



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 052012-008 Project Number: 2011-12-039
Installation Number: 101-0009

Parent Company: 509 Bomb Wing, Air Force Global Strike Command
Department of the Air Force

Parent Company Address: 660 10 Street, Suite 125, Whiteman Air Force Base, MO 65305

Installation Name: Whiteman Air Force Base

Installation Address: 740 Arnold Avenue, Whiteman Air Force Base, MO 65305

Location Information: Johnson County, S33, T46N, R24W

Application for Authority to Construct was made for:

Burn-off oven to clean and regenerate diesel particulate filters. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAY 15 2012

EFFECTIVE DATE

Kyra L Moore
DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Whiteman Air Force Base
Johnson County, S33, T46N, R24W

1. **Operational Requirement**
Whiteman Air Force Base shall clean only diesel particulate filters (DPF) from vehicles in the burn-off oven (i.e. Evacublast DPF Regeneration Oven).

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2011-12-039
Installation ID Number: 101-0009
Permit Number:

Whiteman Air Force Base
740 Arnold Avenue,
Whiteman Air Force Base, MO 65305

Complete: February 24, 2012

Parent Company:
509 Bomb Wing, Air Force Global Strike Command
Department of the Air Force
660 10 Street, Suite 125
Whiteman Air Force Base, MO 65305

Johnson County, S33, T46N, R24W

REVIEW SUMMARY

- Whiteman Air Force Base has applied for authority to install a burn-off oven to clean and regenerate diesel particulate filters.
- Insignificant quantities (i.e. less than screening model action levels) of Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation. This type of burn-off oven is considered a rack, part, and drum reclamation unit and is therefore exempt from 40 CFR 60, Subpart CCCC, *Standards of Performance for Commercial and Industrial Solid Waste Incineration Units*.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. A burn-off oven is a type of incinerator, and a construction permit is required for all types of incinerators.
- This installation is located in Johnson County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- Emissions testing is not required for the equipment.
- An amendment to your Intermediate Operating Permit is required for this installation within 90 days of the start of operation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Whiteman Air Force Base (Whiteman AFB) is a United States military installation located in Johnson County. Sources of emissions include natural gas-fired boilers, emergency generators, and painting/de-painting activities. The following New Source Review permits have been issued to Whiteman Air Force Base from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0977-022	Incinerator
1080-001A	100,000 gallon Aboveground Storage Tank (AST) for oil
1083-003	40.4 mmBtu Boiler #4 for standby operation (Superseded by 0696-011)
0688-004A	75 mmBtu Boiler #5 and Boiler #4 increase (Superseded by 0696-011)
0191-002	15,000 gallon (Underground Storage Tank (UST)) and an emergency generator
0291-002A	Four 420,000 gallon AST for jet fuel (JP-8)
1291-003	Tanks for diesel and gasoline and an emergency generator
0792-039	2 mmBtu natural gas-fired boiler, diesel AST and emergency generator
1093-016	Replacement of emergency generator
0893-010	Drive-through blast booth and spray booth (superseded by 062000-025A)
0893-034 0893-034A	Paint booth (superseded by 062000-025A)
0893-005	Munitions center paint booth
0194-018	Diesel AST and a, emergency generator
0695-006 0695-006A 0695-006B 0695-006C	Maintenance and painting equipment for A-10 Aircraft (superseded by 062000-025A)
0995-004	Wastewater treatment facility tanks
0696-006	Emergency generator
0496-021 0496-021A	Fuel storage USTs and ASTs
0696-011	Emergency generator and diesel AST
0796-021	8 boilers, 50 emergency generators, 2 paint booths, media blasting booth, various fuel and solvent tanks
0896-002	Painting operations (superseded by 062000-025A)
0797-007	Emergency generators, tanks, and some coating operations
0398-008	Engine testing
022000-007	B-2 painting (superseded by 062000-025A)
062000-025 062000-025A	A-10 painting
012010-005	ArcJet thermal sprayer

PROJECT DESCRIPTION

Whiteman AFB has proposed to install an Evacublast DPF Regeneration Oven to clean diesel particulate filters. These filters are an emissions control device used on over-the-road vehicles. The oven is an electric unit with no emission controls. Diesel particulate filters are stacked in the oven, a maximum of 3 filters per cleaning cycle. The oven heats up to 1100°F in 30 minutes, maintains this temperature for 3 hours, and cools off over a 3.5 hour period. The minimum cycle time is 7 hours. The maximum design rate for this process was determined to be 1.4 pounds oily particulate residue per hour, based on a worst case estimate of 1500 grams oily particulate per filter.

EMISSIONS/CONTROLS EVALUATION

The emission factors were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 2.1 “Refuse Combustion” (October 1996) using the Source Classification Code (SCC) 5-01-001-01. Potential emissions of volatile organic compounds (VOC) and HAP were not calculated and are assumed to be insignificant compared to their respective de minimis levels and screening model action levels (SMAL). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2010 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/D	N/D	0.015	N/A
PM ₁₀	15.0	N/D	2.79	0.015	N/A
PM _{2.5}	10.0	N/D	0.09	0.015	N/A
SO _x	40.0	N/D	2.16	0.014	N/A
NO _x	40.0	N/D	29.32	0.014	N/A
VOC	40.0	N/D	4.22	N/D	N/A
CO	100.0	N/D	17.05	0.001	N/A
HAPs	10.0/25.0	N/D	1.02	N/D	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. A burn-off oven is a type of incinerator, and a construction permit is required for all types of incinerators.

APPLICABLE REQUIREMENTS

Whiteman Air Force Base shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Kathi Jantz
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 8, 2012, received February 8, 2012, designating 509 Bomb Wing, Air Force Global Strike Command, Department of the Air Force as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Mr. Keith Brumley
Air Program Manager
Whiteman Air Force Base
660 10th Street, Suite 125
Whiteman Air Force Base, MO 65305

RE: New Source Review Permit - Project Number: 2011-12-039

Dear Mr. Brumley:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Kathi Jantz, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:kjl

Enclosures

c: Kansas City Regional Office
PAMS File: 2011-12-039

Permit Number: