

Environmental Protection Agency

§49.5512

Name of nonregulatory TIP provision	Tribal submittal date	EPA approval date	Explanations
Technical Amendments to Part II of the 2006 Air Quality Management Program Plan, Title 17 Chapter 9 of the Gila River Indian Community Law and Order Code.	June 22, 2009	3/28/11 [76 FR 17028]	Minor NSR program support documents.
Minor New Source Review Demonstration.	June 22, 2009	3/28/11 [76 FR 17028]	Minor NSR program support documents.
Letter from Margaret Cook, Executive Director, GRIC DEQ, to Deborah Jordan, Air Division Director, EPA Region 9, Re: Gila River Indian Community Tribal Implementation Plan.	July 17, 2010	3/28/11 [76 FR 17028]	Letter discussing intent of citizen suit provisions in Part III.

[76 FR 17030, Mar. 28, 2011]

EDITORIAL NOTE: At 76 FR 23879, April 29, 2011, §49.22 was to be redesignated as §49.5511 in subpart L; however, the amendment could not be incorporated as §49.5511 already exists.

§49.5512 Federal Implementation Plan Provisions for Four Corners Power Plant, Navajo Nation.

(a) *Applicability.* The provisions of this section shall apply to each owner or operator of the coal burning equipment designated as Units 1, 2, 3, 4, and 5 at the Four Corners Power Plant (the Plant) on the Navajo Nation Indian Reservation located in the Four Corners Interstate Air Quality Control Region (see 40 CFR 81.121).

(b) *Compliance Dates.* Compliance with the requirements of this section is required upon the effective date of this rule unless otherwise indicated by compliance dates contained in specific provisions.

(c) *Definitions.* For the purposes of this section:

(1) *Affirmative defense* means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

(2) *Air pollution control equipment* includes baghouses, particulate or gaseous scrubbers, and any other apparatus utilized to control emissions of regulated air contaminants which would be emitted to the atmosphere.

(3) *Business Day.* Business day means a normal working day, excluding weekends and Federal Holidays.

(4) *Daily average* means the arithmetic average of the hourly values measured in a 24-hour period.

(5) *Excess emissions* means the emissions of air contaminants in excess of an applicable emissions limitation or requirement.

(6) *Heat input* means heat derived from combustion of fuel in a Unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources. Heat input shall be in accordance with 40 CFR part 75.

(7) *Malfunction* means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This rule provides an affirmative defense to actions for penalties brought for excess emissions that arise during certain malfunction episodes. An affirmative defense is not available if during the period of excess emissions, there was an exceedance of the relevant ambient air quality standard that could be attributed to the emitting source.

(8) *Owner or Operator* means any person who owns, leases, operates, controls, or supervises the Plant or any of the coal burning equipment designated as Units 1, 2, 3, 4, or 5 at the Plant.

(9) *Oxides of nitrogen (NO_x)* means the sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, expressed as nitrogen dioxide.

(10) *Plant-wide basis* means total stack emissions of any particular pollutant from all coal burning equipment at the Plant.

(11) *Regional Administrator* means the Regional Administrator of the Environmental Protection Agency (EPA) Region 9 or his/her authorized representative.

(12) *Shutdown* means the cessation of operation of any air pollution control equipment, process equipment, or process for any purpose. Specifically, for Units 1, 2, or 3, shutdown begins when the unit drops below 40 MW net load with the intent to remove the unit from service. For Units 4 or 5, shutdown begins when the unit drops below 300 MW net load with the intent to remove the unit from service.

(13) *Startup* means the setting into operation of any air pollution control equipment, process equipment, or process for any purpose. Specifically, for Units 1, 2, or 3, startup ends when the unit reaches 40 MW net load. For Units 4 or 5, startup ends when the unit reaches 400 MW net load.

(14) *24-hour period* means the period of time between 12:01 a.m. and 12 midnight.

(d) *Emissions Standards and Control Measures*—(1) *Sulfur Dioxide*. No owner or operator shall discharge or cause the discharge of sulfur dioxide (SO₂) into the atmosphere in excess of:

(i) 12.0 percent of the potential combustion concentration assuming all of the sulfur in the coal is converted to SO₂. This percent emitted is determined by a daily calculation of the plantwide heatinput weighted annual average.

(ii) 17,900 pounds of total SO₂ emissions per hour averaged over any consecutive three (3) hour period, determined on a plant-wide basis.

