

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	
CAMDEN COGENERATION PLANT	)	ORDER RESPONDING TO
	)	PETITIONER'S REQUEST THAT
	)	THE ADMINISTRATOR OBJECT
Program Interest No.: 51608	)	TO ISSUANCE OF A
Facility ID: 50800	)	STATE OPERATING PERMIT
Issued by the New Jersey	)	
Department of Environmental Protection	)	Petition No.: II-2005-06
_____	)	

ORDER GRANTING IN PART AND DENYING IN PART  
PETITION FOR OBJECTION TO PERMIT

On October 26, 2005, the Environmental Protection Agency ("EPA" or "Agency") received a joint petition from the South Jersey Environmental Justice Alliance ("SJEJA"), and the New Jersey Public Interest Research Group ("NJPIRG"), collectively referred to as "Petitioners" hereafter, requesting that EPA object to the issuance of a state operating permit, pursuant to title V of the Clean Air Act ("CAA" or "the Act"), CAA §§ 501-507, 42 U.S.C. §§ 7661-7661f, to the Camden Cogeneration Plant, ("CCP") located in Camden, New Jersey.<sup>1</sup>

The CCP permit was issued by the New Jersey Department of Environmental protection, ("NJDEP"), on July 7, 2005, pursuant to title V of the Act, the federal implementing regulations, 40 C.F.R. part 70, and the New Jersey State Operating Permits regulations, at N.J.A.C. 7:27-22.

The facility generates electricity to sell to local utilities, and consists of one combined-cycle gas turbine, one duct burner, and one auxiliary boiler rated at 1144 MMBTU/hr, 225 MMBTU/hr, and 17.5 MMBTU/hr, respectively. The duct burner fires only natural gas. While the gas turbine and auxiliary boiler fire natural gas, they are designed to also fire distillate fuel oil as a backup. The facility is a major source of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs).

The petition alleges that CCP's title V permit does not comply with 40 C.F.R. part 70 in that: 1) the permit lacks a statement of basis, as required under 40 C.F.R. § 70.7(a)(5); 2) the permit fails to include a compliance schedule as required under 40 C.F.R. § 70.5(c)(8)(iii)(C); 3) CCP's past violations are not properly addressed through permit enforcement action and in the permitting process; 4) the permit needs additional monitoring, recordkeeping and reporting; 5)

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<sup>1</sup> The deadline for filing any petitions with EPA to object to the CCP permit was October 31, 2005. Therefore, EPA considers this petition to be timely.

the permit failed to adequately limit emissions of particulate matter, a pollutant regulated under the Clean Air Act; 6) the permit failed to enforce environmental justice requirements stated under New Jersey state Executive Order, and federal Executive Order 122898. The Petitioners have requested that EPA object to the issuance of the CCP permit pursuant to § 505(b)(2) of the Act and 40 C.F.R. § 70.8(d) for these reasons.

EPA has reviewed these allegations pursuant to the standard set forth in 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 C.F.R. § 70.8(c)(1); *New York Public Interest Research Group v. Whitman*, 321 F.3d 316, 333 n.11 (2<sup>nd</sup> Cir. 2002).

Based on a review of all the information before me (including the petition, the facility’s permit application, NJDEP’s hearing report responding to public comments on the draft permit, and the administrative record supporting the permit), and for the reasons set forth in this Order, I hereby grant in part and deny in part the Petitioners’ request for an objection to the permit.

## **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 New Jersey effective June 17, 1996. 61 Fed. Reg. 24715 (May 16, 1996); 40 C.F.R. part 70, Appendix A. On November 30, 2001, EPA granted full approval to New Jersey’s title V operating permit program. 66 Fed. Reg. 63168 (Dec. 5, 2001)). 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), 42 U.S.C. §§ 7661a(a) and 7661c(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, recordkeeping, reporting, and other conditions to assure compliance by sources with existing applicable requirements. *See*, 57 Fed. Reg. 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 CAA §§ 505(a), 42 U.S.C. §§ 7661d(a), and 40 C.F.R. §§ 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, 42 U.S.C. § 7661d(b)(1), authorizes EPA to object if a title V permit contains provisions not in compliance with applicable requirements, including the requirements of the

applicable State Implementation Plan (SIP). This petition objection requirement is also reflected in the corresponding implementing regulations at 40 C.F.R. § 70.8(c)(1).

Section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), states that if the EPA does not object to a permit, any member of the public may petition the EPA to take such action, and the petition shall be based on objections that were raised during the public comment period unless it was impracticable to do so. *See also*, 40 C.F.R. § 70.8(d).<sup>2</sup> 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 C.F.R. §§ 70.7(g)(4) or (5)(i) and (ii) for reopening a permit for cause.

