

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF
Public Service Company of New Mexico
San Juan Generating Station

Title V Permit Number: P062R2
Issued by the New Mexico Environment Department
Air Quality Bureau

Petition Number: VI-2010- **Joe's Final dated 8/27/12**
Filed by WildEarth Guardians (WEG), San Juan Citizens Alliance (SJCA), and Carson Forest Watch

**RESPONSE OF NEW MEXICO ENVIRONMENT DEPARTMENT, AIR QUALITY
BUREAU, TO ORDER GRANTING PETITION FOR OBJECTION TO PERMIT**

I. INTRODUCTION

On February 15, 2012, EPA Administrator Jackson issued an Order responding to Petition VI-2010-XX ("Petition") filed by WildEarth Guardians (WEG), San Juan Citizens Alliance (SJCA), and Carson Forest Watch (collectively "Petitioners") on November 19, 2010. The Petitioners objected to the New Mexico Environment Department, Air Quality Bureau's (NMED) issuance of Title V Renewal Operating Permit No. P062R2 ("Permit") to Public Service Company of New Mexico (PNM) for its San Juan Generating Station (SJGS). SJGS is a coal-fired power plant located approximately 3 miles north-northeast of Waterflow, NM in San Juan County.

The Petition was filed pursuant to section 505(b)(2) of the Clean Air Act ("CAA or Act"), 42 U.S.C. § 7661d(b)(2), requesting that EPA object to issuance of the Permit. The Petitioners claim that the Permit: (1) fails to ensure compliance with the Prevention of Significant Deterioration ("PSD") requirements; (2) fails to ensure compliance with source impact analysis requirements in the New Mexico State Implementation Plan; (3) fails to require prompt reporting of deviations; (4) fails to require sufficient periodic monitoring; and (5) includes a condition that is contrary to applicable requirements.

A. BACKGROUND

SJGS is a 1,848-megawatt (MW) power plant consisting of four coal-fired generating units and associated support facilities, as defined under Standard Industrial Classification ("SIC") Code 4911 – Electric Services, located approximately three miles north-northeast of the city of Waterflow, in San Juan County, New Mexico. The area is in attainment for all criteria pollutants. Each of the coal-fired boilers (Units 1-4) burns pulverized coal received by conveyors from the adjacent San Juan Mine to generate high-pressure steam that powers a steam turbine coupled with an electric generator. Electric power produced by the units is supplied to the electric power grid for sale. Units 1 and 2 have a unit capacity of 350 and 360 MW, respectively, while Units 3 and 4 have a unit capacity of 544 MW each. The Units began operations in 1976, 1973, 1979, and 1982, respectively. See Statement of Basis ("SOB") for the April 2, 2010 draft Permit ("draft SOB") at 1.

PNM, the operator of the SJGS, entered into a consent decree in 2005 with The Grand Canyon Trust, Sierra Club, and NMED to reduce emissions of nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM), and mercury. See Consent Decree (CD) entered in The Grand Canyon Trust, et. al. v. Public Service Co. of New Mexico, CV 02-552 BB/ACT (ACE)(D.N.M. 2005). The CD also required SJGS to obtain any necessary authorizations and to comply with all "federal, state, and local laws and regulations and orders of this Court." CD at 35. In addition, the CD required that the emissions controls and limitations, emissions monitoring, and all definitions relied upon in the CD be incorporated into the title V operating permit at renewal. CD at 38-39.

On February 3, 2009, NMED received an application from PNM for the renewal of the SJGS Permit - Permit Number P062R2 ("draft Permit"). A copy of the draft Permit along with the draft SOB was submitted for a 30-day public comment period beginning April 2, 2010. On May 7, 2010, WEG submitted comments on the draft Permit on behalf of themselves, SJCA, and Carson Forest Watch to NMED ("WEG Comments"), raising several concerns. On the same day under separate cover, SJCA submitted comments on their own behalf and on behalf of five additional citizens groups ("SJCA Comments") on the draft Permit. The five additional groups included the Northern New Mexico Group of the Sierra Club, the Center for Biological Diversity, Dooda Desert Rock, the Coalition for Clean Affordable Energy, and Dine Care. NMED prepared a separate response to comments ("RTC"), dated August 4, 2010, for each group ("WEG RTC" and "SJCA RTC," respectively) and submitted the proposed Permit along with a revised SOB ("proposed SOB") to the EPA on the same date. On September 20, 2010, the last day of the 45-day EPA review period, the EPA submitted preliminary comments to NMED ("EPA Comments") on the proposed Permit but did not object to the proposed Permit. On November 19, 2010, Petitioners submitted an electronic copy of the Petition to the EPA,

requesting that the EPA object to the renewal of the Permit. The NMED issued the final permit on January 24, 2011.

