BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF
PUBLIC SERVICE COMPANY
FT. ST. VRAIN STATION

ORDER RESPONDING TO
PETITIONER’S REQUEST THAT
THE ADMINISTRATOR OBJECT
TO ISSUANCE OF A
STATE OPERATING PERMIT

Permit Number: 970PWE180

Issued by the Colorado Department of
Public Health and Environment, Air
Pollution Control Division

Petition Number: VIII-2005-02

ORDER GRANTING IN PART AND
DENYING PETITION FOR OBJECTION TO PERMIT

The United States Environmental Protection Agency ("EPA") received a petition dated August 6, 2005, from Jeremy Nichols ("Mr. Nichols" or "Petitioner") requesting that EPA object, pursuant to section 505(b)(2) of the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. § 7661d, to the issuance of a state operating permit to the Public Service Company, Fort Saint Vrain Station, located at 16805 County Road 19 ½, Platteville, Weld County, Colorado. The permittee will be referred to as "Ft. St. Vrain" for purposes of this Order. The primary function of the Ft. St. Vrain facility is to generate electricity using natural gas fired combustion turbines and heat recovery steam generators. The Ft. St. Vrain renewal permit was issued by the Colorado Department of Public Health and Environment, Air Pollution Division ("CDPHE" or "Colorado") on July 1, 2005, pursuant to title V of the Act, the federal implementing regulations at 40 CFR part 70, and the Colorado State implementing regulations at Regulation No. 3 part C.

The petition alleges that the Ft. St. Vrain permit does not comply with 40 CFR part 70 in that: (I) the operating permit fails to require appropriate best available control technology for NOx emissions; (II) the operating permit fails to ensure compliance with the NOx concentration limits and/or fails to adopt enforceable limits; (III) the operating permit fails to subject T004 in simple cycle mode to Compliance Assurance Monitoring (CAM) requirements for NOx emissions; (IV) the operating permit fails to require opacity monitoring; (V) the operating permit sets unenforceable CO emission limits and/or fails to ensure compliance with CO limits; and (VI) concerns on
eight specific permit conditions. Petitioner has requested that EPA object to the issuance of the Ft. St. Vrain permit pursuant to section 505(b)(2) of the Act.

EPA has reviewed these allegations pursuant to the standard set forth by Section 505(b)(2) of the Act, which places the burden on the petitioner to “demonstrate to the Administrator that the permit is not in compliance” with the applicable requirements of the Act or the requirements of Part 70. See also 40 CFR § 70.8(c)(1); New York Public Interest Research Group, Inc. v. Whitman, 321 F.3d 316, 333 n.11 (2nd Cir. 2002).

In reviewing the merits of the various allegations made in the petition filed by the Petitioner, EPA considered information in the permit record including: the petition; pertinent sections of the permit application; Mr. Nichols’ April 14, 2005 comments on the draft permit; CDPHE’s response to the comments submitted by Mr. Nichols (May 5, 2005); Final Renewal Operating Permit for Ft. St. Vrain issued by CDPHE (July 1, 2005); Technical Review Document for Renewal of the Operating Permit 970PWE180 (April 6, 2005); Technical Review Document for Operating Permit 960PDE134, Zuni Station (June 12, 1998), Final Operating Permit for Public Service Company – Zuni Station (April 1, 2004); and CDPHE Compliance Order on Consent in the Matter of Public Service Company of Colorado, Fort St. Vrain Facility (Signed April 2000). Based on a review of all the information before me, I grant in part and deny in part the Petitioner’s request for an objection to the Ft. St. Vrain title V permit for the reasons set forth in this Order.

STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act calls upon each State to develop and submit to EPA an operating permit program to meet the requirements of title V. EPA granted interim approval to the title V operating permit program submitted by the State of Colorado effective February 23, 1995. 60 Fed. Reg. 4563 (January 24, 1995); 40 CFR part 70, Appendix A. See also 61 Fed. Reg. 56367 (October 31, 1996) (revising interim approval). Effective October 16, 2000, EPA granted full approval to Colorado’s title V operating permit program. 65 Fed. Reg. 49919 (August 16, 2000). Major stationary sources of air pollution and other sources covered by title V are required to apply for an operating permit that includes emission limitations and such other conditions as are necessary to assure compliance with applicable requirements of the Act. See CAA §§ 502(a) and 504(a).

