BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	ORDER RESPONDING TO
	)	PETITIONER'S REQUEST
WISCONSIN PUBLIC SERVICE	)	THAT THE ADMINISTRATOR
CORPORATION'S JP PULLIAM	)	OBJECT TO ISSUANCE OF
POWER PLANT	)	STATE OPERATING PERMIT
	)	
Permit No. 405031990-P20	)	
Issued by the Wisconsin	)	Petition Number V-2009-01
Department of Natural Resources	)	

ORDER GRANTING PETITION FOR OBJECTION TO PERMIT

On April 30, 2009, pursuant to its authority under the state of Wisconsin's implementing statute, Wis. Stat. Ann. 285.62-285.64, and regulations, Wis. Admin. Code NR 407, title V of the Clean Air Act (Act), 42 U.S.C. §§ 7661-7661f, and the U.S. Environmental Protection Agency's implementing regulations at 40 C.F.R. Part 70, the Wisconsin Department of Natural Resources (WDNR) issued a title V renewal operating permit to the Wisconsin Public Service Corporation's JP Pulliam power plant (JP Pulliam). The JP Pulliam plant is a 400 megawatt (MW) electric generation facility that primarily consists of six coal-fired boilers.

On June 25, 2009, David Bender of Garvey McNeil & McGillivray, SC, submitted to the U.S. Environmental Protection Agency (EPA) on behalf of the Sierra Club (Petitioner) a petition requesting that EPA object to issuance of the JP Pulliam title V permit pursuant to Section 505(b)(2) of the Act and 40 C.F.R. § 70.8(d). Petitioner alleges that (1) the permit omits more stringent applicable particulate matter (PM) emission limits for boilers B24, B25, B26 and B27[1] because the units are: (a) subject to the lower limits established in a preconstruction permit issued on October 15, 2008, pursuant to Wisconsin's State Implementation Plan (SIP), and/or (b) subject to a SIP provision providing for a lower PM limit for units modified after April 1972 because these units were modified in the late 1980s; (2) the permit omits the maximum hourly heat input limits that are applicable because they were contained in a preconstruction permit application submitted by the permittee and relied upon by WDNR to issue a New Source Review (NSR) synthetic minor permit; and (3) the permit's PM monitoring for the boilers and PM and visible emissions monitoring for certain material handling sources are deficient.

EPA has reviewed these allegations pursuant to the standard set forth in Section 505(b)(2) of the Act, which requires the Administrator to issue an objection if a petitioner demonstrates to the Administrator that the permit is not in compliance with the applicable

[1] The petition lists the boilers as B23, B24, B25, and B26 on page 2. However, the boilers are identified elsewhere in the petition and in Sierra Club's March 17, 2008, comments on the draft JP Pulliam title V permit as boilers B24, B25, B26 and B27. We believe Petitioner meant boilers B24, B25, B26, and B27 on page 2 of the petition and have addressed the Petition accordingly.

requirements of the Act. *See also* 40 C.F.R. § 70.8(d); *New York Public Interest Research Group v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003).

Based on a review of the available information, including the petition, the permit record, and the relevant statutory and regulatory authorities and guidance, I grant the petition for the reasons set forth in this Order.

STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program to meet the requirements of title V. EPA granted final full approval of the Wisconsin title V operating permit program effective November 30, 2001. 66 Fed. Reg. 62946 (December 4, 2001).

All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions necessary to assure compliance with applicable requirements of the Act, including the requirements of the applicable SIP. *See* Sections 502(a) and 504(a) of the Act, 42 U.S.C. §§ 7661a(a) and 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements (referred to as "applicable requirements"), but does require that permits contain monitoring, recordkeeping, reporting, and other requirements to assure compliance by sources with existing applicable emission control requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992) (EPA final action promulgating part 70). One purpose of the title V program is to "enable the source, states, EPA, and the public to better understand the requirements to which the source is subject, and whether the source is meeting those requirements." Id. 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, 42 U.S.C. § 7661d(a), and the relevant implementing regulations at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to EPA for review. Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the permit if EPA determines the permit is not in compliance with applicable requirements or the requirements of title V. 40 C.F.R. § 70.8(c). If EPA does not object to a permit on its own initiative, Section 505(b)(2) of the Act provides that any person may petition the Administrator, within 60 days of expiration of EPA's 45-day review period, to object to the permit. 42 U.S.C. § 7661d(b)(2). *See also* 40 C.F.R. § 70.8(d). The petition must "be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period)." 42 U.S.C. § 7661d(b)(2). In response to such a petition, the Administrator must issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. *Id. See also* 40 C.F.R. § 70.8(c)(1); *New York Public Interest Research Group*, 321 F.3d at 333 n.11. Under Section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to EPA. *Sierra Club v. Johnson*, 541 F.3d 1257, 1266-1267 (11th Cir. 2008); *Citizens Against Ruining*