In a February 12, 2012 Order (“Order”), EPA Administrator Jackson granted in part the objection as related to specific issues raised by the Petitioners, claiming that the Permit did not comply with 40 C.F.R Part 70. The Petitioners claims are summarized below:

1. The Permit failed to assure compliance with PSD and title V requirements because “evidence indicate[s] that PSD requirements are, in fact, applicable to [SJGS] and that the facility is currently in violation of PSD requirements.” (“Claim I.A-Not Granted”); NMED failed to address significant increases in CO emissions that occurred as a result of installation of low-NOx burners on all four units at SJGS in 2006. (“Claim I.B”)
2. The Permit failed to ensure compliance with source impact analysis requirements in the New Mexico SIP. (“Claim II-Not Granted”)
3. The Permit failed to include prompt reporting for all deviations in the permit conditions. (“Claim III”)
4. The Permit failed to require sufficient periodic monitoring for compliance with particulate matter (PM) emission limits for Units 1, 2, 3, and 4 and allowed for exemptions to monitoring frequency (“Claim IV.A”); NMED failed to explain how the duct leak monitoring requirements will ensure compliance with the applicable emission limits (“Claim IV.B”).
5. The Permit included a condition that is contrary to applicable requirements related to compliance with the National Ambient Air Quality Standards (“NAAQS”) (“Claim V”).

In the Order, EPA grants request for objection to the above Claims to the extent described below:

Claim I.A: SJGS is currently in violation of PSD requirements

EPA determined that the NMED was not obligated to investigate whether SJGS was in compliance with PSD for the original installation of Units 1, 3 and 4 in this title V proceeding. Specifically, the Administrator states in the Order:

“I deny the Petitioners' request for an objection to the Permit on this claim on the basis that Petitioners have not shown that it was impracticable to raise this objection during the public comment period or that the grounds for this objection arose after the public comment period. Additionally, I deny the Petitioners' request for an objection to the Permit on this claim on the alternative basis that Petitioners have not demonstrated that the SJGS permit is not in compliance

with the requirements of the Act, specifically the PSD requirements. See generally CAA section 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. 70.8(c)-(d).”

Claim I.B: Permit fails to assure compliance with applicable PSD requirements

EPA determined that the NMED has not provided an adequate explanation in the record regarding its decision not to address PSD requirements in the Permit for the low-NOx burner installations on the Units. Specifically, the Administrator states in the Order:

“I grant Petitioners' request to object to the Permit on this claim because NMED has not provided an adequate explanation in the record regarding its decision not to address PSD requirements in the Permit for the low-NOx burner installations on the Units. As NMED itself states:

This comparison clearly shows that all four units individually and combined exceed the 100 tons/year increase threshold for CO PSD significance. Therefore, it is our conclusion that NSR Permit 0063M4 should have been a PSD Permit or processed as a PSD permit. It is our intent to add a Compliance Plan in the current Title V Permit P062R2 for PNM to submit a PSD application to address the significance increase in CO from the construction of the low-NOx Burners.

NMED's Response to EPA at 3. However, NMED issued the final Permit on January 24, 2011, without including the compliance plan for addressing PSD requirements. The only explanation NMED offers for this apparent change is the following:

Considering adding Compliance plan for submitting PSD netting analysis for NSR Permit 00634M4 that was issued /8/2006. May not be appropriate to do this in TV permit, since it has nothing to do with the facility being out of compliance and bring them back into compliance. Was not added to Permit P062R2.

Final SOB at 14. This explanation clearly does not provide sufficient detail or reasoning regarding why NMED did not include the compliance plan in the Permit as previously indicated in NMED's Response to EPA. These confusing and contradictory statements in the record regarding PSD applicability for the 2006 low-NOx burner installations at each Unit require further clarification by NMED so that the public may clearly understand its basis for the Permit that was issued on January 24, 2011. Therefore, given the unresolved nature of this claim in the record, NMED must clarify the record, explain its final decision regarding this issue, and make any necessary changes to the Permit consistent with its SIP and title V.”

Claim II: Compliance with Source Impact Analysis Requirements in the New Mexico SIP

EPA determined that there was no evidence to question that the Permit addresses applicable requirements. Specifically, the Administrator states in the Order:

“I deny the Petitioners' request for an objection to the Permit on this claim on the basis that Petitioners have not demonstrated that the Permit fails to address applicable requirements. Petitioners have not demonstrated that NMED failed to conduct the appropriate source impacts analysis under the applicable New Mexico NSR permitting regulations. Petitioners generally assert that NMED failed to provide the citations for the permitting actions under which the source impacts analyses were conducted. Without providing additional evidence, they further generally assert that the source impact analyses were not conducted and that therefore the permit limits are not protective of the NAAQS or NMAQS and violate applicable requirements. These general assertions, however, are not sufficient to show that the Permit does not address applicable requirements.”