## **ISSUES RAISED BY THE PETITIONER**

### **I. Statement of Basis**

Petitioners allege that the CCP draft permit was not accompanied by a statement of basis. Petitioners assert that the failure to issue a statement of basis is a violation of the title V regulations and unnecessarily prohibits the public from adequately participating in the public review and comment period for the draft permit. Petitioners also stated that the statement of basis must include the following: (1) a description of the facility, including information on emission units, pollutants emitted, and pollution control equipment; (2) an explanation of NJDEP's periodic monitoring decisions (especially when the monitoring required deviates from the norm); (3) a discussion on past violations, including a discussion on the fines paid and corrective actions taken to resolve the violations; and (4) a discussion on how the compliance schedule will bring the facility into compliance. Petition at page 3.

Petitioners could have raised these issues concerning the statement of basis during the public comment period but failed to do so. Thus, Petitioners have not satisfied the requirements of CAA section 505(b)(2) which states in relevant part, "Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period . . . (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)." *See also* 40 C.F.R. § 70.8(d). For these reasons, I am dismissing the petition on this issue.

### **II. Compliance Plan and Schedule**

Petitioners argue that, from the time that CCP applied for the operating permit in

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<sup>2</sup> The Petitioners commented during the public comment period, raising concerns with the draft operating permit that, except as discussed in section I below, provide a basis for this petition.

February, 1998,<sup>3</sup> the facility has been cited six times for permit violations for exceeding allowable emission concentrations for nitrogen oxides. Petitioners state that, under 40 C.F.R. § 70.5(b), there is a duty to supplement or correct the application, thus, the facility should have filed additional information about these permit violations. Moreover, Petitioners assert that, because there were emission units not in compliance at the time of application submittal, the NJDEP should have required a compliance plan meeting the requirements of 40 C.F.R. § 70.5(c)(8).

40 C.F.R. §§ 70.5(c)(8)(iii)(C) and 70.6(3) require that if a facility is in violation of an applicable requirement and it will not be in compliance at the time of permit issuance, its permit must include a compliance plan that meets certain criteria. For sources that are not in compliance with applicable requirements at the time of permit issuance, compliance plans must include “a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance.” 40 C.F.R. §§ 70.5(c)(8)(iii)(C). If the reported violation has been corrected prior to permit issuance, a schedule of compliance is not necessary.

Results of stack tests<sup>4</sup> conducted at the facility from May 19 through 24, 1993, indicate that emissions of all contaminants tested were within the facility’s NSPS allowable limits. Also, the NJDEP states that the CCP is in compliance with the annual emission limits required by its operating permit, based on its review of CCP’s annual Emission Statements for 1999 - 2003. *See*, Hearing Officer’s Report at 7-8. The EPA has no evidence to support Petitioners’ argument that CCP was not in compliance at the time of its permit issuance. If a source corrects all violations and is in compliance prior to permit issuance, then there is no need for a compliance schedule to be included in the permit. In this case, the Petitioners have not presented evidence, much less demonstrated, that the facility was not in compliance with its applicable requirements at the time of permit issuance. Accordingly, Petitioners have not demonstrated a flaw in the permit and I deny the petition on this issue.

### III. Past Violations

The Petitioners claim that NJDEP must assess penalties against CCP for violating its permit. Further, Petitioners assert that if NJDEP has chosen to enter into an administrative consent order to address violations and exceedances, the statement of basis must provide an explanation as to how NJDEP determined that the violations have been addressed and the measures taken to avoid further violations or to assure compliance on a continual basis. Petition at page 5.

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<sup>3</sup> The correct submittal date was May 15, 1995.

<sup>4</sup> The purpose of the tests was to quantify the emissions of particulates, nitrogen oxides (NOx), carbon monoxide (CO), total non-methane hydrocarbons and ammonia being discharged to the atmosphere from the gas turbine, while burning either natural gas or kerosene, with and without the duct burner.

Petitioners' request that NJDEP assess penalties against CCP for past permit violations is outside the scope of the title V petition process. Issues associated with what mechanism to use to resolve past violations are not appropriately addressed in the title V petition process. Such enforcement actions are taken pursuant to title I of the CAA. The remedy provided in title V of the CAA, as pointed out by the Petitioner, is submittal of a compliance plan by the applicant to address requirements for which it is not in compliance at the time of permit issuance. The State incorporates this plan into the permit with a compliance schedule in an effort to bring the source back into compliance. As explained above, in this case, the past permit violations raised by Petitioners were settled and CCP came into compliance, prior to permit issuance, without the need for remedial measures; accordingly, such a schedule is not warranted in this case.