The title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as “applicable requirements”) but does require permits to contain monitoring, record keeping, reporting, and other conditions to assure compliance by sources with existing applicable emission control requirements. See 57 Fed. Reg. at 32250, 32251 (July 21, 1992). One purpose of the title V program is to enable the source, EPA, states, and the public to better understand the applicable requirements to which the source is subject and whether the source is meeting those requirements. Thus, the title V operating permits program is a vehicle for
ensuring that existing air quality control requirements are appropriately applied to facility emission units and that compliance with these requirements is assured.

Under section 505(a) of the Act and 40 CFR § 70.8(a), States are required to submit all proposed title V operating permits to EPA for review. Section 505(b)(1) of the Act authorizes EPA to object if a title V permit contains provisions not in compliance with applicable requirements, including the requirements of the applicable SIP. See also 40 CFR § 70.8(c)(1).

Section 505(b)(2) of the Act states that if the EPA does not object to a permit, any member of the public may petition the EPA, within sixty (60) days after the expiration of EPA's forty-five (45) day review period, to take such action, and the petition shall be based on issues that were raised during the public comment period, unless the petitioner demonstrates that it was impracticable to do so or unless the grounds for objection arose after the close of the comment period. See also 40 CFR § 70.8(d). A petitioner must demonstrate that the permit is not in compliance with the requirements of the Act, including the requirements of part 70. See CAA § 505(b)(2); 40 CFR § 70.8(d). If EPA objects to a permit in response to a petition and the permit has been issued, EPA or the permitting authority will modify, terminate, or revoke and reissue such a permit consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) for reopening a permit for cause.

Petitioner commented during the public comment period, raising concerns with the draft operating permit that provide a partial basis for this petition. See Electronic Mail Letter from Jeremy Nichols to CDPHE (April 14, 2005) (“Nichols Comment Letter”). As discussed below, the Petitioner failed to raise certain issues with the requisite “reasonable specificity” to allow the Agency to respond to his concerns, as required by the Act. These issues will, therefore, be denied in this Response Order.

**ISSUES RAISED BY PETITIONER**

I. **Best Available Control Technology for NO\textsubscript{x} Emissions.**

Petitioner's first claim alleges that the “permit fails to incorporate all the applicable requirements related to best available control technology for NO\textsubscript{x} emissions from emissions unit T004.” Specifically, Petitioner alleges that the “proposed Title V permit fails to require the use of SCR for emissions unit T004 when the unit is operating in simple cycle mode, or when only the combustion turbine is in operation.” Ft. St. Vrain Petition at 3 and 4. In addition, Petitioner raises concerns that the operating permit does not require the use of selective catalytic reduction (SCR) to limit NO\textsubscript{x} emissions.

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1 The Petitioner requested that to the extent his comments were not raised with reasonable specificity, the Agency consider his petition a petition to reopen the Ft. St. Vrain permit in accordance with 40 C.F.R. § 70.7(f). This order is not a response to such a petition.
from emissions unit T004, in accordance with a 2000 Consent Decree.2 Ft. St. Vrain
Petition at 4. Neither the Petitioner nor any other party raised any issues relating to the
applicable requirements for best available control technology ("BACT") for NOx
emissions, or the Consent Decree during the public comment period. Petitioner has also
not presented any information to demonstrate that it was impractical to raise such
objections during the public comment period, nor is there any evidence that the grounds
for the objection arose after the public comment period.

Accordingly, the Petitioner's claims on these issues are therefore denied. See

CAA § 505(b)(2); 40 CFR § 70.8(d).

II. Compliance with the NOx Concentration Limits and Enforcement of

Limits.