“Therefore, based on a review of the record, Petitioners have not demonstrated that the Permit failed to address all applicable requirements or that NMED failed to conduct the appropriate source impact analyses as required by the New Mexico SIP. Petitioners were apparently aware of the relevant NSR permitting actions from which the PM and NO_x emissions limits were incorporated into the Permit since they reference the same specific NSR permits in their Petition that NMED referenced in the permitting record. Petition at 11; Public Notice at 1; draft SOB at 1,3-5; WEG RTC at 2-3. Yet, Petitioners did not show that they requested but were unable to obtain the analyses from NMED or otherwise show that the required analyses were not performed. Therefore, I deny the request to object to this claim.”

Claim III: Prompt Reporting of Deviations

EPA determined that the RTC and permit record did not adequately document or explain conditions in the Permit regarding prompt reporting of deviations. Specifically, the Administrator states in the Order:

“I grant this request for an objection to the Permit on the basis that the record does not adequately document or explain NMED's decisions regarding how it concluded that reporting each six months, or more frequently in the case of excess emissions under the SIP, constitutes 'prompt' reporting of all permit deviations.”

In addition, “I grant this claim based on the lack of justification in the permit record for NMED's decisions regarding reporting of permit deviations, in accordance with the requirements of 40 C.F.R. § 70.6(a)(3)(iii)(B). I direct NMED to consider whether the permit conditions for

reporting of deviations are consistent with the requirements of 40 C.F.R. § 70.6(a)(3)(iii)(B) for all permit deviations and provide further explanation of its conclusions, in the SOB or elsewhere in the permitting record, or make appropriate changes to the Permit to ensure prompt reporting consistent with the Act and implementing regulations.”

Claim IV: Sufficient Periodic Monitoring

“Petitioners allege generally that the SJGS Permit fails to contain monitoring that assures compliance with the terms and conditions of the permit, and that NMED must supplement this monitoring to ensure compliance with the Permit. Permit at 13-14; CAA section 504(c), 42 U.S.C. § 7661c(c), 40 C.F.R. §§ 70.6(a)(3)(i)(B), 70.6(c)(1); *Sierra Club v. EPA*, 536 F.3d 673, 680 (D.C. Cir. 2008)). Related to this general claim, Petitioners make two specific claims, which we describe and respond to below.”

Claim IV.A: Monitoring Exemptions

The Permit contains the following language that allows monitoring to be waived: if an emissions unit operates 25% or less of a monitoring period, monitoring is not required. The maximum number of successive waived monitoring periods cannot exceed two, unless the emissions unit is operated for less than 10% of the period. In this case, the period is not counted as a successive period. A minimum of one of each type of monitoring activity must be conducted during the five-year term of the title V permit. EPA determined that the SoB for the Permit does not explain the rationale for these monitoring exemptions. Specifically, the Administrator states in the Order:

“I grant the Petitioners' request for an objection on this claim on the basis that NMED's Permit record, including the draft SOB, does not adequately document the rationale for NMED's permitting decision supporting the monitoring exemptions contained in Condition B108.D.”

In addition, “In addressing this objection, NMED must discuss the adequacy of the permit monitoring requirements in support of the Permit's exemption for low operation periods, or make appropriate changes to the Permit to ensure it includes monitoring requirements consistent with the Act and implementing regulations.”

Claim IV.B: Emissions Monitoring for Duct Leaks

The Permit contains language to the effect that compliance with NO_x, SO₂, CO and PM emission limits is demonstrated through the duct leak management plan and by Department inspections. EPA determined that the RTC and permit record did not adequately respond to Petitioners' comment and explain how the duct leak monitoring requirements will ensure

compliance with the applicable emissions limits in the Permit. Specifically, the Administrator states in the Order:

“Upon review of the Petition, the Permit, the incorporated preconstruction permit 0063M4 referenced by NMED to contain the duct leak program (See WEG RTC at 6), and the permit application, I find that NMED failed to adequately respond to Petitioners' comment. NMED must make clear in the record the details of and rationale for the duct leak monitoring program that is clearly required by the Permit. Permit at 8 and at 23-24. While the requirement for a program is clearly stated, the duct leak monitoring requirements themselves are unclear, vague, and lack adequate detail in the Permit. For example, the NMED fails to explain how to assess increases in leaking areas and time frames for leak repair. Additionally, the rationale for why NMED selected the particular duct leak monitoring requirements for demonstrating compliance with the applicable emissions limits must be clear and documented in the SOB or elsewhere in the Permit record. Again, NMED failed to explain, in either the Permit or the SOB, how the duct leak management program or the expansion joint maintenance program monitoring will generate adequate information to assure compliance with the applicable emission limits. Permit at 23-24. Consequently, I order NMED to either provide an adequate rationale for duct leak monitoring requirements in the Permit, or to make appropriate changes to the Permit to ensure it includes adequate duct leak monitoring requirements.”