EPA has not required that a statement of basis provide an explanation as to how past violations have been addressed by the permitting authority. However, a permitting authority should respond to all significant public comments, including comments that question whether permit provisions are adequate to assure compliance in light of past violations. In this case, NJDEP responded to such comments by stating that the permit includes provisions requiring detailed reports for any deviation from permit or regulatory requirements, and that these provisions are intended "to help ensure continuous compliance with the permit conditions." Hearing Report at 11. The Hearing Report contains additional information on NJDEP's compliance assurance and enforcement process. *See id.* NJDEP provided an adequate response on this issue, in light of the facility's compliance record. For these reasons, I deny the petition on this issue.

#### **IV. Strengthen Monitoring and Reporting Requirements**

Petitioners argue that, to prevent CCP from violating its title V permit, the NJDEP must strengthen the permit's monitoring, recording, and reporting requirements by including new requirements that should be aimed at preventing violations in the future. Petitioners argue that, in light of CCP's past violations and the area's poor air quality, NJDEP should require CCP to perform increased frequency of stack testing from once every five years to once a year. Optimally, Petitioners argue, a Continuous Emission Monitoring System should be required as a means of enhancing the monitoring at CCP.

Petitioners view the application of a Continuous Emission Monitoring System (CEMS) to monitor facility emissions as an optimal tool in the monitoring of pollutant data. Indeed, a CEMS is an effective tool for determining a facility's compliance with its emissions limits. Such systems are required under various EPA regulations, such as the Compliance Assurance Monitoring rules of 40 C.F.R. part 64, to determine compliance with an emission limitation or standard on a continuous basis. Further, to ensure that the data collected by these systems are representative of the on-going operation, they are themselves subject to performance criteria which govern their installation, operation, and calibration (*See*, 40 C.F.R. § 60.13), thus ensuring their effectiveness in determining the compliance status of the specified monitoring.

The primary pollutants from gas turbine engines such as the one in use at CCP are NO<sub>x</sub>, carbon monoxide (CO), and to a lesser extent, volatile organic compounds (VOCs).<sup>5</sup> Particulate Matter (PM<sub>10</sub>) can also be a primary pollutant for gas turbines using liquid fuels. However, as stated earlier, CCP only uses distillate fuel oil as backup and, for this reason, PM<sub>10</sub> is not a primary pollutant being emitted from the facility. The EPA notes that various CEMSs are installed at CCP to monitor compliance with its applicable requirements, as desired by Petitioners. Specifically, for the gas turbine, the permit specifies a NO<sub>x</sub> CEMS (Refs.# 5, 6 and 7, page 35), to monitor compliance with its NO<sub>x</sub> emissions limits. This NO<sub>x</sub> CEMS was installed as a pre-construction permit requirement, under N.J.A.C. 7:27-22.16(e). Similarly, under the pre-construction requirements of N.J.A.C. 7:27-22.16(e), the permit prescribes a CEMS, Refs.# 9, 10, and 11, page 36, to monitor the turbine's emissions of CO, a pollutant which is an indicator of combustion performance. Also, another CEMS, installed under the facility's pre-construction requirements, Ref.# 22, page 38, serves to monitor emissions of ammonia, an air contaminant. Collectively, these various continuous monitoring systems, together with their associated quality assurance regime, provide for effective monitoring of facility emissions. Thus, CCP's monitoring of its turbine's primary pollutants, NO<sub>x</sub> and CO, is being performed through CEMSs, thereby ensuring effective monitoring of these pollutants. Under these circumstances, increasing the frequency of stack testing, from once every 5 years to annually, would not gain the facility additional information pertaining to its NO<sub>x</sub> and CO emissions. In addition, the EPA notes that, in the event the facility were to operate the turbine in excess of 500 hours in a calendar year while using distillate oil, the permit, at pages 41 and 42, Refs.# 1 and 7, respectively, provides for installing a continuous opacity monitor (COM) to conduct surrogate monitoring of particulate matter. A COM is a type of CEMS which is also subjected to strict quality assurance criteria for ensuring effective monitoring of particulate matter emissions.

CCP's once per permit term prescribed stack testing is intended to ascertain the facility's compliance with the emissions of its lesser air contaminants, consisting primarily of VOCs, sulfur dioxide (SO<sub>2</sub>), and trace metals. Emissions of sulfur compounds, including SO<sub>2</sub>, are directly related to the sulfur content of the fuel. The CCP's SO<sub>2</sub> emission limit is monitored through surrogate monitoring of the natural gas's sulfur content (Ref.# 25, page 38). This effectively serves as periodic monitoring of the turbine's sulfur emissions, in lieu of stack testing. Trace metals emissions are products carried over from the metals content of the fuel. They are emitted from the combustion of oil and are not a factor in the burning of natural gas which is the primary fuel in use at CCP.