the Environment v. EPA, 535 F.3d 670, 677-678 (7th Cir. 2008); *Sierra Club v. EPA*, 557 F.3d 401, 406 (6th Cir. 2009) (discussing the burden of proof in title V petitions). If, in responding to a petition, EPA objects to a permit that has already been issued, EPA or the permitting authority will modify, terminate, or revoke and reissue the permit consistent with the procedures set forth in 40 C.F.R. §§ 70.7(g)(4), (5)(i) - (ii) and 70.8(d).

BACKGROUND

The Wisconsin Public Service Corporation (WPSC) submitted to WDNR on June 12, 2007, an application to renew the title V permit for the JP Pulliam plant. WDNR published the public notice of the draft title V permit on February 13, 2009. WDNR proposed the title V renewal permit to EPA on March 25, 2009, and EPA did not object to the permit. WDNR issued the final permit on April 30, 2009.

Under the statutory timeframe in Section 505(b)(2) of the Act, July 8, 2009, was the deadline to file a petition requesting that EPA object to the issuance of the final JP Pulliam permit. Petitioner submitted its petition to object to the issuance of the JP Pulliam permit to EPA on June 25, 2009. Accordingly, EPA finds that Petitioner timely filed its petition.

ISSUES RAISED BY PETITIONER

I. Particulate Matter Emission Limits

Petitioner alleges that the permit omits applicable PM emission limits for boilers B24, B25, B26 and B27. Specifically, Petitioner asserts that the permit fails to include applicable PM limits from preconstruction permit 07-SDD-311, issued on October 15, 2008. Petition at 2. According to Petitioner, the preconstruction permit contains the following PM limits:

- Emissions may not exceed 69.3 pounds per hour for Boiler B24, 87.5 pounds per hour for Boiler B25 and 0.10 pounds of particulate matter from any stack per million BTU of heat input. [s. NR 415.06(2)(c), Wis. Adm. Code]." Permit 07-SDD- 311 § I.A.1.a.(1).

- Emissions may not exceed 99.9 pounds per hour for Boiler B26, 151.0 pounds per hour for Boiler B27 and 0.10 pounds of particulate matter from any stack per million BTU of heat input. [s. NR 415.06(2)(c), Wis. Adm. Code]." Permit 07-SDD-311 § I.B.1.a.(1).

Petition at 2-3.

Petitioner further alleges that these boilers were modified in the late 1980s and are therefore subject to the PM limit in the Wisconsin SIP at Wis. Admin. Code § NR 415.06(2)(c). Petition at 5. According to Petitioner, NR 415.06(2)(c) requires that "[a]ll installations on which construction or modification is commenced after April 1, 1972 shall meet the emission limitations of this subsection... Installations of more than 250 million Btu per hour: maximum emission from any stack of 0.10 pounds of particulate matter per million Btu heat input." Petition at 3, quoting Wis. Admin Code § NR 415.06(2)(c). Notwithstanding that requirement, Petitioner notes that the title V permit contains a prohibition on PM emissions in excess of 0.30

pounds of PM from any stack per million BTU of heat input, and, therefore, the permit is not in compliance with the applicable SIP. Petition at 2-3 and 6.

Petitioner claims that WDNR responded to its comment on including the lower PM emission limits from preconstruction permit 07-SDD-311 by stating that "[t]he particulate matter limits from permit 07-SDD-311 are not included in the operation permit renewal because JP Pulliam has not completed the project described in permit 07-SDD-311." Petition at 3, quoting Memorandum from Wulk, WDNR, to Pyle, WDNR (April 30, 2009) ("Response to Comment"), at 2. Petitioner claims that a schedule provided by JP Pulliam to WDNR shows that modifications to Units 5 and 6 (boilers B24 and B25, respectively) were to be completed in the spring of 2009 and the modifications to Unit 7 (boiler B26) were to be completed in the fall of 2009. Petition at 3-4. Petitioner further asserts that Wis. Admin. Code § NR 415.06(2)(c) applies to "any installation where construction or modification has *commenced*, not once construction or modification is *completed*." Petition at 4 (emphasis in original). Petitioner states that, pursuant to a requirement of preconstruction permit 07-SDD-311, WPSC notified WDNR that construction commenced on January 22, 2009. Petition at 4-5.