Petitioner's second claim alleges that "while NOx concentrations from emissions
unit T004 are limited to 9 ppmvd at 15% oxygen when the unit is operating in simple
cycle mode and limited to 4 ppmvd at 15% oxygen when the unit is operating in
combined cycle model (see, Section II, Condition 2.5.1.1 an 2.5.1.2), these limits only
apply at 24-hour averages." Ft. St. Vrain Petition at 6. Petitioner also alleges that the
permit exempts Ft. St. Vrain from any concentration limits for periods of less than 24
hours of operation in either simple cycle or combined cycle mode. Regarding these
concerns, neither the Petitioner nor any other party commented on the averaging time or
the applicability of NOx concentration limits for periods less than 24 hours during the
public comment period.

Accordingly, for the same reasons discussed in Section I above, Petitioner's
second claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

III. Emission Unit T004 in Simple Cycle Mode and CAM Requirements for

NOx Emissions.

Petitioner's third claim alleges that the "despite the fact that emissions unit T004
uses a control device to achieve compliance with NOx emissions limitations and has pre-
control emissions that exceed or are equivalent to the major source threshold, the Title V
Permit for Ft. St. Vrain Station does not subject the unit to CAM requirements." Ft. St.
Vrain Petition at 8. Specifically, the Petitioner alleges that "the Title V permit fails to
apply CAM requirements to emissions unit T004 when operating in simple cycle mode,
or when only the combustion turbine is in operation." Ft. St. Vrain Petition at 8.
Regarding these concerns, neither the Petitioner nor any other party commented on the
applicability of CAM to emissions unit T004 during the public comment period.

Accordingly, for the same reasons discussed in Section I above, Petitioner's third
claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

2 CDPHE Compliance Order on Consent in the Matter of Public Service Company of Colorado,
Fort St. Vrain Facility (April, 2000)
IV. **Opacity Monitoring.**

In comments submitted to CDPHE on April 14, 2005, the Petitioner alleged that the permit must require monitoring of opacity to demonstrate compliance with the various opacity standards for the three combined cycle turbines (combustion turbines, heat recovery steam generators, and duct burners) covered by the permit (T002-T004). The Petitioner also challenged the presumption of compliance with the opacity limit whenever pipeline quality gas is burned by the emission units, as outlined in the permit Section II, Conditions 1-13-1.17 and 2.14-2.15.

In its response to public comments, CDPHE stated

> [i]t has been the Division’s experience that opacity emissions from natural-gas fired turbines are well below the 20% limitation. Therefore, the title V operating permit does not require any intermittent Method 9 visible emission observations. Although the permit does not require any monitoring for opacity, when the Division inspects a facility, the inspector look (sic) for visible emissions and would conduct a Method 9 reading if he/she believed that opacity from a given emission unit would exceed the applicable standard.

In his petition, the Petitioner restates the alleged permit deficiency regarding opacity monitoring. The Petitioner asserts that the Clean Air Act and its regulations require explicit monitoring provisions. In addition, the Petitioner objects to the use of a fuel restriction as a method of monitoring compliance with opacity limits because past experience at the Public Service Company’s Zuni Station indicates such restrictions are unreliable to ensure compliance with opacity standards. Furthermore, the Petitioner challenges the use of fuel restrictions as not being in compliance with annual compliance certification requirements. As discussed below, EPA does not agree with the Petitioner that direct opacity monitoring would always be required for emission sources firing natural gas or that the use of fuel restrictions are invalid per se. EPA also disagrees that the use of fuel restrictions is inconsistent with the compliance certification obligations.

A. **Direct Monitoring Under CAA**

The Petitioner argues broadly that Section 504(a) of the CAA requires emission limitations and standards set forth in title V permits to be enforceable and that permits must require direct emission monitoring to demonstrate compliance. The Petitioner further argues that “it would be impossible to demonstrate compliance with any standard, such as opacity, without explicit monitoring.” Petition at 10.

As a general matter, EPA does not believe that direct or instrumental monitoring is always required under the Act, or its implementing regulations under 40 C.F.R. part 70. While 40 C.F.R. § 70.6(a)(3)(i)(B) requires “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit,” that provision also recognizes that “recordkeeping
provisions may be sufficient to meet the requirements of this paragraph...”