VOCs encompass a wide spectrum of volatile organic compounds and are primarily the result of improper burning conditions which can be minimized through work practice standards, such as periodic tune up and adjustment, that enhance a combustion source's thermal efficiency. Indeed, the NJDEP's SIP at N.J.A.C. 7:27-16.8(c), N.J.A.C. 7:27-19.7(a), and N.J.A.C. 7:27-16.9(f) specifies periodic tuneup and adjustment of combustion sources, to enhance their

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<sup>5</sup> See, EPA/AP-42, Fifth Edition, Volume 1, Chapter 3: Stationary Internal Combustion Sources

efficiency and minimize the emission of air contaminants. EPA notes that while the permit prescribes annual combustion process adjustments for the heat recovery steam generator and the auxiliary boiler (Refs. # 4 and 5, page 24),<sup>6</sup> it fails to prescribe any annual adjustment for the turbine per se. Such periodic adjustment serves as an important periodic monitoring tool for the turbine (and is required under the SIP, *see* N.J.A.C. 7:27-16.9(f)). This periodic adjustment aims to minimize the variability of emissions from the unit over time and helps maintain the turbine in compliance with its VOC emission limits. The EPA views the implementation of such work practice standard as critical in helping to ascertain the turbine's compliance with its VOC limits.

In conclusion, the permit prescribes the use of a CEMS to monitor the primary pollutants. Sulfur dioxide emissions can be monitored via surrogate monitoring of the fuel's sulfur content and requires no increased stack testing to ascertain compliance. Emissions of trace metals are not a significant factor in the burning of natural gas and, therefore, do not warrant monitoring through increased stack testing. With respect to VOCs, the EPA views the once-per permit term stack testing, to be adequate in ensuring compliance with CCP's VOCs emission limits provided that an annual adjustment of CCP's combustion sources is implemented. Accordingly, I find that annual stack testing is not required but I am granting the petition on this issue and directing NJDEP to modify the permit consistent with NJDEP rules to include annual tuneup requirements for the turbine, as stated at N.J.A.C. 7:27-16.9(f).

## V. Reduce Facility Emissions

The Petitioners argue that NJDEP must reduce the facility's emissions to ensure that it does not cause unsafe ambient air levels for fine particles (PM<sub>2.5</sub>) and the air toxins as identified in the Air Toxics Study.<sup>7</sup> Petitioners assert that based on this study conducted by the NJDEP, the Waterfront South neighborhood is generally found to have a high concentration of PM<sub>2.5</sub>. Petitioners argue that NJDEP should take action to address the impacts of PM<sub>2.5</sub> now and not wait until 2008. Petition at page 7 and 8.

EPA establishes national ambient air quality standards ("NAAQS") for certain pollutants, pursuant to section 109 of the CAA, 42 U.S.C. § 7409, and States are required to attain those standards. The SIP is the means by which States comply with CAA requirements to attain the NAAQS, pursuant to section 110(a) of the CAA, 42 U.S.C, § 7410(a). The national designations for the PM<sub>2.5</sub> NAAQS were published in the *Federal Register* on January 5, 2005. *See*, Fed. Reg. 943-1019. Under the Clean Air Act, New Jersey is required to submit its SIP for any area

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<sup>6</sup> The permit calls for combustion process adjustment of the heat recovery steam generator and erroneously cites N.J.A.C. 7:27-16.9(f) as the associated applicable requirement.

<sup>7</sup> This study, pertaining to the Camden's Waterfront South neighborhood, has been conducted by the NJDEP to address environmental issues that are of concern to the area, and includes more than 50 facilities located within or near the Camden Waterfront South neighborhood. The final report can be found at: <http://www.nj.gov/dep/ej/camden/index.html>

designated by EPA as non-attainment showing how it will attain the new PM<sub>2.5</sub> standard no later than 3 years from the effective date of the non-attainment designation (i.e. by April 5, 2008).

The new PM<sub>2.5</sub> standard does not by itself impose any obligation on sources. A source is not obligated to reduce emissions as a result of the standard until the State identifies a specific emission reduction measure needed for attainment (and applicable to the source), and that measure is incorporated into a SIP approved by EPA. Accordingly, since Petitioners have not identified a current requirement of the Clean Air Act (including a current SIP requirement) that is applicable to this source (and not included in the permit), I deny the petition on this issue.

