the owners or operators of air pollution sources, throughout Indian country. See 63 Fed. Reg. at 7259 (responding to comment that EPA should "grandfather" existing facility subject to state authority so that states continue to regulate those facilities until the affected parties all agree

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rights-of-way running through the same. Although it is part of Title 18 of the federal criminal code, the Supreme Court has recognized that section 1151 defines Indian country for questions of civil jurisdiction as well. *Decoteau v. District Court for the Tenth Judicial Dist.*, 420 U.S. 425, 427 n.2 (1975). Under this definition, EPA treats as reservations trust lands validly set aside for the use of a Tribe even if the trust lands have not been formally designated as a reservation.

cooperatively to a transition from state to tribal jurisdiction.") Therefore, the New Mexico SIP does not apply to FCPP and there is a regulatory gap.

EPA is exercising its discretion to promulgate emission limitations for FCPP to close this regulatory gap in light of the magnitude of the emissions of NO<sub>x</sub>, SO<sub>2</sub>, and PM from FCPP. In addition, the FIP is appropriate to maintain consistent standards on the Navajo Indian Reservation and its neighboring States.

The source-specific FIP published today is based on the same CAA authority that EPA has used elsewhere in rulemakings and that has been affirmed by the courts. EPA's interpretation of its authority in the TAR was affirmed by the U.S. Court of Appeals for the District of Columbia Circuit in Arizona Public Service Co. v. EPA, 211 F.3d 1280 (D.C. Cir. 2000), cert. denied 121 S. Ct. 1600 (2001). That court also upheld EPA's authority to issue operating permits to major stationary sources located in Indian country under Title V of the CAA, pursuant to regulations at 40 CFR Part 71. See State of Michigan v. EPA, 268 F.3d 1075 (D.C. Cir. 2001). In an unpublished opinion in December 2006, the Ninth Circuit Court of Appeals declined to find that EPA's promulgation of a FIP establishing agricultural burning rules that applied to some, but not all, reservations in the Northwestern United States was arbitrary and capricious. A copy of unpublished opinion is in our docket.

EPA has used its authority in CAA sections 301(a) and (d), as implemented through 40 CFR Part 49, to issue a number of FIPs

to address air pollution concerns at specific facilities located in Indian country. See, e.g., Federal Implementation Plan for Tri-Cities Landfill, Salt River Pima-Maricopa Indian Community, 40 CFR 49.22 (64 FR 65663, November 23, 1999); Federal Implementation Plan for the Astaris-Idaho LLC Facility (formerly owned by FMC Corporation) in the Fort Hall PM<sub>10</sub> Nonattainment Area, 40 CFR 49.10711 (65 FR 51412, August 23, 2000).

Therefore, we disagree with those comments challenging EPA's authority to promulgate a FIP for FCPP.

D. Comments On Control Requirements.

**Comment:** One commenter was concerned that the heat input for FCPP Plant may have increased over a number of years as indicated from the "EPA Acid Rain Scorecard" and wanted to know if this increase constituted a major modification triggering permitting.

**Response:** EPA is undertaking this rulemaking pursuant to our rulemaking authority established in CAA Sections 301(a) and 301(d) to promulgate FIPs in Indian Country. EPA is not assessing the status of this source with respect to any need for major source permitting or whether or not a modification had occurred at the plant.

We do note that changes in the heat input reflected by the "EPA Acid Rain Scorecard" do not necessarily indicate that an electric generating unit (EGU) has made a major modification. The "EPA Acid Rain Scorecard" summarizes heat input for 1985, 1990, and then subsequently every year after 1995. The method of

determining heat input to EGUs in the Scorecard changed with the 1995 data. For the years before this, the Scorecard relied on coal consumption data provided to the EIA, while from 1995 on it was determined by flow measurements in the stack and calculated based on 40 CFR Part 60, Appendix A, Method 19. EPA believes that the current method using flow measurements is more reliable method than measuring the tons of coal delivered to the plant. However, if there is any bias in the current method, it will result in overestimating FCPP's heat input and emissions. In addition to this change in the method for determining heat input, heat input may have changed due to the increased demand for electricity in the west, which may have resulted, in turn, in increased utilization of the plant.