Claim V: Condition B112.E and Applicable Requirements

The Permit contains the following language at Condition B112.E:

“For sources that have submitted air dispersion modeling that demonstrates compliance with federal ambient air quality standards, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with federal ambient air quality standards specified at 40 CFR 50 NAAQS.”

The Permit also contains the following language at Condition B101.A(13):

“The permittee will continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee will meet such requirements on a timely basis. This condition is pursuant to sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC.”

EPA determined that the RTC and permit record did not provide adequate response to the Petitioners' claim that NMED automatically concluded that compliance with a title V permit assures compliance with the National Ambient Air Quality Standards (NAAQS). The EPA also

determined that the RTC and permit record did not adequately explain the possible conflict between Conditions B112.E and B101.A(13). Specifically, the Administrator states in the Order:

“In responding to this Order, NMED must fully respond to the Petitioners’ comment. In so doing, I also suggest that NMED consider the basis for Condition B112.E and clarify the purpose and scope of Condition B112.E, considering whether the term should be removed or revised for clarity, in accordance with the appropriate permit revision requirements. NMED may additionally wish to consider the relationship between Condition B112.E and Condition B101.A(13), and as necessary, revise the permit to ensure that these terms will not conflict with one another.”

II. RESPONSE TO CLAIM I.B

In accordance with page 11 of the Order, given the unresolved nature of this claim in the records, NMED must clarify the record, explain its final decision regarding this issue, and make any necessary changes to the Permit consistent with its SIP and title V.

NMED CONCLUSIONS – PSD requirements for installation of low-NOx burners

EPA’s Order states the following with regard to Claim I.B, PSD Compliance: “NMED has not provided an adequate explanation in the record [G]iven the unresolved nature of this claim in the record, NMED must clarify the record, explain its final decision regarding this issue, and make any necessary changes to the Permit”

NMED has worked with PNM to gather and validate data used to determine whether there was a significant increase of CO emissions as defined in 20.2.74 NMAC. The arguments and conclusion presented by PNM are not supported by the regulatory requirements in 20.2.74 NMAC.

NMED disagrees with PNM’s assertion that the Installation of Low NOx Burners on the Four Boilers as part of the Consent Decree (NSR Permit 0063M4) are four separate projects. The modification requested in the application for NSR Permit 0063M4 is a single project subject to 20.2.74.200 NMAC.

NMED continues to agree with PNM that the pre-construction application (0063M4) submitted by PNM relied on the best pre-project information available to PNM from the manufacturer of the low NOx burner equipment. (20.2.74.7.AR(1) NMAC)

PNM-SJGS NMED Response to EPA Order

NMED agrees that there are no grounds for an NOV or enforcement action since PNM in good faith submitted a proper NSR application for action 0063M4 in accordance with 20.2.74.7.AR(1) NMAC.

NMED has the authority, pursuant 20.2.74.300 NMAC, to review the post project data to determine if the pre-project information and projection were in fact correct. NMED has evaluated the data per 20.2.74.7.AR(1) NMAC and determined that there is a significant emissions increase of CO for Unit 2 of 297 tpy based on the Baseline Actual Emission (BAE)-to-Projected-Actual Emissions (PAE) applicability test. The threshold for CO is 100 tpy per Table 2 of 20.2.74.502 NMAC. Units 1, 3, and 4 had CO emission decreases well over 1,000 tpy per unit.

As background, in reviewing the BAE-to-PAE applicability test submitted by PNM on December 13, 2010 and April 30, 2012, NMED provides the following information:

- The term “shakedown period” was not defined in the Consent Decree and the December 2006 Low NOx Burner/Demister Settlement Agreement (CD/Agreement) or in Permit 0063M4. NMED disagrees with PNM’s assertion that the shakedown period matches the 12-month NOx Testing schedule required by the CD/Agreement. The purpose of the 12-month NOx testing was to evaluate the NOx emission rate of 0.30 lb/MMBtu required by the CD. It is reasonable to expect the units to be operating as expected to evaluate the emissions. State-of-the-art NOx combustion controls, as agreed to in the Settlement Agreement, were required to be procured, installed, commissioned, tuned, and operated by specific dates (DATE A). DATE B is the start of the 12-month NOx Testing schedule. It is NMED’s determination that the shakedown period is the time between DATE A and DATE B. As shown in the table below the shakedown period varies and is the time between Dates A & B that PNM used to ensure the new control devices were working properly before the start of the testing schedule requested by PNM.

Unit	DATE A	DATE B	Shakedown Period
4	11/1/2007	9/2/2008	306 days
3	5/1/2008	9/2/2008	124 days
1	12/1/2008	3/6/2009	95 days
2	4/1/2009	5/20/2009	49 days

- There were four quarterly tests that covered the 12-month PAE period, starting on the “DATE B” date. NMED reviewed whether it was best to (1) use an average of the four tests to determine the monthly emissions (tons) or (2) use each test to determine the contemporaneous monthly emission (tons). The conservative approach is to use option (1), which is the first option presented by PNM in 2010.