(2) *Particulate Matter*. No owner or operator shall discharge or cause the discharge of particulate matter from any coal burning equipment into the atmosphere in excess of 0.050 pounds per million British thermal unit (lb/MMBtu) of heat input (higher heating value), as averaged from three sampling runs, each at 60 minutes in duration, each collecting a minimum sample of 30 dry standard cubic feet.

(3) *Dust*. Each owner or operator shall operate and maintain the existing dust suppression methods for controlling dust from the coal handling and storage facilities. Within ninety (90) days after promulgation of this section, the owner or operator shall submit to the Regional Administrator a description of the dust suppression methods for controlling dust from the coal handling and storage facilities, flyash handling and storage, and road sweeping activities. Within 548 days of promulgation of this section each owner or operator shall not emit dust with an opacity greater than 20 percent from any crusher, grinding mill, screening operation, belt conveyor, or truck loading or unloading operation.

(4) *Opacity*. No owner or operator shall discharge or cause the discharge of emissions from the stacks of Units 4 and 5 into the atmosphere exhibiting greater than 20% opacity, excluding uncombined water droplets, averaged over any six (6) minute period, except for one six (6) minute period per hour of not more than 27% opacity.

(5) *Oxides of nitrogen*. No owner or operator shall discharge or cause the discharge of NO_x into the atmosphere.

(i) From either Unit 1 or 2 in excess of 0.85 lb/MMBtu of heat input per unit, and from either Units 3, 4, or 5 in excess of 0.65 lb/MMBtu of heat input per unit averaged over any successive thirty (30) boiler operating day period;

(ii) In excess of 335,000 lb per 24-hour period when coal burning equipment is operating, on a plant-wide basis; for each hour when coal burning equipment is not operating, this limitation shall be reduced. If the unit which is not operating is Unit 1, 2, or 3, the limitation shall be reduced by 1,542 lb per hour for each unit which is not operating. If the unit which is not operating is Unit 4 or 5, the limitation shall be reduced by 4,667 lb per hour for each unit which is not operating.

(e) *Testing and Monitoring*. Upon completion of the installation of continuous emissions monitoring systems (CEMS) software as required in this section, compliance with the emissions limits set for SO₂ and NO_x shall be determined by using data from a CEMS unless otherwise specified in paragraphs (e)(2) and (e)(4) of this section.

Environmental Protection Agency

§49.5512

Compliance with the emissions limit set for particulate matter shall be tested annually, or at such other time as requested by the Regional Administrator, based on data from testing conducted in accordance with 40 CFR part 60, appendix A, Methods 1 through 5, or any other method receiving prior approval from the Regional Administrator. Compliance with the emissions limits set for opacity shall be determined by using data from a Continuous Opacity Monitoring System (COMS) except during saturated stack conditions (uncombined water droplets). If the baghouse is operating within its normal operating parameters, the baghouse is not fully closed, and a high opacity reading occurs, it will be presumed that the occurrence was caused by saturated stack conditions and shall not be considered a violation.

(1) The owner or operator shall maintain and operate CEMS for SO₂, NO or NO_x, a diluent and, for Units 4 and 5 only, COMS, in accordance with 40 CFR 60.8 and 60.13, and appendix B of 40 CFR part 60. Within six (6) months of promulgation of this section, the owner or operator shall install CEMS and COMS software which complies with the requirements of this section. The owner or operator of the Plant may petition the Regional Administrator for extension of the six (6) month period for good cause shown. Completion of 40 CFR part 75 monitor certification requirements shall be deemed to satisfy the requirements under 40 CFR 60.8 and 60.13 and appendix B of part 60. The owner or operator shall comply with the quality assurance procedures for CEMS found in 40 CFR part 75, and all reports required thereunder shall be submitted to the Regional Administrator. The owner or operator shall provide the Regional Administrator notice in accordance with 40 CFR 75.61.

(2) *Sulfur Dioxide.* For the purpose of determining compliance with this section, the sulfur dioxide inlet concentration (in lb/MMBtu) shall be calculated using the daily average percent sulfur and Btu content of the coal combusted. The inlet sulfur concentration and Btu content shall be determined in accordance with American Society for Testing and Materials (ASTM) methods or any other method receiving prior ap-

proval from the Regional Administrator. A daily fuel sample shall be collected using the coal sampling tower conforming to the ASTM specifications. The analyses shall be done on the daily sample using ASTM methods or any other method receiving prior approval from the Regional Administrator.