Furthermore, in its Order Responding to the Petition to Object for the Fort James Camas Mill operating permit (Petition No. X-1999-1), EPA stated:

EPA recognizes that there may be limited cases in which the establishment of a regular program of monitoring would not significantly enhance the ability of the permit to reasonably assure compliance with the applicable requirement and where the status quo (i.e., no instrumental monitoring) could meet the requirements of 40 C.F.R. § 70.6(a)(3). For example, where a prior stack test showed that emissions were only a small percentage of the applicable emission limit, and the source owner or operator periodically certifies that the relevant production information (e.g., fuels, materials, processes operations) remain substantially unchanged, ongoing compliance could be assured without any additional monitoring beyond the periodic certification of operating conditions.

Id. at 13-14.

Accordingly, EPA does not believe that direct or instrumental monitoring is always required to demonstrate compliance with an emission limit and to satisfy the periodic monitoring requirements of 40 CFR § 70.6(a)(3). These types of determinations are based on engineering judgment and must be handled on a case-by-case basis. As discussed below, EPA believes that the Ft. St. Vrain facility presents conditions such that recordkeeping provides sufficient monitoring for the opacity limits.

B. Zuni Station Operating Permit

Section II.B. of the petition references opacity violations that have been documented at the Public Service Company of Colorado’s Zuni Station, which consists of three natural gas fired boilers. The Petitioner cites the Technical Review Document for the 1998 Zuni Station title V permit, which notes there were opacity violations documented for one of the boilers while burning natural gas. As a result, CDPHE required periodic monitoring for the boiler in the original title V permit. The Petitioner asserts that based on the single boiler experience at the Zuni Station, the CDPHE (and EPA) should require periodic opacity measurements for the combined cycle combustion turbines in the Ft. St. Vrain title V permit.

As noted above, EPA must object to a title V permit based on a petition for review only where the petitioner demonstrates that the permit is not in compliance with the applicable requirements of the Act. See CAA § 505(b)(2); 40 CFR § 70.8(d). EPA does not agree that one incidence of opacity problems at a natural gas fired boiler demonstrates that the monitoring requirements at the Ft. St. Vrain Station, a facility that

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3 In addition to the Fort James Camas Mill Petition Response Order, EPA has made other determinations that direct emission monitoring is not required in every situation in order to satisfy 40 CFR § 70.6(a)(3) (see Petition Response Orders for Kerr-McGee Chemicals, LLC’s Mobile Alabama Chemical Manufacturing Facility (IV-2000-1), Doe Run Company Buick Mine and Mill (VII-1999-001), Shaw Industries, Inc. Plant No. 2 (IV-2001-10), and Shaw Industries, Inc. Plant No. 80 (IV-2001-9)).
operates natural gas fired combined cycle turbines, must be revised. First, the situation at the Zuni Station involved opacity from a natural gas fired boiler. This is an external combustion unit, as opposed to the internal combustion gas turbines at the Ft. St. Vrain facility. Combustion of fuel in a boiler typically occurs at much different temperatures and pressures as compared to internal combustion gas turbines. Furthermore, the combustion chamber for a boiler would typically be much larger than that of an internal combustion gas turbine, making for significant differences in the mixing of air and fuel during combustion. These factors significantly affect the combustion mechanisms and consequently the formation of emissions.

On the other hand, the three combined cycle turbines all include heat recovery steam generators (HRSG), equipped with natural gas duct burner firing capability. Duct firing in the HRSG is an external combustion source and would be under similar combustion conditions as the boilers at Zuni. The permit conditions give each combined cycle turbine the ability to consume approximately 25 percent of their total annual fuel consumption from duct firing. Therefore, under these circumstances, the majority of the emissions would not come from duct firing, but from the combustion turbines.

Therefore, the Zuni Station in relevant part is not similar to the Ft. St. Vrain combustion turbines, nor has the Petitioner provided any evidence that there have been any violations of the opacity standards at the Ft. St. Vrain facility.