Petitioner further claims that WDNR failed to respond to the portion of its comments that pointed out that the boilers were previously modified in the late 1980s under preconstruction permits 87-AJH-027 and 88-AJH-101. Petition at 5. Petitioner notes that the title V permit PM limit, 0.3 lb/MMBtu, is three times higher than the applicable limits in NR 415.06(2)(c) and permit 07-SDD-311. Petition at 6. Petitioner maintains that for all of these reasons the proposed title V permit is not in compliance with the Act and the Administrator should object. *Id.*

EPA's Response. For the reasons described below, the Petition is granted with respect to the above claims.

Petitioner claims that the permit fails to include the PM limits from two applicable requirements: (1) the PM limits from preconstruction permit 07-SDD-311 (Permit 311); and (2) the PM limit from the Wisconsin SIP at NR 415.06(2)(c). A title V permit must include all applicable requirements. *See* 40 C.F.R. §§ 70.5(c)(4) and 70.6(a)(1). The term "applicable requirement," as defined under part 70, includes "any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act." 40 C.F.R. § 70.2. Similarly, the term "applicable requirement" under Wisconsin's title V permit regulations is defined to include "[a]ny term or condition of any construction permit issued pursuant to ch. NR 405, 406 or 408." Wis. Admin Code § NR 400.02(26)(b). In addition, both part 70 and Wisconsin's title V operating permits regulations include in the definition of "applicable requirement" those requirements that will become effective during the term of the title V permit. *See* 40 C.F.R. §§ 70.2, 70.5(c)(4) and (8), and Wis. Admin. Code § NR 400.02(26). In its Response to Comments on this issue, WDNR stated that the PM limits from Permit 311 "are not included in the operation permit renewal because Pulliam has not completed the projects described in the permit. The more restrictive limits *are not applicable* until Pulliam completes the project." Response to Comment at 2 (emphasis added). WDNR responded in this manner even though Permit 311 was issued in October 2008, several months before the JP Pulliam title V renewal permit was issued. WDNR did not provide any legal justification for its position that the PM limits in the preconstruction

permit are not applicable until the relevant projects are completed, and WDNR's action was contrary to both part 70 and Wisconsin's title V operating permit regulations that define the term "applicable requirement" to include requirements that will become effective during the permit term. *See* 40 C.F.R. §§ 70.2, 70.5(c)(4) and (8), and Wis. Admin. Code § NR 400.02(26). Based on EPA's and Wisconsin's definition of "applicable requirement," as described above, the PM limits in Permit 311 are applicable requirements and, as such, must be included in the title V operation permit. I therefore grant the petition on this issue and direct WDNR to include the PM limits from Permit 311 in the title V renewal permit.

Additionally, Petitioner claims that the PM limit in the Wisconsin SIP at NR 415.06(2)(c) applies and must be included in the title V permit. Petitioner alleges that, regardless of when the modification covered by Permit 311 is complete, the boilers were modified in the late 1980s, thus triggering the lower emission limit in NR 415.06(2)(c). Petition at 5. Petitioner notes that it commented on this issue during the public comment period for the draft title V permit and that WDNR failed to respond to this comment. *Id.*

WDNR has an obligation to respond adequately to significant comments on the draft title V permit. Section 502(b)(6) of the Act, 42 U.S.C. § 7661a(b)(6), requires that all title V permit programs include adequate procedures for public notice regarding the issuance of title V operating permits, "including offering an opportunity for public comment." *See also* 40 C.F.R. § 70.7(h). It is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments. *Home Box Office v. FCC,* 567 F.2d 9, 35 (D.C. Cir. 1977) ("the opportunity to comment is meaningless unless the agency responds to significant points raised by the public."). *See, e.g., In the Matter of: Louisiana Pacific Corporation*, Petition V-2006-3, at pages 4-5 (Nov. 5, 2007). During the public comment period, Petitioner commented that the source is subject to the lower PM limit (0.1 lb/MMBtu) provided by the SIP at NR 415.06(2)(c) because of modifications in the late 1980s that are covered by Permits 87-AJH-027 and 88-AJH-101 (Permits 027 or 101, respectively). Petition at 5-6. Petitioner's comment was a significant comment because it called into question whether the JP Pulliam title V permit included an applicable requirement for boilers B24, B25, B26 and B27 (i.e., the PM limit in the Wisconsin SIP at NR 415.06(2)(c)). In its Response, WDNR discussed the nitrogen oxide (NOx) limits in the permits identified above that covered these projects in the 1980s, but not the PM limits relative to these projects, which was the subject of Petitioner's comment. See Response to Comment at 2. More importantly, Wisconsin's Response did not address Petitioner's comment that the modifications that occurred in the late 1980s triggered applicability of the lower PM limit (0.1 lb/MMBtu) provided for in the SIP. *Id.* For the reasons stated above, EPA concludes that WDNR failed to respond to a significant comment and that this failure may have resulted in one or more deficiencies in the JP Pulliam title V permit. Therefore, I grant the petition on this issue and order WDNR to address Petitioner's comment on the applicability of the PM limit in NR 415.06(2)(c) to the modifications to boilers B24, B25, B26 and B27 in the late 1980s, and to incorporate this PM limit into the JP Pulliam title V permit if it determines that NR 415.06(2)(c) applies.