Since the project is significant, PNM needs to complete and submit a netting analysis to determine if the project can net-out of PSD applicability in accordance with 20.2.74.200.D NMAC. PNM has the option of taking creditable and contemporaneous decreases on either or all of Units 1, 3, and 4 to reduce the 297 tpy CO emission increase below the PSD threshold for CO. If the netting analysis indicates that the net emissions increase is not significant, then no further action would be required to demonstrate that PSD applicability was properly considered for NSR Permit 0063M4.

PNM refers to EPA's "aggregation policy" (71 FR 54244 (9-14-06)) and the proposed rule on "Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Debottlenecking, Aggregation, and Project Netting" in an attempt to justify that the installation of control technologies at SJGS, as required by the Consent Decree, were individual projects and not "substantially related" as one project.

In previous permit applications, Consent Decree negotiations, and response to public comments, NMED has consistently considered the modification to the four boilers as related. Moreover, EPA's proposed "aggregation policy" (which was subsequently stayed) does not support PNM's contention that each unit constitutes a separate project merely because each boiler exhausts to a separate control device. Since the modification to the four boilers is a single project, PNM must aggregate the emissions increases for the purpose of determining project significance.

Based on the above discussion, extensive research, and prior EPA decisions and guidance, NMED makes the following conclusions using the authority under its state implementation plan:

NMED will re-open the Title V Permit P062R2, in accordance with 20.2.70.405.A NMAC, to include a compliance plan in accordance with 20.2.70.300.D(11) NMAC that requires the following:

1. Submittal of a modification to the NSR permit to take federally enforceable CO emission limits as necessary to establish the PAE for purposes of the netting analysis. Update Section 12 of the application stating that the project is significant, and provide a complete netting analysis for CO. The contemporaneous period is five years back from the date that construction commenced for NSR Permit 0063M4.
2. If PNM chooses not to modify the NSR permit to obtain the credible decreases that allow the project to net-out of PSD, then PNM must submit a PSD application and BACT determination for CO in accordance with 20.2.74 NMAC.

3. The compliance plan will require that these actions be completed within 180 days from issuance of the reopened Title V Permit P062R2.

III. RESPONSE TO CLAIM III

NMED Response- Prompt Reporting of Deviations:

The deviation reporting requirements at 20.2.70.302.E NMAC reflect the Department's belief that not all deviations from Title V permit conditions warrant the expeditious reporting required by 20.2.7 NMAC.

Since all Title V sources are subject to the excess emissions rule at 20.2.7 NMAC, any deviations from Title V permit requirements that resulted in excess emissions would be reported in accordance with the timelines at 20.2.7.110 NMAC.

The excess emissions rule at 20.2.7 NMAC applies to Title V emergencies as well, since they also meet the definition of excess emissions at 20.2.7.7.D NMAC. The timelines in 20.2.7.110 NMAC are more stringent than the reporting timelines for emergencies at 20.2.70.304.B.4 NMAC.

20.2.70.302.E NMAC requires that all deviations resulting in excess emissions (including those classified as Title V emergencies) would be reported in accordance with the timelines at 20.2.7.110 NMAC, and all deviations that did not result in excess emissions would be reported every six months as part of the monitoring reports required by Title V permits.

This reporting schedule is in accordance with the federal requirement at 40 C.F.R. § 70.6(a)(3)(iii)(B) which states in relevant part, "...The permitting authority shall define "prompt" in relation to the degree and type of deviation likely to occur and the applicable requirements."

The NMED has determined that deviations resulting in excess emissions require a much more stringent reporting time frame than deviations that do not result in excess emissions. Deviations resulting in excess emissions have a potential impact on public health, whereas deviations that do not result in excess emissions do not.

The NMED believes that it is unnecessary to make more specific distinctions such as whether or not the deviation was from monitoring requirements, performance standards, etc. Any deviation from a monitoring requirement, performance standard, etc. that results in excess emissions is

required to be reported in accordance with the timelines at 20.2.7.110 NMAC. NMED believes that it is sufficient to make the distinction between those deviations that result in excess emissions and those that do not.

However, the NMED acknowledges that the above discussion regarding the intent is not obvious to those outside the agency who read the regulatory requirement at 20.2.70.302.E NMAC or the permit conditions in previous and current Title V permit templates.

