



NRO-031-15

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY NORTHERN REGIONAL OFFICE

Molly Joseph Ward
Secretary of Natural Resources

13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

David K. Paylor
Director

Thomas A. Faha
Regional Director

February 13, 2015

Mr. Alan Nielsen
Vice President, Corporate Services
AOL, Inc.
22000 AOL Way
Dulles, VA 20166

Location: Loudoun County
Registration No.: 72346
Facility ID No. 51-107-00134

Dear Mr. Nielsen:

Attached is a minor amendment to your new source review permit dated August 26, 2011, to modify and operate fuel burning equipment at AOL's campus (located at 22000 AOL Way, Dulles, Virginia, 20166) in accordance with the provisions of the Virginia State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution. The purpose of this permit amendment is to remove equipment from the permit that as of January 1, 2015, AOL no longer owns and operates at the Dulles Tech Center located at 22080 Pacific Boulevard in Dulles, Virginia. This amended permit supersedes your permit document dated August 26, 2011.

The Department of Environmental Quality (DEQ) deemed the application complete on October 24, 2014 and has determined that the application meets the requirements of 9 VAC 5-80-1280 for a minor amendment to a new source review permit.

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

The permit approval to operate shall not relieve AOL, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Please note that reciprocating internal combustion engines included within this permit document may be affected facilities under 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT) Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines). As the owner/operator of the potentially affected units, DEQ advises you to review the applicable MACT regulations to ensure compliance with

Mr. Alan Nielsen
AOL, Inc.
February 13, 2015
Registration Number 72346
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applicable emission standards, operational limitations, and the monitoring, notification, reporting and recordkeeping requirements. Applicable notifications shall be sent to EPA, Region III. The MACT regulations may be found at www.ecfr.gov.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 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 30 days from the date you actually received this permit document or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit document was delivered to you by mail, three days are added to the thirty-day 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 required 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, please contact me, by phone at (703) 583-3928 or e-mail at james.lafratta@deq.virginia.gov.

Sincerely,


James B. LaFratta
Regional Air Permit Manager

TAF/JBL /72346 mNSR Permit (2-13-15)

Attachment: Permit

cc: Manager/Inspector, NRO Air Compliance (electronic copy)



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NORTHERN REGIONAL OFFICE

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

This amended permit supersedes your permit document dated August 26, 2011.

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

AOL, Inc.
22000 AOL Way
Dulles, VA 20166
Registration No.: 72346

is authorized to operate

fuel burning equipment at an office building campus

located at

22000 AOL Way
Dulles, VA 20166
(Loudoun County)

in accordance with the Conditions of this permit.

Approved on
Amended on

August 26, 2011
February 13, 2015.

Thomas A. Faha
Regional Director

Permit document consists of 11 pages.
Permit Conditions 1 to 24.

INTRODUCTION

This permit approval is based on the permit application dated May 6, 2011 (with supplemental information dated July 21, 2011) and the permit application dated October 22, 2014. 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. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

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 Regulations for the Control and Abatement of Air Pollution. 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 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 permitted prior to the date of this permit:			
Equipment Location	Equipment Description	Rated Capacity	Delegated Federal Requirements
Steve Case Center	One (1) Kohler/Detroit Model 500R07D71 emergency electrical generator driven by a diesel engine	500 kW	None
James Kimsey Center	One (1) Kohler/Detroit Model 600R0Z071 emergency electrical generator driven by a diesel engine	600 kW	None
James Kimsey Center	One (1) natural gas engine-driven chiller, Tecochill CH-350	360 bhp	None

Equipment exempt from permitting:				
Equipment Location	Equipment Description	Rated Capacity	Exemption Citation	Exemption Date
Ted Leonsis Center	Three (3) Peerless natural gas fired boilers	1.9 mmBtu/hr (Heat Input)	9 VAC 5-80-1105.B.1	April 10, 2003
Ted Leonsis Center	One (1) Kohler/Detroit Model 180R07J71 emergency electrical generator driven by a diesel engine	180 kW	9 VAC 5-80-1105.B.2	April 10, 2003
James Kimsey Center	Sixteen (16) natural gas fired Hydrotherm boilers	3.08 mmBtu/hr (Heat Input)	9 VAC 5-80-1105.B.1	April 10, 2003
Mail Hub	One (1) Cummins Model 239/3.9 emergency electrical generator driven by a diesel engine	60 kW	9 VAC 5-80-1105.B.2	April 10, 2003