II. Heat Input Limits[2]

Petitioner alleges that the permit omits the heat input limits for boilers B24 and B25 contained in the preconstruction permit application for Permit 27. Petition at 7. Petitioner alleges that these heat inputs are "applicable requirements" because "they were made as representations in the permit application for [Permit 027] and the preconstruction permit and Wisconsin SIP [at NR 406.10] provide that the plant must be constructed and operated consistent with the application." *Id.* Petitioner asserts that WDNR relied on those heat input representations to issue synthetic minor Permit 027. Petition at 9. Petitioner claims that WDNR's "Preliminary Determination (Statement of Basis) confirms that it relied upon the represented maximum heat input to calculate maximum emission rates prior to and after installation of the burners." *Id.* Petitioner also claims that Permit 027 contains a requirement to construct and operate "as described" in particular plans and specifications, including the permit application containing the heat input rates at issue, and that this requirement in Permit 027 "largely mirrors" the SIP requirement at NR 406.10 that a construction project conform with the application made to WDNR. Petition at 10. Petitioner further claims that, although WPSC originally intended to use the gas burners only for startup, it later decided to use them to provide supplemental heat when burning lower sulfur and lower Btu coal. Petition at 11. According to Petitioner, in a September 7, 1993, letter from Alan Hubbard, WDNR, to Gary Van Helvoirt, WPSC (1993 letter), WDNR "notes that [the proposed use of the gas burners] is appropriate only if WPSC *does not use the gas capacity to increase the total heat input into the boiler*." Petition at 11 (emphasis in original). Petitioner asserts that WDNR "relied on WPSC's stated maximum heat rates to determine that the gas burners would not increase heat input [of] the boilers … and [concludes] that a preconstruction permit was not needed to use the burners to supply heat rather than merely startup." Petition at 11. Petitioner claims that WPSC's heat input rate representations were central to WDNR's permitting decisions. *Id.* Petitioner further claims that WDNR's reference to the 1993 letter in its Response to Comment further reinforces Sierra Club's comment because "the letter points out that [WDNR's] assumption was that the gas burners do not increase the maximum heat rate of the boilers." Petition at 12. Petitioner contends that, absent the limit on boiler heat input, adding the gas burners to the boilers would have triggered Prevention of Significant Deterioration and New Source Performance Standards requirements by increasing the boilers' heat input capacity and, therefore, potential emissions. *Id.*

Petitioner asserts that it commented on incorporating into the title V permit the heat input rates represented in the permit application for Permit 027, and that WDNR responded that "[the] limitations in Permit No. 87-AJH-027 were stated to be eliminated in a letter from Al Hubbard, [WDNR], to WPSC, dated 9/7/93, in which it is stated that in the Department's opinion, no change is needed to Permit No. 87-AJH-027 to have these limitations eliminated …." Petition at 11-12, quoting Response to Comment at 2. Petitioner claims that "[WDNR's] response does not mention, nor respond to, Sierra Club's comment regarding maximum heat rate represented in WPSC's application, which constitute applicable requirements because of the preconstruction

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[2] Although an introductory statement in the petition summarizing this allegation also mentions fuel usage and maximum generation limits (see Petition at 2), the Petitioner narrows its allegation to only heat input in section II of the petition. We therefore conclude that this allegation pertains only to the heat input rates and respond accordingly.

permit and the Wisconsin SIP's requirement that the boilers be constructed and operated consistent with the application." Petition at 12.

EPA's Response. For the reasons described below, the Petition is granted with respect to the above claims.

