



Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

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FEB - 1 2006

Mr. Robert L. Davis, Colonel
U.S. Army, Chief of Staff - FLW
U.S. Army MANSCEN and Fort Leonard Wood
ATZT-DPW-EE
1334 First Street
Ft. Leonard Wood, MO 64573,

Re: U.S. Army MANSCEN and Fort Leonard Wood, 169-0004
Permit Numbers: **OP2006-005 through 2006-010**

Dear Colonel Davis:

Enclosed with this letter is your operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program at (573) 751-4817, or you may write to the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

for Michael J. Stansfield, P.E.
Permit Section Chief

MJS:mvb

Enclosures

c: Ms. Tamara Freeman, U.S. EPA Region VII
Ms. Amy Baker, Kansas City Regional Office
PAMS File: 169-0004-020A



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PERMIT TO OPERATE

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

Operating Permit Number: OP2006-010

Expiration Date: 01/31/2011

Installation ID Number: 169-0004

Project Number: 169-0004-020G

Installation Name and Address

U.S. Army MANSCEN and Fort Leonard Wood
ATZT-DPW-EE
1334 First Street
Ft. Leonard Wood, MO 64573
Pulaski County

Parent Company's Name and Address

Training & Document Command
ATBO-SE
Fort Monroe, VA 23651-5000

Installation Description:

U.S. Army MANSCEN and Fort Leonard Wood is a federal military installation in Pulaski County. The operating permit is divided into six documents. This document includes miscellaneous units.

FEB - 1 2006

Effective Date


Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

U.S. Army MANSCEN and Fort Leonard Wood is a federal military installation in Pulaski County. The installation is an existing major source of particulate matter less than or equal to ten microns (PM₁₀), sulfur oxides (SO_x), nitrogen oxides (NO_x), ozone (VOC) and carbon monoxide (CO).

The installation's primary purpose is to train enlisted and officer personnel of all branches of service in basic combat training, military engineering, and motor vehicle operations. The installation includes power plants, rock crushing plants, an asphalt plant, storage vessels, a chemical defense training facility, chemical and military police training schools, dry cleaners, and associated equipment.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM ₁₀)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2000	82.88	5.82	73.36	135.86	470.67	--	0.66
2001	81.82	11.39	86.61	114.73	721.41	--	0.09
2002	29.41	3.53	94.46	135.89	168.69	--	0.09
2003	96.14	25.9	116.88	203.81	670.69	--	0.02
2004	155.96	29.07	62.74	158.73	1333.7	--	0.03

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU9010	Building 185 Generator
EU9020	Building 3203 Generator
EU9030	Building 10250 Generator
EU9040	Building 10252 Generator
EU9050	Building 5101 Diesel Emergency Generator #1
EU9060	Building 5101 Diesel Emergency Generator #2
EU9070	Building 5003 Generator
EU9080	Building 5138 Vehicle Paint Booth
EU9090	Building 5265 Vehicle Paint Booth
EU9100	Building 5265 Furniture Paint Booth
EU9110	Building 5266 Vehicle Paint Booth
EU9120	Building 181 Boiler No. 2
EU9130	Building 490 Boiler No. 1
EU9140	Building 490 Boiler No. 2
EU9150	Building 498 Boiler
EU9160	Building 1134 Boiler
EU9170	Building 1390 Boiler
EU9180	Building 1549 Boiler
EU9190	Building 2322 Boiler
EU9200	Building 2553 Boiler

EU9210	Building 5051 Boiler
EU9220	Building 5053 Boiler
EU9230	Building 599 Boiler
EU9240	Building 2563 Boiler
EU9250	Firefighter Training