C. Midwest Generation, LLC, Fisk Generating Station Operating Permit

Finally, the Petitioner cites a paragraph out of the Response Order for Midwest Generation, LLC Fisk Generating Station (V-2004-1), where EPA required the removal of a permit condition note that says, "(f)urther compliance procedures are not set by this permit as compliance is assumed to be inherent in operation of an affected boiler under operating conditions other than startup or shutdown." (emphasis in original). The Petitioner claims this note is analogous to the presumption in the Ft. St. Vrain title V permit that the combined cycle turbines will be in compliance with the opacity limits whenever natural gas is combusted. The Petitioner alleges that the Ft. St. Vrain permit fails to contain any opacity monitoring whatsoever. As such, the Petitioner insists that the position taken by EPA in the Fisk Response Order must also be applied by EPA in the Response Order for Ft. St. Vrain.

EPA disagrees. As described in the Fisk Response Order, the permit condition does require direct emission testing for the emission limit in question, "(c)ompliance with the CO emission limitation in 7.1.4(d) is addressed by emission testing in accordance with Condition 7.1.7." Petition no. V-2004-1 (March 25, 2005) at 9. EPA’s problem with the note’s language “compliance is assumed to be inherent” was that it “could be read as eliminating the need for any of the compliance requirements (testing, monitoring, recordkeeping, and reporting) of part 70 to determine whether the facility is complying with the CO emission limits in the permit.” Id. In addition, EPA said that the language was “not in compliance with the annual compliance certification requirements under part
70" because the "permit may not authorize the facility to certify compliance based on something else, such as an assumption that compliance is inherent." *Id.*

The distinction between the two permit conditions is that compliance with the opacity standard in the Ft. St. Vrain permit is not automatically assumed to be inherent. The Ft. St. Vrain permit does contain opacity monitoring requirements in the form of recordkeeping requirements to allow the facility to certify compliance. For Ft. St. Vrain, compliance for each combined cycle turbine is determined based on the source's natural gas fuel restriction, which in turn, is based on CDPHE's experience with the use of natural gas in combined cycle combustion turbines. The fuel restriction and associated recordkeeping is intended to be the means of satisfying the periodic monitoring requirement under 40 C.F.R. § 70.6(a)(3), which would then be used by the source to certify compliance with those terms of the permit. Section 70.6(a)(3) states that recordkeeping provisions may be sufficient to meet the periodic monitoring requirements of that paragraph.

EPA agrees with CDPHE's response to Petitioner's public comments, which concluded that based on experience, opacity emissions from natural gas fired turbines are typically well below the 20% limitation. As stated previously, EPA believes that natural gas is a clean burning fuel and the likelihood of these units exceeding the applicable opacity standard (i.e., 20 percent) is considered minimal. *See* Shaw Industries, Inc. Plant No 2 Petition IV-2001-10 at 10. Furthermore, in the preamble to the proposed New Source Performance Standard for Stationary Combustion Turbines (40 C.F.R. part 60, proposed Subpart KKKK, Federal Register, Volume 70, No. 33, February 18, 2005), EPA explains why it is not proposing a particulate matter standard for this source category, "[p]articulate matter emissions are negligible with natural gas firing due to the low sulfur content of natural gas." Based on this experience, direct opacity readings do not need to be required for such facilities to assure compliance with opacity limits.

V. **CO Emission Limits.**

Petitioner's fifth claim alleges that the "Title V permit for the Ft. St. Vrain Station sets unenforceable CO emission limits and/or fails to ensure compliance with CO limits in relation to operation of emission unit T002, T003, and T004 during startup, shutdown, combustion tuning, and testing." Ft. St. Vrain Petition at 13. Neither the Petitioner nor any other party raised any issues relating to the enforceability or ensuring compliance with the CO limits during the public comment period.

Accordingly, for the same reasons as discussed in Section I. above, Petitioner's fifth claim is denied. *See* CAA § 505(b)(2); 40 CFR § 70.8(d).

VI. **Specific Permit Conditions.**
A. Manufacturer’s Recommendations and Good Engineering Practices for the NOx Combustion Systems.