Petitioner claims that the heat input rates represented in the preconstruction permit application for Permit 027 are applicable requirements and must therefore be included in the JP Pulliam title V permit. In support, Petitioner cites to two applicable requirements: the Wisconsin SIP at NR 406.10 and a statement in Permit 027. NR 406.10 provides that:

> Any owner or operator who fails to construct a stationary source in accordance with the application as approved by the department; any owner or operator who fails to construct and operate a stationary source in accordance with conditions imposed by the department under s. *285.65, Stats.*; any owner or operator who modifies a stationary source in violation of conditions imposed by the department under s. *285.65, Stats.*; or any owner or operator who commences construction or modification of a stationary source without applying for and receiving a permit as required under this chapter or ch. NR 408 shall be considered in violation of s. *285.60, Stats.*

The statement in Permit 027 referenced by Petitioner provides that WPSC "is authorized to construct and operate a series of natural gas-fired burners for steam generating units 3, 4, 5, and 6 at the JP Pulliam power plant, *described in the plans and specifications* dated April 7, 1987, May 7, 1987, and June 8, 1987, in conformity with the conditions herein." Petition at 10, quoting Permit 027, p. 1 (emphasis added). (Units 3 though 6 relate to boilers B22 through B25, respectively).

It is not clear from the language set forth above whether Permit 027 incorporated the "plans and specification" contained in the preconstruction permit application and thereby made those provisions applicable requirements. It is also unclear whether WDNR interprets NR 406.10 to include the contents of preconstruction permit applications as a requirement of that SIP provision, thus making the terms of preconstruction permit applications applicable requirements. In either case, the heat input rates would become applicable requirements and must therefore be included in the JP Pulliam title V permit. In addition, if WDNR relied on the heat input rates to issue the synthetic minor Permit 027 and to determine in the 1993 letter that the proposed project mentioned in that letter did not require modification of Permit 027, as Petitioner alleges, then the heat input rates may be necessary to assure compliance with Permit 027, and WDNR must either include those heat input rates in the title V permit or explain why inclusion of the rates is not required to assure compliance with Permit 027. *See* 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(1) (requiring title V permits to contain monitoring sufficient to assure compliance with applicable requirements).

As discussed above in the response to Issue I, WDNR has an obligation to adequately respond to significant public comments on draft title V operating permits. Petitioner's comment about the heat input rates was a significant comment because it raised an issue that WDNR may have failed to incorporate certain applicable requirements into the JP Pulliam title V permit, or

failed to incorporate into the title V permit terms and conditions necessary to assure compliance with applicable requirements. As described above, WDNR responded by stating that the NOx limits in Permit 027 "were stated to be eliminated" in the 1993 letter regarding a proposed natural gas use expansion project. WDNR's response did not mention the heat input rates provided in the preconstruction permit application, much less address whether these heat input rates are applicable requirements. WDNR's failure to respond to this significant comment may have resulted in one or more deficiencies in the JP Pulliam title V permit. Therefore, I grant the petition on this issue and order WDNR to adequately respond to the comment that the JP Pulliam title V permit must include the heat input rates provided in the application for Permit 027 for boilers B24 and B25. Specifically, I direct WDNR to address the following issues, which were raised either in the original comment or in this petition responding to WDNR's Response to Comment:

- Whether Wisconsin SIP NR 406.10 and/or the provision in Permit 027 described above incorporate the contents (including heat input rates) of a preconstruction permit application into the Wisconsin SIP and/or preconstruction permit, thus making the contents of the permit application part of these applicable requirements.
- Whether WDNR had relied on the heat input rates in issuing Permit 027 and/or making the permitting decision described in the September 7, 1993, letter, and, if so, whether the heat input rates must be included in the title V permit to assure compliance with Permit 027.

If WDNR determines that the heat input rates are applicable requirements or are necessary to assure compliance with applicable requirements, it must revise the title V permit to include the heat input rates.

III. Particulate Matter and Visible Emissions Monitoring[3]

Petitioner alleges that the permit's PM monitoring for the boilers and PM and visible emissions monitoring for certain material handling sources are insufficient, and that WDNR failed to provide sufficient explanation for the permit's monitoring in its Response to Comment on these issues. We describe in more detail these allegations and our responses below.