## **VI. Environmental Justice - Executive Order 12898**

Petitioners argue that the Camden Community is a low income minority community whose residents suffer disproportionately from adverse health related diseases. Evoking the Presidential Executive Order 12898,<sup>8</sup> and the State Of New Jersey Order on Environmental Justice, Petitioners request that strict conditions be included in CCP's title V permit to help reduce the health and environmental impacts associated with this facility.

Executive Order 12898, signed by President Clinton on February 11, 1994, focuses federal attention on the environmental and human health conditions of minority populations and low-income populations with the goal of achieving environmental protection for all communities. The Executive Order also is intended to promote non-discrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment. It generally directs federal agencies to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

Environmental justice issues can be raised and considered in a variety of actions carried out under the Clean Air Act, as for example when EPA or a delegated state issues a NSR permit.<sup>9</sup>

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<sup>8</sup> The following discussion focuses on the federal Executive Order, because the state order provides even less of a basis for objection to a title V permit. See CAA § 504(c) (permits must assure compliance with applicable requirements of the Clean Air Act); CAA § 505(b)(2) (objection required where petitioner demonstrates the permit is not in compliance with the requirements of the Clean Air Act); 40 C.F.R. § 70.2 (defining "applicable requirement" to include specified standards or requirements promulgated pursuant to the Clean Air Act).

<sup>9</sup> Indeed, as indicated in the response to another title V permit petition, section 173(a)(5) of the Act, 42 U.S.C. § 7503(a)(5) requires that a permit for a "major source" subject to the NSR program may be issued only if an analysis of alternative sites concludes that "the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification." See, Borden Chemical, Inc., title V petition No. 6-01-01 (Dec. 22, 2000), pp. 34-44, available at:



Unlike NSR permits, however, title V generally does not impose new, substantive emission control requirements, but rather requires that all underlying applicable requirements be included in the operating permit. Title V also includes important public participation provisions as well as monitoring, compliance certification and reporting obligations intended to assure compliance with the applicable requirements.

In regard to CCP, Petitioners have not demonstrated how their particular environmental justice concerns demonstrate that the facility's title V permit fails to properly identify and comply with the applicable requirements of the Clean Air Act.<sup>10</sup> Thus, the petition to object to the permit on this particular issue must be denied. However, as a recipient of EPA financial assistance, the programs and activities of NJDEP, including its issuance of the CCP permit, are subject to the requirements of title VI of the Civil Rights Act of 1964, as amended, and EPA's implementing regulations, which prohibit discrimination by recipients of EPA assistance on the basis of race, color, or national origin. 42 U.S.C. 2000d et seq.; 40 C.F.R. Part 7. The Petitioners may file a complaint under title VI and EPA's title VI regulations if they believe that the state discriminated against them in violation of those laws by issuing the permit to CCP. The complaint, however, must meet the jurisdictional criteria that are described in EPA's title VI regulations in order for EPA to accept it for investigation.<sup>11</sup> See In the matter of Camden County Energy Recovery Associates Facility, Petition Number: II-2005-01 date January 20, 2006.

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[http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/borden\\_response1999.pdf](http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/borden_response1999.pdf).

<sup>10</sup> EPA notes that, in response to public comments, NJDEP has added a requirement for particulate emissions (TSP and PM<sub>10</sub>) to be included in the trend analysis that the facility is required to submit with its operating permit renewal application. (*See*, Hearing Report, page 16.)

<sup>11</sup> Under title VI, a recipient of federal financial assistance may not discriminate on the basis of race, color, or national origin. Pursuant to EPA's title VI administrative regulations, EPA's Office of Civil Rights conducts a preliminary review of title VI complaints for acceptance, rejection or referral. 40 C.F.R. § 7.120(d)(1). A complaint should meet jurisdictional requirements as described in EPA's title VI regulations. First, it must be in writing. Second, it must describe alleged discriminatory acts that may violate EPA's title VI regulations. Title VI does not cover discrimination on the grounds of income or economic status. Third, it must be timely filed. Under EPA's title VI regulations, a complaint must be filed within 180 calendar days of the alleged discriminatory act. 40 C.F.R. § 7.120(b)(2). Fourth, because EPA's title VI regulations only apply to recipients of EPA financial assistance, it must identify an EPA recipient that allegedly committed a discriminatory act. 40 C.F.R. § 7.15.

**CONCLUSION**

For the reasons set forth above and pursuant to section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), I deny in part and grant in part the petition requesting an objection to the issuance of the CCP title V permit.

**MAY 25 2006**

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Date

  
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Stephen L. Johnson  
Administrator