Petitioner’s claim alleges that permit Condition 1.1.1.1 fails to explain what the specific manufacturer’s recommendations and good engineering practices are in order to ensure that the dry low NOx combustion system for emissions units T002 and T003 are operated and maintained properly. Ft. St. Vrain Petition at 14. Neither the Petitioner nor any other party raised any issues relating to the manufacturer’s recommendations and good engineering practices for emissions units T002 and T003 during the public comment period.

Accordingly, for the same reasons as discussed in Section I. above, Petitioner’s sixth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

B. SO2 Emissions Monitoring.

Petitioner’s claim alleges that permit conditions 1.41., 1.4.2, 1.4.3, 2.4.3, and 2.4.4 inappropriately presume compliance with SO2 emission limits when pipeline natural gas is used. Ft. St. Vrain Petition at 16. In addition, the Petitioner alleges that the permit erroneously incorporates the SO2 monitoring provisions of 40 C.F.R. § 75.11. Ft. St. Vrain Petition at 17. Neither the Petitioner nor any other party raised any issues relating to the compliance with these permit Conditions or the requirements of 40 C.F.R. § 75.11 during the public comment period.

Accordingly, for the same reasons as discussed in Section I. above, Petitioner’s seventh claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

C. SO2 Emissions Monitoring – Annual Limits.

Petitioner’s claim alleges permit conditions 1.4.4 and 2.4.1 are unclear in how SO2 emissions will be monitored under 40 C.F.R. § 75.11, since the regulation outlines multiple monitoring options and exemptions from continuous emissions monitoring. Ft. St. Vrain Petition at 18. Neither the Petitioner nor any other party raised any issues relating to the monitoring of SO2 emissions in these permit conditions during the public comment period.

Accordingly, for the same reasons as discussed in Section I. above, Petitioner’s eighth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).


Petitioner alleges permit condition 1.5 fails to specify sufficient periodic monitoring to ensure compliance with volatile organic compound (“VOC”) emission limits for emissions units T002 and T003. Ft. St. Vrain Petition at 19. Neither the Petitioner nor any other party raised any issues relating to the periodic monitoring for this permit condition during the public comment period.
Accordingly, for the same reasons as discussed in Section I. above, Petitioner’s
ninth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

E. Particulate Matter Emissions.

Petitioner alleges permit conditions 1.6 and 2.2 rely on use of pipeline quality
natural gas to demonstrate compliance with the emission limits. Ft. St. Vrain Petition at 20. Neither the Petitioner nor any other party raised any issues relating to compliance with these permit conditions during the public comment period.

Accordingly, for the same reasons as discussed in Section I. above, Petitioner’s
tenth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

F. Periodic Monitoring of Volatile Organic Compounds Emission Limits
for T004.

In comments submitted to CDPHE on April 14, 2005, the Petitioner alleged that
the permit “lacks credible and sufficient supporting data to ensure that VOCs are
adequately monitored and to ensure compliance with the VOC emission limits at Turbine 004.” The Petitioner bases this alleged deficiency on the condition’s reliance upon a “VOC correlation” (VOC emissions versus heat input) that, as the permit expressly states, has yet to be approved.

In its response to public comments, CDPHE stated

The performance tests conducted for Turbine 4 were conducted at various loads
and the results indicate compliance with the VOC emission limits at all loads.
The construction permit (99WE0762) issued for Turbine 4 did not require
development of a VOC correlation to continuously monitor VOC emissions. The
construction permit for Turbine 4 only required that a performance test be
conducted to demonstrate compliance with the VOC emission limit; thereafter the
Division would generally expect that the source use an emission factor and the
quantity of fuel consumed to demonstrate compliance with the VOC emission
limits. The use of a VOC correlation provides the hourly VOC emission rate as
determined by the correlation curves and can provide a more accurate assessment
of the VOC emissions than a single emission factor. Therefore the Division
considers the use of the VOC correlation to assess VOC emissions is sufficient to
monitor compliance with the VOC emission limit. Although the VOC correlation
is not approved, the Division will require changes to the correlation and/or
additional testing if such changes and additional testing are necessary to approve
the correlation.