A. PM Emission Monitoring for the Boilers

Petitioner alleges that the PM monitoring in the permit is deficient. According to Petitioner, there is no continuous, direct monitoring of PM from the boilers. Petition at 13. Petitioner states that the permit relies instead on a stack test every 24 months or less, monitoring of electrostatic precipitator (ESP) parameters once every eight hours, defining "normal performance" of ESP parameters in an off-permit "Malfunction, Prevention and Abatement Plan" that will be submitted after permit issuance without public notice and comment, and inspecting the ESP on an undefined schedule. *Id.* Petitioner claims that WDNR does not explain in the Statement of Basis, or anywhere else, how this monitoring is sufficient to assure that the ESP is achieving the minimum control efficiency required to achieve the instantaneous PM

[3] As discussed in Issue III.B, Petitioner also alleges in this section of the petition inadequate visible emissions monitoring in the permit for certain material handling sources.

emission limit. Petition at 14. Petitioner states that the permit, therefore, has the same deficiency that EPA recently found in another title V permit. *Id.*, citing *In re WE Energies Oak Creek Power Plant* (June 12, 2009), at 15-16. In particular, Petitioner claims that monitoring must incorporate both a quantitative element and a temporal element. Petition at 14-15. Petitioner states that the temporal element requires that the monitoring correspond to the averaging period for the emission limit. Petition at 15. Noting that the PM limits in the JP Pulliam permit are instantaneous, Petitioner asserts that the monitoring must be sufficient to show that each boiler is emitting at or below the PM limit at all times. *Id.* Petitioner claims that WDNR did not explain how a one-time snapshot every eight hours provides assurance that emissions during any other minute were in compliance. *Id.* Further, Petitioner asserts that, "[w]here compliance depends on continuous effectiveness of the ESP device, and [where parameters] are reliable indicators of when the ESP is working correctly and achieving adequate emission reductions, the permit must identify the parameter operating ranges in which [WDNR] is sure that the plant is complying with the applicable requirements." Petition at 15-16. Petitioner claims that WDNR not only failed to establish an enforceable range for the ESP parameters in the JP Pulliam permit, but that the permit "inexplicably exempts the plant from operating the ESP devices during periods of startup and shutdown, despite the fact that the underlying, instantaneous, SIP limits on PM emissions apply at all times." Petition at 17.

Petitioner asserts that it raised this issue in its comment on the draft JP Pulliam title V permit, and that WDNR responded as follows:

> Periodic stack testing for the boilers and ESPs is required by s. NR 439.075(2)(a) and NR 439.075(3)(b), Wis. Adm. Code. The ESP parameters are monitored continuously and recorded a minimum of once for every eight hours of operation as required by s. NR 439.055(1)(c), and 439.055(2)(b), Wis. Adm. Code. The applicable parameters are defined in the Malfunction, Prevention and Abatement Plan and are based on stack testing and operating experience. The proposed permit will require that the plan and parameters be approved in writing by the Department and the plan must include actions to be taken if parameters are measured outside the Plan range. A limit with units of pounds per million Btu heat input may seem like an instantaneous limit, however compliance may be averaged over three hours of stack testing and the emission rate may be used to show compliance with a 24 hour standard.

Petition at 17, quoting WDNR's Response to Comment at 2-3.

Petitioner asserts that WDNR's requirement that JP Pulliam set enforceable ESP parameters in an off-permit Malfunction Prevention and Abatement Plan, at a later date and outside of the title V permit and the public process, is unlawful. Petition at 18. Citing to 40 C.F.R. §§ 70.6(a)(3)(i), 70.6(c), 70.7(a)(5) and 70.7(h)(2). Petitioner asserts that WDNR must establish monitoring in the permit and provide a sufficient explanation for that monitoring in the Statement of Basis that is available to the public for comment. *Id.*

EPA's Response. For the reasons described below, the Petition is granted with respect to the above claims.

EPA's part 70 monitoring rules (40 C.F.R. §§ 70.6(a)(3)(i)(A) and (B) and 70.6(c)(1)) are designed to satisfy the statutory requirement that "[e]ach permit issued under [title V] shall set forth . . . monitoring . . . requirements to assure compliance." Section 504(c) of the Act, 42 U.S.C. § 7661c(c). As a general matter, authorities must take three steps to satisfy the monitoring requirements in part 70 regulations. First, under 40 C.F.R. § 70.6(a)(3)(i)(A), permitting authorities must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit. Second, if the applicable requirement contains no periodic monitoring, permitting authorities must add "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 C.F.R. § 70.6(a)(3)(i)(B). Third, if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 70.6(c)(1). In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5). Further, as discussed above, the permitting authorities have a responsibility to respond to significant comments, and this principle applies to significant comments on the adequacy of monitoring.