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Building 310 200 kW Diesel Generator (0.68 mmBtu/hr)
Building 404 230 kW Diesel Generator (0.79 mmBtu/hr)
Building 485 80 kW Diesel Generator (0.27 mmBtu/hr)
Building 755 45 kW Diesel Generator (0.15 mmBtu/hr)
Building 890 35 kW Diesel Generator (0.12 mmBtu/hr)
Building 979 50 kW Diesel Generator (0.17 mmBtu/hr)
Building 1000 10 kW Diesel Generator (0.03 mmBtu/hr)
Building 3200 80 kW Diesel Generator (0.27 mmBtu/hr)
Building 5006 210 kW Diesel Generator (0.72 mmBtu/hr)
Building 5008 15 kW Diesel Generator (0.05 mmBtu/hr)
Building 5009 Generator
Building 5013 12 kW Diesel Generator (0.04 mmBtu/hr)
Building 5018 30 kW Diesel Generator (0.10 mmBtu/hr)
Building 5019 12 kW Diesel Generator (0.04 mmBtu/hr)
Building 5027 12.5 kW Diesel Generator (0.04 mmBtu/hr)
Building 5245 30 kW Diesel Emergency Generator (0.10 mmBtu/hr)
Building 1601 40 kW Diesel Emergency Generator (0.14 mmBtu/hr)
15 Closed Landfills
Installation Pesticide/Herbicide use
Golf Course Pesticide/Herbicide use
Building 2350 Print Plant
Space Heating for Post Wide Offices – Propane – 30.150 mmBtu/hr (total)
Space Heating for Post Wide Offices – #1 Fuel Oil – 0.413 mmBtu/hr (total)
Space Heating for Post Wide Offices – #2 Fuel Oil – 45.543 mmBtu/hr (total)
Space Heating for Post Wide Offices – Natural Gas – 2.689 mmBtu/hr (total)
Space Heating for Post Wide Offices – Waste Oil – 0.845 mmBtu/hr (total)
Space Heating for Post Wide Offices – Wood/Oil – 0.54 mmBtu/hr (total)
Waste Water Treatment
Welding Operations
Prescribed Burning
Building 181 Boiler (1.965 mmBtu/hr, Methane, 1980)
Building 312 Boilers (2 each, 0.615 mmBtu/hr, Natural Gas, 1992)
Building 315 Boilers (2 each, 0.675 mmBtu/hr, Natural Gas, 1993)
Building 404 Boilers (2 each, 0.445 mmBtu/hr, Natural Gas, 1995)
Building 450 Boilers (5 each, 0.133 mmBtu/hr, Natural Gas, 1993)
Building 470 Boilers (10 each, 0.299 mmBtu/hr, Natural Gas, 1995)
Building 486 Boiler (0.455 mmBtu/hr, Natural Gas, 1992)
Building 490 Boilers (2 each, 1.000 mmBtu/hr, Natural Gas, 1992)

Building 490 Boiler (0.625 mmBtu/hr, Natural Gas, 1992)
Building 493 Boiler (1.550 mmBtu/hr, Natural Gas, 1979)
Building 499 Boiler #1 (1.000 mmBtu/hr, Natural Gas, 1994)
Building 499 Boiler #2 (0.750 mmBtu/hr, Natural Gas, 1994)
Building 580 Boiler #1 (0.100 mmBtu/hr, Natural Gas, 2000)
Building 580 Boiler #2 (0.300 mmBtu/hr, Natural Gas, 2000)
Building 606 Boiler (0.675 mmBtu/hr, Natural Gas, 1992)
Building 607 Boiler (1.000 mmBtu/hr, Natural Gas, 1992)
Building 607 Boilers (2 each, 0.675 mmBtu/hr, Natural Gas, 1992)
Building 615 Boiler #1 (0.990 mmBtu/hr, Natural Gas, 1994)
Building 615 Boiler #2 (0.129 mmBtu/hr, Natural Gas, 1994)
Building 625 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 626 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 627 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 628 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 629 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 630 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 630 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
Building 631 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 632 Boilers (4 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 633 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 634 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 635 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 636 Boilers (3 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 637 Boilers (3 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 638 Boilers (3 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 639 Boilers (3 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 640 Boilers (2 each, 2.500 mmBtu/hr, Natural Gas, 2001)
Building 650 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 651 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 652 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 653 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 653 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
Building 654 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 655 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 656 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 657 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 657 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
Building 658 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 659 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 660 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 730 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
Building 731 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
Building 732 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 733 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 734 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 735 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 735 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
Building 736 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)

- Building 737 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 738 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 739 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 739 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
- Building 740 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 741 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 1999)
- Building 742 Boilers (3 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 743 Boilers (3 each, 0.100 mmBtu/hr, Natural Gas, 1999)
- Building 744 Boilers (3 each, 0.150 mmBtu/hr, Natural Gas, 1999)
- Building 746 Boilers (2 each, 1.526 mmBtu/hr, Natural Gas, 1999)
- Building 747 Boilers (6 each, 0.299 mmBtu/hr, Natural Gas, 1996)
- Building 748 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 749 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 750 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 751 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
- Building 752 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
- Building 753 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 754 Boilers (2 each, 0.800 mmBtu/hr, Natural Gas, 1999)
- Building 754 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 755 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 756 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 757 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 1999)
- Building 768 Boiler (0.480 mmBtu/hr, Oil, 1987)
- Building 786 Boiler (0.422 mmBtu/hr, Fuel Oil #2, 1982)
- Building 804 Boiler #1 (0.750 mmBtu/hr, Natural Gas, 1992)
- Building 804 Boiler #2 (0.172 mmBtu/hr, Natural Gas, 1992)
- Building 805 Boiler (1.000 mmBtu/hr, Natural Gas, 1992)
- Building 815 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 816 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 817 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 818 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 819 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 820 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 820 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
- Building 821 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 821 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
- Building 822 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 823 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
- Building 824 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
- Building 825 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 826 Boilers (2 each, 2.500 mmBtu/hr, Natural Gas, 2001)
- Building 827 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 828 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 829 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 830 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 831 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
- Building 832 Boilers (3 each, 0.100 mmBtu/hr, Natural Gas, 2001)
- Building 835 Boilers (3 each, 0.150 mmBtu/hr, Natural Gas, 2001)
- Building 836 Boilers (12 each, 0.300 mmBtu/hr, Natural Gas, 2001)