In his petition, the Petitioner restates the alleged permit deficiency regarding the
lack of approval of the VOC correlation and its inherent inability to satisfy the periodic
monitoring requirements of 40 C.F.R. § 70.6(a)(3) until it is approved.
As a practical matter, EPA agrees with the Petitioner that title V permits need to establish "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit," as required by 40 C.F.R. § 70.6(a)(3)(i)(B). At the time the permit was issued, CDPHE had not approved the VOC correlation according to the language in Section II Condition 2.3 of the permit. In its response to public comments, CDPHE reasons that since TO04 demonstrated compliance with the VOC limit at various loads and that a VOC correlation would provide more accurate data than using an otherwise-approved emission factor, "the Division considers the use of the VOC correlation to assess VOC emissions is sufficient to monitor compliance with the VOC emission limit." While this might be true for an approved VOC correlation, EPA believes that if the VOC correlation was not approved by CDPHE, it would be impossible for CDPHE to have determined whether or not the VOC correlation in question would satisfy the periodic monitoring provisions of 40 C.F.R. § 70.6(a)(3)(i)(B). As such, CDPHE should have reviewed the VOC correlation and made a determination of whether it was approvable prior to issuing the title V permit.

EPA believes that if the VOC correlation is to be the means of periodic monitoring used to satisfy 40 C.F.R. § 70.6(a)(3)(i)(B), the provisions of the correlation have to be contained in the permit itself. As it stands, the permit is unclear how compliance with the ton per year VOC limit is monitored in the title V permit. In reviewing the VOC correlation, it appears there are two equations used to calculate VOC emissions (one for the combustion turbine and one for the duct burners) based on the heat input, which is continuously monitored. If CDPHE is relying on these equations to satisfy 40 C.F.R. § 70.6(a)(3)(i)(B), they should be included in the permit.

As a general matter, EPA does not oppose the use of a VOC correlation to monitor compliance with the ton per year VOC limit. However, we do not believe that the way the VOC correlation has been incorporated into the title V permit satisfies the requirements of 40 C.F.R. § 70.6(a)(3)(i)(B). Furthermore, we believe CDPHE erred in issuing a final title V permit prior to approving the means of satisfying the periodic monitoring requirements.

For the reasons discussed above, this petition issue is granted. CDPHE must revise the permit and incorporate the provisions of the VOC correlation that CDPHE has determined to be approvable, directly into Section II Condition 2.3.

G. NOx and Diluent Monitors.

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4 Permitting authorities are required to incorporate into permits the monitoring imposed by underlying applicable requirements and must add periodic monitoring during the permitting process when the underlying requirements contains no periodic testing, specifies no frequency, or requires only a one-time test. See 71 FR 75422 (Dec. 15, 2006). In this case, the underlying applicable requirement contains no monitoring of a periodic nature. CDPHE is therefore required to include periodic monitoring in the permit consistent with 40 CFR § 70.6(a)(3)(i)(B) and CDPHE Reg. 3, Part C, § 5.V.C.5.b

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Petitioner alleges permit condition 5.2.1.1 references 40 CFR § 75.11(e) in err. Ft. St. Vrain Petition at 21. Neither the Petitioner nor any other party raised any issues relating to this reference to the federal rule during the public comment period.

Accordingly, for the same reasons discussed in Section I above, Petitioner’s twelfth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

H. Permit Condition 29 Monitoring.

Petitioner alleges the operating permit fails to require any periodic monitoring to ensure compliance with permit condition 29. Ft. St. Vrain Petition at 21. Neither the Petitioner nor any other party raised any issues relating to the monitoring for this permit condition during the public comment period.

Accordingly, for the same reasons discussed in Section I. above, Petitioner’s thirteenth claim is denied. See CAA § 505(b)(2); 40 CFR § 70.8(d).

CONCLUSION

For the reasons set forth above and pursuant to section 505(b)(2) of the Clean Air Act, Mr. Nichols’ petition is granted in part and denied in part.

Dated: FEB - 5 2007

Stephen L. Johnson
Administrator