(i) The inlet sulfur dioxide concentration shall be calculated using the following formula:

$$I_s = 2(\%S_f)/GCV \times 10^4 \text{ English units}$$

Where:

I_s = sulfur dioxide inlet concentrations in pounds per million Btu;

$\%S_f$ = weight

percent sulfur content of the fuel; and

GCV = Gross calorific value for the fuel in Btu per pound.

(ii) The total pounds of SO₂ generated by burning the coal shall be calculated by multiplying the SO₂ inlet concentration by the daily total heat input determined by the 40 CFR part 75 acid rain monitoring. This will determine the pounds of SO₂ produced per day. The SO₂ emitted from the stacks shall be determined by adding the daily SO₂ emissions from each stack as determined by the 40 CFR part 75 acid rain monitors. Compliance with the emission limit shall be determined for each day by adding that day's SO₂ emissions and that day's SO₂ produced to the previous 364 days and then dividing the 365 days of emissions by the 365 days of SO₂ produced. Compliance is demonstrated if this fraction, converted to a percent, is equal to or less than 12.0 percent. The data from the 40 CFR part 75 monitors shall not be bias adjusted. If a valid SO₂ pounds per hour or heat input is not available for any hour for a unit, that heat input and SO₂ pounds per hour shall not be used in the calculation of the annual plant-wide average.

(3) *Particulate matter.* Particulate matter emissions shall be determined by averaging the results of three test runs. Each test run shall be sixty (60) minutes in duration and shall collect a minimum volume of thirty (30) dry standard cubic feet. Within six (6) months of promulgation of this section, particulate matter testing shall be conducted annually and at least six

(6) months apart, with the equipment within 90 percent of maximum operation in accordance with 40 CFR 60.8 and appendix A to 40 CFR part 60. The owner or operator shall submit written notice of the date of testing no later than 21 days prior to testing. Testing may be performed on a date other than that already provided in a notice as long as notice of the new date is provided either in writing or by telephone or other means acceptable to the Region 9 Enforcement Office, and the notice is provided as soon as practicable after the new testing date is known, but no later than 7 days (or a shorter period as approved by the Region 9 Enforcement Office) in advance of the new date of testing.

(4) *Oxides of nitrogen.* The total daily plant-wide oxides of nitrogen emissions in pounds of NO₂ per day shall be calculated using the following formula:

$$TE = \sum_{i=1}^n \sum_{j=1}^m (E_{ij} \times H_{ij})$$

Where:

TE = total plant-wide nitrogen dioxide emissions (lb NO₂/day);

E_{ij} = hourly average emissions rate of each unit (lb NO₂/MMBtu);

H_{ij} = hourly total heat input for each unit (MMBtu);

n = the number of units of coal burning equipment operating during the hour;

m = the number of operating hours in a day, from midnight to midnight.

(5) Continuous emissions monitoring shall apply during all periods of operation of the coal burning equipment, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. Continuous monitoring systems for measuring SO₂, NO_x, and diluent gas shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Hourly averages shall be computed using at least one data point in each fifteen minute quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant in an hour) if data are

unavailable as a result of performance of calibration, quality assurance, preventive maintenance activities, or backups of data from data acquisition and handling system, and recertification events. When valid SO₂ pounds per hour, NO₂ pounds per hour, or NO₂ pounds per million Btu emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments, emission data must be obtained by using other monitoring systems approved by the EPA to provide emission data for a minimum of 18 hours in at least 22 out of 30 successive boiler operating days. If a parameter essential for determining either the SO₂ pound per hour or the heat input is not valid or unavailable, that hour for that unit shall not be used in calculating the percent emissions of SO₂ for the plant-wide limit. The necessary software for determining compliance with the SO₂ plantwide annual average shall be installed and operating within 180 days of the effective date of this rule. The first day for determining compliance with the plantwide SO₂ limit shall be 365 days after the successful installation of the software.

(6) The owner or operator shall maintain a set of opacity filters to be used as audit standards.

(7) Nothing herein shall limit EPA's ability to ask for a test at any time under Section 114 of the Clean Air Act, 42 U.S.C. 7414, and enforce against any violation.