In order to clarify this, the NMED proposes to revise the Title V permit template language and re-open and change the San Juan Generating Station Permit regarding reporting of deviations as follows:

“B110 General Reporting Requirements

B110.C The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:

- (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)*
- (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).*

The NMED believes that the less stringent reporting timeframe for deviations that do not result in excess emissions is consistent with the justification used by the EPA in the preamble to the final version of the Federal Operating Permit rule at 40 CFR 71 (61 FR 34219, July 1, 1996), reproduced in relevant part as follows;

“...Two commenters requested that part 71 clarify prompt reporting requirements for deviations other than those associated with hazardous, toxic, or regulated air pollutants, as described in sections 71.6(a)(3)(iii)(B)(1) and (2). The Agency believes that the requirement contained in section 71.6(a)(3)(iii)(A), in which sources are to report all instances of deviations from permit requirements at least every 6 months, provides the basis for prompt reporting of all other deviations. However, the Agency is willing to clarify this reporting requirement and has modified section 71.6(a)(3)(iii)(B) by adding a statement that directs sources to submit all other deviation reports in accordance with the timeframe given in section 71.6(a)(3)(iii)(A).”

In addition, the NMED also believes that the proposed revision to the deviation reporting language in the NMED Title V permit template and re-opened San Juan Generating Station Permit is consistent with that found in the Federal Operating Permit Program at 40 CFR § 71.6(a)(3)(iii)(A) and (B) (reproduced as follows);

(a) Standard permit requirements. Each permit issued under this part shall include the following elements:

(3) Monitoring and related recordkeeping and reporting requirements. (i) Each permit shall contain the following requirements with respect to monitoring:

(iii) With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(A) Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with §71.5(d).

(B) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

*(1) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour **in excess of permit requirements** (emphasis added), the report must be made within 24 hours of the occurrence.*

*(2) For emissions of any regulated air pollutant, excluding those listed in paragraph (a)(3)(iii)(B)(1) of this section, that continue for more than two hours **in excess of permit requirements** (emphasis added), the report must be made within 48 hours.*

(3) For all other deviations from permit requirements, the report shall be contained in the report submitted in accordance with the timeframe given in paragraph (a)(3)(iii)(A).

IV. RESPONSE TO CLAIM IV

Summary of EPA Comment– IV – Monitoring Exemptions conflict with Federal requirement:

EPA commented in footnote 8 on page 18, that “We note that Condition B108 also contains Condition B108.A, which states: "These [monitoring] requirements do not supersede or relax requirements of federal regulations." This provision was not addressed by Petitioners or NMED. It could be read to provide that a federally applicable monitoring requirement would prevail over the general monitoring exclusion under Condition B108.D, making it unclear whether this monitoring exemption has a place in the Permit.”

NMED Response – IV Monitoring Exemptions conflict with Federal requirement:

NMED added B108.A to provide clarification that State requirements cannot and do not relax federal requirements as required by the 20.2.70 NMAC and 40 CFR 70. Part B of all New Mexico permits contain “General Requirements” which are required by 20.2.70 NMAC and/or 40 CFR 70. All of the general conditions may or may not apply to a given facility or emissions unit at any given time. Also, a facility may have some regulated sources subject to federal requirements and other sources not subject to federal requirements and may choose to use the exemptions allowed in Section B108 for those units not subject to federal requirements. NMED does not tailor the “General Conditions” to the facility. {Emphasis added}

V. RESPONSE TO CLAIM IV.A

Summary of Petitioners Comments and EPA Response – IV.A.1 – Monitoring Exemptions:

Petitioners additionally allege the title V Permit allows for even less frequent monitoring for the boilers since Condition B108.D(2) "allows the source to avoid monitoring for NO_x, and carbon monoxide altogether if a unit has been operated for less than 25% of a monitoring period." Petitioners believe this condition is "wholly inappropriate and as a practical matter would allow the operator to violate hourly emission limits in the permit for up to three months, which is 25% of the annual monitoring period.".... Petitioners claim this is not sufficient monitoring under title V and note that this requirement does not even apply if a source operates less than 10% of any annual monitoring period. Petitioners state that in "the practical result of this exemption could allow SJGS to operate Units 1, 2, 3, or 4 for almost 90 days annually without being required to conduct any PM monitoring." Petitioners conclude that this monitoring requirement ""[i]t is unclear how this would ensure continuous compliance with hourly or *lb/mmbtu* emission limits. The fact that PNM could be allowed to avoid monitoring altogether if it only operates units 1, 2, 3, or 4 for 10% or less than any monitoring period-9 days a quarter or 36 days a year-underscores the inappropriateness of including Condition B I08.D in the Title V Permit due to its failure to ensure sufficient periodic monitoring that assures compliance with applicable PM limits" Citing 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(i), Petitioners assert title V requires that monitoring shall provide

reliable data from the relevant time period which is representative of the source's compliance with provisions of permit in order to ensure compliance.

EPA granted Petitioners' request for an objection on this claim on the basis that NMED's Permit record, including the draft SOB, does not adequately document the rationale for NMED's permitting decision supporting the monitoring exemptions contained in Condition B108.D. In addressing this objection, NMED must discuss the adequacy of the permit monitoring requirements in support of the Permit's exemption for low operation periods, or make appropriate changes to the Permit to ensure it includes monitoring requirements consistent with the Act and implementing regulations.