**Comment:** One commenter questions whether or not the current method of fly ash disposal is safe.

**Response:** The only regulatory action in this rule addresses the generation of dust while handling the flyash on site. The rule is imposing a 20 percent opacity limit on transfer points for fly ash. This will cover the ash that is being sold for use as an additive to cement and the mixing of flyash and scrubber sludge for disposal at the mines. This regulation does not evaluate or control the method of disposal at the mine.

**Comment:** One commenter questions whether or not the facility was ever exempted from opacity monitoring as required and then eligible for exemption under 40 CFR Part 75.10(a) and 40 CFR Part 75.14(b), respectively.

**Response:** EPA is not aware that there was any specific exemption requested or granted to this facility. However, EPA has had extensive experience inspecting and negotiating with this plant since the early 1990's. EPA has been aware that even to the extent FCPP has followed the New Mexico rules, the three venturi scrubbed units (1, 2, and 3) have had no opacity limit and no opacity monitoring in the stacks. These units have venturi scrubbers that can not be bypassed while the unit is in operation and the stacks have an exhaust gas stream that is always saturated. If a specific exemption was required, EPA would likely grant it for these three units upon request by the facility.

**Comment:** APS has commented that parametric monitoring should not be required by this rule, but that EPA should wait until Compliance Assurance Monitoring (CAM) is required by the facility's Title V permit. The commenter goes on to say if parametric monitoring is required that there should be a 6 month schedule for installation and shakedown of the equipment.

**Response:** EPA disagrees with the comment that EPA should wait to require the parametric monitoring under CAM. EPA believes that newly created applicable requirements, such as the emissions limitations in the FCPP FIP, should establish adequate monitoring, recordkeeping, and reporting that will assure compliance. It would not be appropriate to establish new applicable requirements -- in the form of FCPP FIP requirements -- that lack compliance-assuring monitoring, recordkeeping, and reporting requirements. Therefore, FCPP should establish

parametric monitoring, and recordkeeping and reporting requirements, in conjunction with this source-specific FIP rule.

CAM is designed as a gap filling mechanism where the parametric monitoring required for an applicable requirement is insufficient to ensure compliance. All rules, such as the FCPP FIP, should have sufficient monitoring to assure compliance rather than rely on the gap filling anticipated by CAM. EPA believes that the parametric monitoring is the most appropriate method to assure continuous compliance with the PM limits in this rule for Units 1, 2, and 3. EPA concurs that FCPP should be allowed a 6 month period to comply with this requirement and the final regulatory language reflects this.

**Comment:** FCPP commented that its emissions during malfunction events should be exempt from the emissions limits, and, therefore, not considered violations, rather than subject to an affirmative defense for penalties.

**Response:** EPA's 1999 proposed FIP did not exempt excess emission caused by malfunctions. See 64 FR at 48,738. It has been EPA's longstanding interpretation of the CAA, consistent with the 1999 proposed FIP, that emissions during malfunction events are considered violations of the underlying emissions limitations. In the 2006 proposed FIP, we have added a provision recognizing that excess emissions caused by malfunction event can be forgiven for civil monetary penalties based on the affirmative defense language we proposed. EPA has considered FCPP arguments on the issue, which are legal rather than technical, and disagrees with

the position. Therefore, EPA is finalizing the language proposed in the FIP allowing an affirmative defense. The affirmative defense language for excess emissions caused by malfunction events is consistent with recent EPA permitting activities and actions we have taken on the Arizona SIP.

**Comment:** FCPP also commented that the FIP should not become effective until 6 to 18 months following promulgation because EPA's 2006 proposed FIP contained a new 20 percent opacity requirement for certain dust-generating activities.

**Response:** EPA agrees that FCPP may have 18 months to develop the necessary controls to ensure it does not exceed 20 percent opacity from its dust generating activities. EPA also agrees that FCPP may have the requested additional time to develop a parametric monitoring plan and to install CEMS and collect adequate data to demonstrate compliance with the SO<sub>2</sub> emission limit.

**Comment:** FCPP commented that it did not agree with EPA's option in the proposal to impose a 40 percent opacity limit for Units 1, 2, and 3.

**Response:** EPA agrees for the reasons discussed above concerning why EPA will not impose a 40 percent opacity limit on Units 1, 2, and 3.