(8) In order to provide reasonable assurance that the scrubbers for control of particulate matter from Units 1, 2, and 3 are being maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions, the owner or operator shall comply with the following provisions:

(i) The owner or operator shall develop a plan to monitor, record, and report parameter(s) indicative of the proper operation of the scrubbers to provide a reasonable assurance of compliance with the particulate matter limits in paragraph (d)(2) of this section. The owner or operator shall submit this plan to the Regional Administrator no later than sixty (60) days after the effective date of this FIP. The

owner or operator shall implement this plan within 90 days of approval by the Regional Administrator and shall commence reporting the data generated pursuant to the monitoring plan in accordance with the schedule in paragraph (e)(8)(v) of this section. If requested by the Regional Administrator, this plan shall be revised and submitted to the Regional Administrator for approval within sixty (60) days of the request. The revised plan shall be implemented within sixty (60) days of the Regional Administrator's approval.

(ii) In the event that the owner or operator is unable to develop the plan required in paragraph (e)(8)(i) of this section due to technical difficulties, fails to submit the plan within sixty (60) days of the effective date of this FIP, or the Regional Administrator disapproves the plan, the owner or operator shall install and operate devices to measure the pressure drop across each scrubber module and the total flow of scrubbing liquid to the venturi section of each scrubber module. The data from these instruments shall be monitored and recorded electronically. A minimum of one reading every 15 minutes shall be used to calculate an hourly average which shall be recorded and stored for at least a five-year period. The owner or operator shall report in an electronic format either all hourly data, or one-hour averages deviating by more than 30 percent from the levels measured during the last particulate matter stack test that demonstrated compliance with the limit in this section. The owner or operator shall implement this requirement no later than one hundred eighty (180) days after the effective date of this FIP if it failed to submit the plan within sixty (60) days after the effective date of this FIP; or no later than 60 days after the Regional Administrator's disapproval of the plan.

(iii) The monitoring required under paragraphs (e)(8)(i) and (e)(8)(ii) of this section shall apply to each Unit at all times that the Unit is operating, except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjust-

ments). A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(iv) The owner or operator may petition the Regional Administrator for an extension of the sixty (60) day deadline. Such extension shall be granted only if the owner or operator demonstrates to the satisfaction of the Regional Administrator that:

(A) The delay is due to technical infeasibility beyond the control of the owner or operator; and

(B) The requested extension, if granted, will allow the owner or operator to successfully complete the plan.

(v) The owner or operator shall submit to the Regional Administrator reports of the monitoring data required by this section semi-annually. The reports shall be postmarked within 30 days of the end of each calendar quarter.

(vi) The owner or operator shall develop and document a quality assurance program for the monitoring and recording instrumentation. This program shall be updated or improved as requested by the Regional Administrator.

(vii) In the event that a program for parameter monitoring on Units 1, 2, and 3 is approved pursuant to the Compliance Assurance Monitoring rule, 40 CFR Part 64, such program will supersede the provisions contained in paragraph (e)(8) of this section.

(f) *Reporting and Recordkeeping Requirements.* Unless otherwise stated all requests, reports, submittals, notifications, and other communications to the Regional Administrator required by this section shall be submitted, unless instructed otherwise, to the Director, Navajo Environmental Protection Agency, P.O. Box 339, Window Rock, Arizona 86515, (928) 871-7692, (928) 871-7996 (facsimile), and to the Director, Air Division, U.S. Environmental Protection Agency, Region IX, to the attention of Mail Code: AIR-5, at 75 Hawthorne Street, San Francisco, California 94105, (415) 972-3990, (415) 947-3579 (facsimile). For each unit subject to the emissions limitation in this section

and upon completion of the installation of CEMS and COMS as required in this section, the owner or operator shall comply with the following requirements:

(1) For each emissions limit in this section, comply with the notification and recordkeeping requirements for CEMS compliance monitoring in 40 CFR 60.7(c) and (d). For Units 4 and 5, periods of excess opacity due to water droplets shall be reported in the summary report required by 40 CFR 60.7(d).

(2) For each day, provide the 365 day percent SO₂ emitted, the total SO₂ emitted that day, and the total SO₂ produced that day. For any hours on any unit where data for SO₂ hourly pounds or heat input is missing, identify the unit number and monitoring device that did not produce valid data that caused the missing hour.

(3) Furnish the Regional Administrator with reports describing the results of the annual particulate matter emissions tests postmarked within sixty (60) days of completing the tests. Each report shall include the following information:

- (i) The test date;
- (ii) The test method;
- (iii) Identification of the coal burning equipment tested;
- (iv) Values for stack pressure, temperature, moisture, and distribution of velocity heads;
- (v) Average heat input;
- (vi) Emissions data, identified by sample number, and expressed in pounds per MMBtu;
- (vii) Arithmetic average of sample data expressed in pounds per MMBtu; and
- (viii) A description of any variances from the test method.