NMED Response – IV.A.1 Monitoring Exemptions:

For reference, the following conditions are related to Petitioners' comments and to NMED's response.

Condition B108.D of Permit No. P062R2: “The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.

- (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
- (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.”
- (3) A minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

The intent of Condition B108.D is to avoid requiring that equipment be operated for the sole purpose of conducting monitoring when a unit is shut down during a monitoring period or when the actual hours of operation are reduced to the extent that completing the required monitoring during the monitoring period becomes impractical. It is not the intent of Condition B108.D to reduce the frequency of monitoring or to exempt a source from conducting periodic monitoring, but rather to re-classify the monitoring period in terms of actual time operated in cases where the operating hours of a unit are reduced.

Providing the option to define the monitoring period in terms of 1) actual operating time or, 2) the amount of time that has passed since monitoring was last conducted, is consistent with NSPS

JJJJ at 40 CFR 60.4243(a)(2)(iii) which states "...and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance". Again, as stated at 76 FR 37966, June 28, 2011, this frequency of testing is sufficient to ensure compliance.

WEG Petitioners are incorrect in claiming that the above condition "exempts monitoring altogether for particulate matter." As the WEG Petition itself recognizes, the condition would only allow for operation of the unit 9 days per quarter, which amounts to only 36 days a year – far less than the 90 days generally expected between consecutive quarterly stack tests when the exemption does not apply.

The WEG Petition also fails to recognize that particulate matter stack tests are not the only means of ensuring compliance with the particulate matter limits applicable to each unit because the units are also subject to compliance assurance monitoring (CAM) provisions that require continuous monitoring of opacity and differential pressure drop across the fabric filters. EPA recently found that the combination of the stack testing requirements and the CAM requirements are sufficient to ensure compliance with applicable particulate matter limits in rejecting a similar petition to object to the Title V permit renewal for another power plant. *See In the Matter of Public Service Co. of Colo., dba Xcel Energy, Cherokee Station, Petition VIII-2010-XX*, Final Order at 11.

NMED has used a three-pronged approach for assuring compliance with the PM limit (1) performance testing to demonstrate that the specified limit is being met; (2) operation and maintenance of the baghouse to ensure that it continues to operate properly; and (3) the CAM plan to provide a mechanism for assessing the performance of the baghouse on an ongoing basis.

- During this, the second renewal of the operating permit, NMED reviewed the original CAM plan and determined the 10 percent Opacity (COMs reading) could be reduced for each boiler to approximately 6.0 percent based on actual COM readings. The CAM plan was updated accordingly to provide a better assessment of the baghouse performance.

The three-pronged approach described above is similar to that supported by EPA In the Matter of Public Service Company of Colorado dba Xcel Energy, Pawnee Station, Petition Number VIII-2010, at 12-13 (June 30, 2011) and In the Matter of Public Service Company of Colorado dba Xcel Energy, Valmont Station, Petition Number VIII-2010, at 10-12 (September 29, 2011)

In consideration of Petitioners' comments, NMED did apply the language in Condition B108.D(2) to the SJGS's two PM monitoring requirements and found that, using the condition's current language, a boiler could be operated for more than a specific monitoring period (quarterly or 12 months) before monitoring was conducted, allowing an exceedance of monitoring period. Therefore to correct this deficiency Condition B108.D(3) has been revised, to state:

“If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.”

With this change to Condition B108.D(3), the SJGS’s PM monitoring must be completed at least once a calendar year (or quarterly), or, if the monitoring period exemption at Condition B108.D(2) is invoked, at least once every 12 months or 8760 hours (or at least once every quarter or 90 days or 2190 hours) that each unit operates.

VI. RESPONSE TO CLAIM IV.B

Summary of Petitioners Comments and EPA Response – IV.B Emissions Monitoring for Duct Leaks:

EPA appears to have granted the WEG Petition on Claim 4B due to a lack of information in the permit record regarding PNM’s duct leak management program, which the Title V permit requires PNM to prepare and implement. As noted in the RTC, the program was approved by the Department and included in the Construction Permit modification 0063M4 issued September 8, 2006 and in the Title V Permit P062R1 issued February 2, 2005. Condition 402.C also requires additional detail in the development of the Expansion Joint Maintenance Plan.

PNM prepared the required plan and its implementation has led to a significant reduction in duct leaks at the plant. PNM recently submitted a permit application for a revision to its Title V permit that provides updated calculations of duct leak emissions and confirming that PNM’s Duct Leak Management Program has been successful in significantly reducing duct leak emissions over time. PNM also noted in its recent permit application that it anticipates completing a pressure redistribution (*i.e.*, a “balanced-draft” conversion) in connection with the selective catalytic reduction (SCR) system that EPA has required as part of its Federal Implementation Plan to implement a portion of the regional haze program in New Mexico. The conversion will result in duct pressures equal to or below atmospheric pressure, which will virtually eliminate all duct leaks. Nevertheless, NMED agrees to include the Duct Leak Management Program (Expansion Joint Maintenance Plan) in the permit as Appendix C to further clarify the manner in which the plant minimizes duct leak emissions.