- 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 5-80-1180 D 3)
- 2. **Emission Controls** – Nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOCs) emissions from the gas engine-driven chiller (James Kimsey Center) shall be controlled by use of an air/fuel ratio controller and a Miratech three-way non-selective catalytic reduction system. The catalytic control device shall be equipped with inlet and outlet temperature gauges to measure temperature rise across the catalyst (which normally should be at least 25 °F) as indication of proper operation. The chiller and catalytic control device shall be provided with adequate access for inspection.
 (9 VAC 5-80-1180 and 9 VAC 5-50-260)
- 3. **Monitoring** – The gas engine-driven chiller (James Kimsey Center) shall be equipped with a gas meter to continuously measure and record fuel usage. The 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. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the chiller is operating.
 (9 VAC 5-80-1180 D, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

OPERATING LIMITATIONS

4. **Emergency Power Generation** – The engine-generator sets (located at Steve Case Center, James Kimsey Center, Ted Leonsis Center and the Mail Hub) listed in Condition 1, shall only be operated in the following modes:
- a. In situations that arises from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
 - i. A failure of the electrical grid;
 - ii. On-site disaster or equipment failure; or
 - iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
 - b. For participation in an ISO-declared emergency, where an ISO emergency is:
 - i. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;
 - ii. Capacity deficiency or capacity excess conditions;
 - iii. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
 - iv. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
 - v. An abnormal event external to the ISO service territory that may require ISO action.
 - c. For periodic maintenance, testing, and operational training.
- (9 VAC 5-80-1180)
5. **Operating Hours: Engine-Generator Sets** – Each engine-generator set (located at Steve Case Center, James Kimsey Center, Ted Leonsis Center and the Mail Hub) listed in Condition 1, shall operate no more than 500 hours per year, calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.
- (9 VAC 5-80-1180)

6. **Emission Rate** – The gas engine-driven chiller (James Kimsey Center) shall not exceed a NO_x (as NO₂) emission rate of 1.5 gram/brake horsepower-hour (g/bhp-hr), a CO emission rate of 1.5 g/bhp-hr and a VOC emission rate of 1.5 g/bhp-hr.
(9 VAC 5-80-1180)
7. **Fuel** – The approved fuel for the gas engine-driven chiller (James Kimsey Center) is natural gas. The approved fuel for the engine-generator sets (located at Steve Case Center, James Kimsey Center, Ted Leonsis Center and the Mail Hub) listed in Condition 1, is diesel fuel. The diesel fuel shall meet the ASTM D975 specification for S500 diesel fuel oil with a maximum sulfur content per shipment of 0.05%. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits. A change in the approved fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)
8. **Fuel Certification** – The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the diesel fuel oil was received;
 - c. The quantity of diesel fuel oil delivered in the shipment;
 - d. A statement that the diesel fuel oil complies with the fuel specification requirements of Condition 7; or
 - e. Alternatively, the permittee shall obtain approval from the DEQ-Northern Regional Office (NRO) if other documentation will be used to certify the diesel fuel oil type.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by the DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 7.
(9 VAC 5-80-1180)

EMISSION LIMITS

9. **Emission Limits** – Emissions from the operation of the permitted equipment (listed in Condition 1) shall not exceed the limits specified below:

Pollutant	500 kW diesel engine generator set (Steve Case Center)	600 kW diesel engine generator set (James Kimsey Center)	Gas engine-driven chiller (James Kimsey Center)
NO _x (as NO ₂)	16.1 lb/hr 4.0 tons/yr	19.3 lb/hr 4.8 tons/yr	1.2 lb/hr 5.2 tons/yr
CO	6.0 lb/hr 1.5 tons/yr	4.0 lb/hr 1.0 tons/yr	1.2 lb/hr 5.2 tons/yr
VOCs	2.8 lb/hr 0.7 tons/yr	3.2 lb/hr 0.8 tons/yr	1.2 lb/hr 5.2 tons/yr
PM ₁₀	2.1 lb/hr 0.5 tons/yr	1.8 lb/hr 0.4 tons/yr	-

These emissions are derived from the manufacturer's "not to exceed" data and EPA AP-42 data (Table 3.4-1, 10/96) at maximum design capacity of the permitted equipment and operating limits to determine the overall emission contribution. Compliance with these pollutant limits shall be based on the proper operation and maintenance of the permitted equipment or by testing, if required. Compliance with the annual emission limits may be determined as stated in Condition 5.