(4) *Excess Emissions Report.* (i) For excess emissions (except in the case of saturated stack conditions), the owner or operator shall notify the Navajo Environmental Protection Agency Director and the U.S. Environmental Protection Agency Regional Administrator by telephone or in writing within one business day (initial notification). A complete written report of the incident shall be submitted to the Navajo Environmental Protection Agency Director and the U.S. Environmental Protection Agency Regional Adminis-

trator within ten (10) working days of the initial notification. This notification should be sent to the Director, Navajo Environmental Protection Agency, by mail to: P.O. Box 339, Window Rock, Arizona 86515, or by facsimile to: (928) 871-7996 (facsimile), and to the Regional Administrator, U.S. Environmental Protection Agency, by mail to the attention of Mail Code: AIR-5, at 75 Hawthorne Street, San Francisco, California 94105, by facsimile to: (415) 947-3579 (facsimile), or by e-mail to: r9.aeo@epa.gov. The complete written report shall include:

(A) The name and title of the person reporting;

(B) The identity and location of the Plant and Unit(s) involved, and the emissions point(s), including bypass, from which the excess emissions occurred or are occurring;

(C) The time and duration or expected duration of the excess emissions;

(D) The magnitude of the excess emissions expressed in the units of the applicable emissions limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

(E) The nature of the condition causing the excess emissions and the reasons why excess emissions occurred or are occurring;

(F) If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;

(G) For an opacity exceedance, the 6-minute average opacity monitoring data greater than 20 percent for the 24 hours prior to and during the exceedance for Units 4 and 5; and

(H) The efforts taken or being taken to minimize the excess emissions and to repair or otherwise bring the Plant into compliance with the applicable emissions limit(s) or other requirements. For this reporting requirement, excess opacity due to saturated stack conditions is exempted.

(ii) If the period of excess emissions extends beyond the submittal of the written report, the owner or operator shall also notify the Regional Administrator in writing of the exact time and date when the excess emissions

stopped. Compliance with the excess emissions notification provisions of this section shall not excuse or otherwise constitute a defense to any violations of this section or of any law or regulation which such excess emissions or malfunction may cause.

(g) *Equipment Operations.* At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the Plant including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the Plant. With regard to the operation of the baghouses on Units 4 and 5, placing the baghouses in service before coal fires are initiated will constitute compliance with this paragraph. (If the baghouse inlet temperature cannot achieve 185 degrees Fahrenheit using only gas fires, the owner or operator will not be expected to place baghouses in service before coal fires are initiated; however, the owner or operator will remain subject to the requirements of this paragraph.)

(h) *Enforcement.* (1) Notwithstanding any other provision in this implementation plan, any credible evidence or information relevant to whether the Plant would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not the owner or operator has violated or is in violation of any standard in the plan.

(2) During periods of startup and shutdown the otherwise applicable emission limits or requirements for opacity and particulate matter shall not apply provided that:

(i) At all times the facility is operated in a manner consistent with good practice for minimizing emissions, and the owner or operator uses best efforts regarding planning, design, and oper-

ating procedures to meet the otherwise applicable emission limit;

(ii) The frequency and duration of operation in start-up or shutdown mode are minimized to the maximum extent practicable; and

(iii) The owner or operator's actions during start-up and shutdown periods are documented by properly signed, contemporaneous operating logs, or other relevant evidence.

(3) Emissions in excess of the level of the applicable emission limit or requirement that occur due to a malfunction shall constitute a violation of the applicable emission limit. However, it shall be an affirmative defense in an enforcement action seeking penalties if the owner or operator has met with all of the following conditions:

(i) The malfunction was the result of a sudden and unavoidable failure of process or air pollution control equipment or of a process to operate in a normal or usual manner;

(ii) The malfunction did not result from operator error or neglect, or from improper operation or maintenance procedures;

(iii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(iv) Steps were taken in an expeditious fashion to correct conditions leading to the malfunction, and the amount and duration of the excess emissions caused by the malfunction were minimized to the maximum extent practicable;

(v) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation if at all possible; and

(vii) The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.

[72 FR 25705, May 7, 2007. Redesignated at 76 FR 23879, Apr. 29, 2011]

EFFECTIVE DATE NOTE: At 73 FR 67109, Nov. 13, 2008, paragraph (d)(3) of §49.23 was stayed until further notice. Section 49.23 was redesignated as Section 49.5512 at 76 FR 23879, Apr. 29, 2011.