The JP Pulliam title V permit includes biannual testing and parametric monitoring of the ESP for demonstrating and monitoring compliance with the PM limits for the boilers. *See* permit conditions I.A.1.b., I.A.1.c., I.B.1.b, and I.B.1.c. However, it is not clear from the permit or permit record how this monitoring scheme will ensure compliance with the PM limits. For example, it is not clear whether WDNR is relying on the ESP's achieving a certain control efficiency to assure compliance with the PM limits. If that is the case, WDNR must establish the correlation between the operating parameters being measured and the ESP performance, and must identify the parameter indicator ranges in the title V permit if they are to be used to demonstrate compliance. It is also not clear from the permit and the permit record whether the required correlation and the necessary indicator ranges have been established.

During the public comment period for the draft title V JP Pulliam permit, Petitioner commented on this issue. As discussed above, WDNR has an obligation to respond to significant comments on the draft title V permit. Petitioner's comment was a significant comment because it raised an issue of whether the permit meets the title V monitoring requirements at 40 C.F.R. §§ 70.6(a)(3)(i)(Bb) and (c)(1). In response to the comment, WDNR cited to the SIP requirements for periodic stack testing (NR 439.075(2)(a) and 439.075(3)(b))[4] and for parameter monitoring of ESP (NR 439.055(1)(c) and 439.055(2)(b)),[5] and concluded that the permit meets these SIP requirements. However, whether or not the permit meets the SIP requirements does not address the comment at issue, which is that the PM monitoring in the permit fails to meet the title V monitoring requirements. *See In the Matter of: Citgo Refining and Chemicals Company L.P., West Plant,* Petition VI-2007-01 (May 28, 2009) (CITGO Order) at 7 ("if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 70.6(c)(1)."). EPA therefore

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[4] NR 439.075(3)(b) requires compliance emission tests every 24 months.

[5] 439.055(1)(c) identifies the ESP parameters to be monitored, and 439.055(2)(b) requires that the parameters be measured and recorded every eight hours of source operation or once per day, whichever yields the greater number of measurements.

concludes that WDNR failed to respond to this significant comment and that such failure may have resulted in one or more deficiencies in the permit. I therefore grant the petition on this issue. WDNR must explain how the permit provides adequate monitoring or modify the permit as necessary to ensure that it contains monitoring sufficient to assure compliance with the PM limits in the permit for the boilers.

B. PM and Visible Emissions Monitoring for the Material Handling Emission Sources

Petitioner asserts that the PM monitoring for the material handling emission sources – coal unloading, coal transfer to storage piles, ash storage silos, and flyash handling – contained in the permit is deficient. Petition at 18. For reference, Petitioner includes in the petition a table listing the PM limits and the associated monitoring requirements in the title V permit for these material handling sources. Petition at 19-21. Petitioner shows in the table that the permit requires a baghouse to control PM emissions from the coal unloading, ash storage silos and flyash handling, and an alarm system on the baghouse to monitor compliance. Petition at 19. Petitioner asserts that the PM monitoring "is indirect, relying on (1) an alarm system on the baghouse, which is set to an undefined pressure drop range; (2) a requirement to record 'any corrective action taken as a result of a different pressure alarm'; and (3) recording pressure drop when the alarm system malfunctions." Petition at 20-21. Petitioner alleges that the factual basis has not been established in the permit record for the apparent presumption in the title V permit that "if emissions are directed to a baghouse, and the baghouse is functioning properly, the emissions will be below the applicable pound-per-hour limit." Petition at 21. Petitioner further alleges that it is unclear how a baghouse alarm set to an unspecified baghouse pressure drop ensures that either the baghouse is functioning properly or that the emission limit is being met. *Id.* For coal transfer to storage piles, Petitioner notes that there is no requirement that chemical suppressants actually be used or that applications of suppressants (if used) are monitored or recorded, only that the permittee monitor and record the rate at which the chemical suppressant storage tank is refilled. *Id.* Based on the allegations described above, Petitioner claims that the PM monitoring in the permit for these material handling emission sources fails to meet the requirements of title V, including 40 C.F.R. §§ 70.6(a)(3)(i)(B), 70.6(c) and 70.7(a)(5). Petition at 21-22.

In addition, Petitioner asserts that the permit does not require monitoring of visible emissions from the material handling emission points, but instead assumes that the monitoring for PM will ensure compliance with the visible emission standards in the permit. Petition at 21. Petitioner claims that there is no basis for this assumption in the record and that WDNR has not explained how compliance with monitoring for PM assures compliance with visible emission standards. Petition at 21-22.

Petitioner states that it commented on these monitoring deficiencies during the public comment period and that WDNR responded as follows:

> The monitoring for the baghouses meets the applicable requirements in s. NR 439.055(2)(b), Wis. Adm. Code. The monitoring and recordkeeping for the fugitive sources of coal dust meet the applicable requirements in s. NR 445.10, Wis.