NMED CONCLUSION – CLAIM IV.B

Duct Leak emissions consists of PM2.5 and PM10 uncontrolled flue gas stream upstream of the PM control system escaping from the expansion joints in the exhaust ducts from each boiler. The

ducts are massive in size and emissions are calculated based on gas stream composition and flow, and assumptions on size and frequency of holes or cracks in the ducts. There is no way to predict the location and frequency of these leaks. Stack or performance tests are not suitable monitoring techniques. Operational inspections and maintenance and repair monitoring are valid forms of monitoring to demonstrate compliance with emissions limits and minimize emissions. NMED required PNM to develop and submit a quarterly inspection and maintenance plan (see attached), which was incorporated into the monitoring requirement of the permit.

The goal of the Expansion Joint Maintenance Program is to minimize leaks from the boiler exit duct expansion joints. This will be accomplished through quarterly inspections and a maintenance program. Each unit's ducts are inspected at between 64 and 92 inspection points. The plan includes threshold limits for total leaks and a tried maintenance plan to ensure the severe leaks are fixed immediately and minor leaks receive temporary repairs with follow-up repairs later.

Based on the above discussion, NMED concludes that San Juan Duct Leak Management Program has been prepared and approved and is sufficient to minimize duct leak emissions from the facility. NMED agrees to supplement the record with the Duct Leak Management Program and with this discussion in response to EPA's Order.

VII. RESPONSE TO CLAIM V

Summary of Petitioners Comments and EPA Response – V Condition B112.E and Applicable Requirements:

Petitioners assert that permit Condition B112.E is contrary to the Clean Air Act in that NMED cannot automatically conclude that compliance with a Title V permit assures compliance with the National Ambient Air Quality Standards (NAAQS).

The EPA granted Petitioners' objection on this issue because the NMED failed to fully respond to Petitioners' comments relating to permit Condition B112.E.

NMED Response – V Condition B112.E and Applicable Requirements:

The NMED considered the basis for Condition B112.E and offers in our response that the basis of Condition B112.E was to provide assurance that the facility will maintain compliance with the NAAQS that were applicable during the previous NSR permitting action which required an air dispersion modeling analysis. As we explained in the RTC, the NMED's mechanism for facilities to demonstrate compliance with the NAAQS typically occurs in the NSR permitting process and in this instance Condition B112.E was meant only to apply to those NAAQS that were effective at the time of the previous NSR permitting action which required a modeling

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demonstration. The Department agrees that Condition B112.E, as written, does appear contrary to the Clean Air Act in that the NMED cannot automatically provide that compliance with the terms and conditions of the Title V permit assures compliance with the NAAQS. The Department did not intend to create a condition that ensured compliance with all NAAQS through compliance with terms and conditions of the Title V permit.

Upon review, the NMED finds the language in Condition B112.E unnecessary and further finds that this condition should be removed from the permit to deter further misunderstanding of the intent and purpose of this condition. The Title V permit will be re-opened to remove Condition B112.E.

VIII. SUMMARY

Based on the above arguments, NMED will take the following actions in response to Claims I – V by the Petitioners:

Re-opening of Title V Permit P062R2 (see the Attached Draft of the re-opened Permit P062R2M2 with the following changes and Statement of Basis (P062R2M2)):

- 1) Claim I.A – No action
- 2) Claim I.B – Re-open and add compliance plan requiring PSD Netting Analysis within 180 days following re-opening. Update and revise the record through the Statement of Basis (P062R2M2)
- 3) Claim II – No action
- 4) Claim III – Revision to Condition B110 as cited in the above response
- 5) Claim IV.A - Revision to Condition B108.D(3) as cited in the above response
- 6) Claim IV.B – Re-open and attach copy of PNM’s Expansion Joint Maintenance Program (EJMP) to the permit and summarize discussion in the statement of basis.
- 7) Claim V – Re-open and removal of Condition B112.E

Supplementation of permit record only:

- 1) Claim I.B – The prior discussion concerning PSD requirements for installation of low-NOx burners will be summarized in a revised Statement of Basis for the re-opened permit.

NMED will also revise the Statement of Basis and will further supplement the permit record for the re-opened permit, as necessary, to address final actions on all Claims.

This Response to Order constitutes a full response by NMED to EPA’s February 12, 2012 Order.

Attachments:

- Attachment 1: Draft Re-opened Permit P062R2M2 (including RJMP)
- Attachment 2; PNM letters dated December 12, 2010 and April 30, 2012