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

10. **Visible Emission Limit** – Visible emissions from the permitted equipment (listed in Condition 1) shall not exceed 20 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)

CONTINUING COMPLIANCE DETERMINATION

11. **Stack Tests** – Upon request by the DEQ, the permittee shall conduct performance tests for nitrogen oxides from the gas engine-driven chiller (James Kimsey Center) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office.

(9 VAC 5-50-30 G)

12. **Visible Emissions Evaluations** – Upon request by the DEQ, the permittee shall conduct visible emission evaluations on the permitted equipment (listed in Condition 1) to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office.

(9 VAC 5-50-30 G)

RECORDS AND NOTIFICATIONS

13. All correspondence concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

(9 VAC 5-50-50)

14. **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 Regional Air Compliance Manager of the DEQ's Northern Regional Office.

These records shall include, but are not limited to:

- a. Annual hours of operation for each engine-generator set (located at Steve Case Center, James Kimsey Center, Ted Leonsis Center and the Mail Hub) listed in Condition 1, calculated monthly as the sum of each consecutive 12-month period.
- b. Records of the reasons for operation for each engine-generator set (located at Steve Case Center, James Kimsey Center, Ted Leonsis Center and the Mail Hub) listed in Condition 1, including, but not limited to, the date, cause of operation, the duration of operation and as applicable, cause of the emergency and/or the ISO-declared emergency notification.
- c. The annual horsepower-hours (hp-hr) for the gas engine-driven chiller (James Kimsey Center), calculated monthly as the sum of each consecutive 12-month period.
- d. All fuel supplier certifications as required by Condition 8.
- e. Annual amount of natural gas (cubic feet) used by the gas engine-driven chiller (James Kimsey Center), calculated monthly as the sum of each consecutive 12-month period.
- f. Scheduled and unscheduled maintenance, and operator training.
- g. Results of all stack tests, visible emission evaluations, and performance evaluations.

Compliance for the consecutive 12 month period (as referenced in a, c and e above) shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.

(9 VAC 5-80-1180 and 9 VAC 5-50-50)

GENERAL CONDITIONS

15. 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 so signed by any provision of the regulations of the board; or
(iii) any other document containing emissions data or compliance information the owner wishes the board to consider in the administration of its air quality programs. A responsible official is defined as follows:
 1. For a business entity, such as a corporation, association or cooperative, a responsible official is either:
 - a. The president, secretary, treasurer, or a vice president of the business entity in charge of a 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 ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. Any person signing a document under subsection 'a' of this section 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 manage 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' of this condition shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing the 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 data and preparing the form need to be

employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate document.

- d. Any person who fails to submit any relevant facts or who has submitted incorrect information in a document shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

(9 VAC 5-20-230)

16. Permit Suspension/Revocation – This permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emissions limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 G)

17. Right of Entry – The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. 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 Regulations;
- c. 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 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 and 9 VAC 5-80-1180)

- 18. Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- 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, prior to their first operation of such equipment. 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 and 9 VAC 5-80-1180 D)

- 19. Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of occurrence. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

- 20. Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Regional Air Compliance Manager of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by electronic mail, 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 Regional Air Compliance Manager.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

21. Notification for Control Equipment Maintenance – The permittee shall furnish notification to the Regional Air Compliance Manager of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B)

22. 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 and 9 VAC 5-80-1180)

23. Change of Ownership - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the Regional Air Compliance Manager of the change of ownership within 30 days of the transfer.

(9 VAC 5-80-1240)

24. Permit Copy - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.

(9 VAC 5-80-1180)