> Adm. Code. The requirement to maintain compliance with particulate matter limits through use of the fugitive dust control plan is acceptable to DNR.

Petition at 21, quoting WDNR's Response to Comment at 3.

Petitioner asserts that its comment did not involve NR 445.10 and did not assert that the monitoring in the permit fails to meet NR 439.055(2)(b). Petition at 22. Petitioner clarifies that its comment was that "the monitoring does not meet the requirements of Title V, including 40 C.F.R. §§ 70.6(a)(3)(B) [sic] and (c)" and that WDNR "failed to explain how the permit's monitoring provisions ensure continue compliance" with the PM limits. *Id.*, citing 40 C.F.R. § 70.7(a)(5). Petitioner alleges that WDNR did not provide sufficient monitoring in the permit or respond to the substance of its comments. *Id.*

EPA's Response. For the reasons described below, the Petition is granted with respect to the above claims.

As discussed in the section above, the title V permit must contain sufficient monitoring to assure compliance with the terms and conditions of the permit. 40 C.F.R. § 70.6(c)(1); *see also* 40 C.F.R. § 70(a)(3)(i)(B). The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5). The JP Pulliam title V permit requires a baghouse to control PM emissions from coal unloading, ash storage silos and flyash handling. In general, if the permittee or permitting authority has demonstrated that the applicable PM limits can be met through the use of a baghouse, compliance with the PM limits can be assured by assuring proper function of the baghouse through monitoring of the relevant parameters for the baghouse. However, according to Petitioner, and based on EPA's review of the permit record, it is not clear that the correlation between the use of the baghouse and compliance with the applicable PM limits has been established. Further, neither the permit nor the permit record identify the specific indicator range(s) that would assure the proper functioning of the baghouse to assure compliance with the PM limits. For coal transfer to storage piles, as Petitioner notes, the permit only requires that the permittee monitor and record the rate at which the chemical suppressant storage tank is refilled. It is not clear how the permit assures compliance with the applicable PM limits without requiring the application of the chemical dust suppressants, or any monitoring or recording of such application, when this material handling activity is being conducted. Further, as Petitioner notes, the title V permit references the PM monitoring requirements for these material handling sources as the compliance demonstration and monitoring requirements for the visible emission standards for these sources. However, it is not clear from the permit or the permit record how the title V permit's PM monitoring requirements described above assure compliance with the visible emission standards in the permit for these material handling sources.

During the public comment period, Petitioner raised these monitoring issues associated with the material handling sources. Petitioner's comment was a significant comment because it raised an issue of whether the permit meets the title V monitoring requirements at 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(1). In its Response, WDNR simply stated that the monitoring in the permit for these material handling sources met the SIP requirements for monitoring a baghouse

(NR 439.055(2)(b))[6] and for outdoor fugitive coal dust control (NR 445.10)[7], and that maintaining compliance with PM limits through the use of the fugitive dust control plan, as required by the permit, is acceptable to WDNR. WDNR's Response to Comment at 3. However, whether or not the permit meets the above SIP requirements does not address the comment at issue, which is whether the PM monitoring in the permit for these material handling emission sources meets the title V monitoring requirements. *See* CITGO Order at 6-8. Furthermore, WDNR did not respond to the comment on whether the permit's PM monitoring is adequate to assure compliance with the visible emission standards in the permit. For the reasons stated above, EPA concludes that WDNR failed to respond to this significant comment and that such failure may have resulted in one or more deficiencies in the permit. I hereby grant the petition on this issue. WDNR must explain how the permit provides adequate monitoring or revise the permit as necessary to ensure that it contains monitoring sufficient to assure compliance with the PM limits and visible emission standards for the material handling emission sources described above.

CONCLUSION

For the reasons set forth above and pursuant to Section 505(b)(2) of the Clean Air Act and 40 C.F.R. § 70.8(d), I hereby grant the petition filed by David Bender on behalf of the Sierra Club objecting to the title V renewal operating permit issued to the Wisconsin Public Service Corporation's JP Pulliam power plant.

Dated: June 28, 2010

Lisa P. Jackson
Administrator

[6] NR 439.055(1)(a) requires monitoring of pressure drop when a baghouse is used, and NR 439.055(2)(b) requires that the relevant parameter be measured and recorded once for every eight hours of source operation or once per day, whichever yields the greatest number of measurements.

[7] NR 445.10 sets forth requirements for controlling outdoor fugitive coal dust emissions, including a requirement to develop and implement an outdoor fugitive dust control plan.