

NRO-036-09

COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr. Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

Thomas A. Faha Regional Director

David K. Paylor

Director

February 27, 2009

Mr. Christopher Sweet EC &HS Specialist Science Applications International Corporation 7990 Science Applications Court Vienna, Virginia 22182

Registration Number: 71804

Dear Mr. Sweet:

Attached is a modification to your state operating permit dated January 8, 2004, and amended on May 23, 2005, to add one diesel engine driven emergency generator that had been removed from the last permit, and operate the existing permitted seven diesel engine driven emergency electric generators and two boilers in accordance with the provisions of the State Air Pollution Control Board's (Board's) Regulations for the Control and Abatement of Air Pollution (Regulations). The attached permit supersedes your permit dated January 8, 2004 and amended on May 23, 2005.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on September 18, 2008, and solicited written public comments by placing a newspaper advertisement in the *Fairfax County Connection Newspapers* on January 21, 2009. The required comment period, provided by 9 VAC 5-80-1020 A, expired on February 20, 2009.

This approval to operate eight diesel engine driven emergency electric generators and two boilers shall not relieve Science Applications International Corporation (SAIC) of the responsibility to comply with all other local, state and federal permit requirements.

Event

Code: PSOF

Scanned

Date

3-4-0

Initials

Science Applications International Corporation

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The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provides that you may request a formal hearing from this case decision by filing a petition with the Board within thirty days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-180 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A: 2 of the Supreme Court of Virginia, you have thirty days from the date of service of this decision (the date you actually received this decision or the date on which it was mailed to you, whichever occurred first), within which to initiate an appeal of the decision by filing a Notice of Appeal with:

David K. Paylor Department of Environmental Quality P.O. Box 1105 Richmond Virginia 23218

In the event that this decision is served on you by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit or any other air pollution issue please feel free to contact the regional office at (703) 583-3800 or Mr. Tom Valentour at (703) 583-3931.

Sincerely,

Terry H. Darton

Regional Air Permit Manager

TAF/THD/TMV/09036sop

Attachment: State Operating Permit

Cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic submission)



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David K. Paylor Director

Thomas A. Faha Regional Director

STATIONARY SOURCE PERMIT TO OPERATE

This permit supersedes your permit dated January 8, 2004, that was amended May 23, 2005.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Science Application International Corporation 7990 Science Applications Court Vienna, Virginia 22182 Registration number: 71804 AIRS ID No.: 51-059-0402

is authorized to operate

eight diesel driven electric generator units and two boilers

located at

7990 Science Applications Court Vienna, Virginia 22182

in accordance with the Conditions of this permit.

Approved on

February 27, 2009.

Thomas A. Faha Regional Director

Permit consists of 10 pages Permit consists of Conditions 1 to 20.

INTRODUCTION

This permit approval is based on the permit application dated August 29, 2008. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the Department of Environmental Quality (DEQ) or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1. Equipment List - Equipment at this facility consists of the following:

Equipment to be constructed				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Original Permit Date
5	Cummins four cycle twelve cylinder Model KTA 2300GS	1030 Bhp (750 KW)	None	Installed 1978 permitted 1/8/2004

Existing Equipment permitted prior to the date of this permit				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Original Permit Date
1 - 4	Cummins Model KTA 2300GS	1030 Bhp (750 KW)	None	Installed 1978 permitted 1/8/2004

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Existing Equ	ipment permitted prior	to the date of this	permit (Continued	d)
6 - 8	Waukesha Model VHP6670DS	1616 BHp (1200 KW)	None	Installed 1980 permitted 1/8/2004

Equipment Exempt from permitting				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Original Permit Date
9 - 10	Natural Gas fired Superior Volcano, CCA1-50WG, Serial 147E, and 148E	2.2 MMBtu/hr each	" 、NA	Installed 1980

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit. (9 VAC 80-850)

PROCESS REQUIREMENTS

- 2. Emission Controls Emissions from the eight diesel engine driven generators shall be controlled by proper operation and maintenance of the engines. The engines shall be provided with adequate access for inspection. The permittee shall develop and maintain a maintenance schedule for the engine units. The maintenance schedule shall be based on the manufacturer's recommendations, at minimum. (9 VAC 5-80-850)
- 3. Monitoring Devices Each diesel engine driven electric generator (emission units 1 through 8) shall be equipped with a device to measure and display the hours of operation of each diesel engine. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when its diesel engine is operating. (9 VAC 5-80-850)
- 4. Monitoring Device Observation The meters used to continuously measure the hours of operation of each diesel engine emission unit shall be observed by the permittee with a frequency of once per month, at minimum. The permittee shall keep a log containing the monthly total hours of operation of each engine emission unit for each calendar month. (9 VAC 5-80-850)

OPERATING/EMISSION LIMITATIONS

- 5. **Operating Hours** Cumulatively, diesel engine driven electric generator emission units 1 through 5 shall not operate more than 1350 hours per year, calculated monthly as the sum of each consecutive twelve month period. (9 VAC 5-80-850)
- Operating Hours Cumulatively, diesel engine driven electric generator emission units 6 through 8 shall not operate more than 870 hours per year, calculated monthly as the sum of each consecutive twelve month period. (9 VAC 5-80-850)
- 7. **Fuel** The approved fuel for the eight diesel engine driven electric generators is diesel fuel with a maximum sulfur content that shall not exceed 0.5 % sulfur by weight. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-850)
- 8. **Fuel Certification** The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:
 - a. The name of the diesel fuel supplier;
 - b. The date on which the diesel fuel was received;
 - c. The volume of diesel fuel delivered in the shipment;
 - d. A statement that the sulfur content of the diesel fuel does not exceed 0.5% sulfur, by weight, or a certification of the sulfur content, by weight, of the diesel fuel. (9 VAC 5-80-850)
- Emission Limits The cumulative NOx emissions from the operation of all diesel engine electric generators (emission units 1 through 8) shall not exceed 24.4 tons per year.

Compliance shall be determined based on the hours of operation limits defined in Conditions 5 and 6, and calculation of annual NOx emissions using hours of operation of each emission unit multiplied by the NOx emission factor of 15.8 lbs/hour for emission units 1-5, and 28.5 lbs./hour for emission units 6-8.

Exceedance of the operating limits or calculated annual emission limit shall be considered credible evidence of the exceedance of the NOx emission limit. (9 VAC 5-80-850)

10. Visible Emission Limit - Visible emissions from each diesel engine driven generator (emission units 1 through 8) shall not exceed twenty percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-50-80)

RECORDS

- 11. On Site Records The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, Northern Regional Office. These records shall include, but are not limited to:
 - a. Results of all stack tests, visible emission evaluations and performance evaluations;
 - b. Monthly hours of operation of each diesel engine driven electric generator (emission units 1 through 8);
 - c. The annual hours of operation of diesel engine driven electric generator emission units 1 through 5, calculated monthly as the sum of each consecutive 12 month period, for the purpose of demonstrating compliance with Condition 5;
 - d. The annual hours of operation of diesel engine driven electric generator emission units 6 through 8, calculated monthly as the sum of each consecutive 12 month period, for the purpose of demonstrating compliance with Conditions 6;
 - e. A list of current NOx emission factors for emission units 1 through 8 for use in calculations to demonstrate compliance with Condition 9.
 - f. The natural gas fuel throughput of the two Superior Volcano boilers, calculated for each calendar year. This record is for informational purposes only, and does not form enforceable terms. This information shall be retained on site, and available upon inspection.
 - g. The combined fuel throughput of the eight diesel engine driven electric generators (emission units 1 through 8);
 - h. Scheduled and unscheduled maintenance, and operator training.

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These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-900)

GENERAL CONDITIONS

12. CERTIFICATION OF DOCUMENTS

- A. The following documents submitted to the Board shall be signed by a responsible official: (i) any emission statement, application, form, report or compliance certification; (ii) any document required to be signed by any provision of the board; or (iii) any other document containing emissions data or compliance information the owner wishes the board consider in the administration of its air quality programs. A responsible official is defined as:
 - 1. For a business entity, such as a corporation, association, or cooperative, a responsible official is either.
 - The president, secretary, treasurer, or vice president of a business entity in charge of the principal business function, or any other person who performs similar policy or decision making functions for the business entity; or
 - b. A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons, or have gross annual sales or expenditures exceeding \$ 25 million (in second quarter 1980 dollars) or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.
 - 2. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
 - 3. For a municipality, state, federal or other public agency, a responsible official is either a principal executive officer or a ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of the principal geographic unit of the agency.
- B. Any person signing a document under subsection A above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- C. Subsection B shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing document (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same line of authority as the preparers, nor do the persons gathering the form need to be employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assume that the necessary actions are taken to prepare a complete and accurate document. (9 VAC 5-20-230)
- 13. **Right of Entry** The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
 - To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board's Regulations;
 - To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board's Regulations; and
 - d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency. (9 VAC 5-170-130)

14. Notification for Facility or Control Equipment Malfunction - The permittee shall furnish notification to the Air Compliance Manager, Northern Regional Office of malfunctions of the affected facility or related air pollution control equipment that

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may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Air Compliance Manager, Northern Regional Office in writing.

All correspondence to the Air Compliance Manager shall be sent to:

Regional Air Compliance Manager Virginia Department of Environmental Quality - Northern Regional Office 13901 Crown Court Woodbridge, VA 22193 (9 VAC 5-20-180 C)

- 15. Violation of Ambient Air Quality Standard The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated. (9 VAC 5-20-180 I)
- 16. Maintenance/Operating Procedures The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions associated with diesel engine driven electric generators (emission units 1 through 8):
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20 E)

- 17. Permit Suspension/Revocation This permit may be suspended or revoked if the permittee:
 - a. Knowingly makes material misstatements in the application for this permit or any amendments to it;
 - b. Fails to comply with the terms or conditions of this permit;
 - Fails to comply with any emission standards applicable to the equipment listed in Condition 1;
 - d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
 - e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted:
 - f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.

(9 VAC 5-80-1010)

- 18. Change of Ownership In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Air Compliance Manager, Northern Regional Office of the change of ownership within 30 days of the transfer at the address listed in Condition 14.

 (9 VAC 5-80-940)
- 19. Registration/Update Annually the permittee will be required to provide information to the DEQ or the Board, which will be used to maintain the currency of the stationary source emissions database. The information requested may include, but is not limited to: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board's Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

(9 VAC 5-80-900)

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20. Permit Copy - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-860 D)