Building 836 Boilers (2 each, 1.470 mmBtu/hr, Natural Gas, 2001)
Building 837 Boilers (6 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 838 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 840 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 841 Boilers (4 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 842 Boilers (4 each, 0.100 mmBtu/hr, Natural Gas, 2001)
Building 843 Boilers (3 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 844 Boilers (3 each, 0.150 mmBtu/hr, Natural Gas, 2001)
Building 869 Boiler (0.500 mmBtu/hr, LPG, 2002)
Building 890 Boilers (3 each, 0.299 mmBtu/hr, Natural Gas, 1998)
Building 950 Boiler (0.950 mmBtu/hr, Natural Gas, 1993)
Building 961 Boilers (5 each, 0.300 mmBtu/hr, Natural Gas, 1998)
Building 964 Boilers (2 each, 0.300 mmBtu/hr, Natural Gas, 1998)
Building 971 Boilers (2 each, 0.300 mmBtu/hr, Natural Gas, 1998)
Building 980 Boiler (0.450 mmBtu/hr, Natural Gas, 1993)
Building 1000 Boiler #1 (2.603 mmBtu/hr, Natural Gas, 1993)
Building 1000 Boiler #2 (1.750 mmBtu/hr, Natural Gas, 1993)
Building 1134 Boiler (0.875 mmBtu/hr, LPG, 1993)
Building 1300 Boiler (5.000 mmBtu/hr, Natural Gas, 1993)
Building 1310 Boiler (0.270 mmBtu/hr, LPG, 1994)
Building 1350 Boiler (0.653 mmBtu/hr, Fuel Oil #2, 1987)
Building 1601 Boiler (0.875 mmBtu/hr, Natural Gas, 1992)
Building 1607 Boiler (0.875 mmBtu/hr, Natural Gas, 1992)
Building 1607 Boilers (2 each, 0.300 mmBtu/hr, Natural Gas, 1998)
Building 1609 Boiler (0.675 mmBtu/hr, Natural Gas, 1992)
Building 2030 Boiler (23 each, 0.150 mmBtu/hr, LPG, 1989)
Building 2051 Boiler (0.095 mmBtu/hr, Fuel Oil #2, 1981)
Building 2100 Boilers (2 each, 3.000 mmBtu/hr, Natural Gas, 1987)
Building 2100 Boiler (2.092 mmBtu/hr, Natural Gas, 1987)
Building 2107 Boilers (3 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 2108 Boilers (5 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 2109 Boilers (5 each, 0.300 mmBtu/hr, Natural Gas, 2001)
Building 2200 Boiler (0.468 mmBtu/hr, Fuel Oil #2, 1968)
Building 5101 Boilers (6 each, 1.000 mmBtu/hr, Natural Gas, 1999)
Building 5101 Boiler (4.5 mmBtu/hr, Natural Gas, 1999)
Building 1383, Waste Oil Heater, 0.14 mmBtu/hr, Installed in 1997
Building 672, Waste Oil Heater, 0.35 mmBtu/hr, Installed in 1997
Building 680, Waste Oil Heater, 0.35 mmBtu/hr, Installed in 1997
Building 681, Waste Oil Heater, 0.35 mmBtu/hr, Installed in 1997
Building 2553, Waste Oil Heater, 2 @ 0.5 mmBtu/hr, Installed in 1997
Fuel Loading Racks
Building 486 Woodworking
Building 2215 Woodworking
Building 5265 Woodworking
Building 1707C Safety Kleen Parts Washer, 12 gallons, Installed 1998
Building 754 Safety Kleen Parts Washers, 2@12 gallons, Installed 2000
Building 5265 Safety Kleen Parts Washer, 77 gallons, Installed 2000
Building 1590 Safety Kleen Parts Washer, 12 gallons, Installed 1995
Building 681 Safety Kleen Parts Washer, 12 gallons, Installed 1995

Building 5138 Safety Kleen Parts Washers, 3@26 gallons, Installed 2003
Building 2845 Safety Kleen Parts Washer, 12 gallons, Installed 1995
Building 2845 Safety Kleen Parts Washer, 17 gallons, Installed 2002
Building 923A ZEP Parts Washer, Installed 1998
Building Kimbo Hall ZEP Parts Washer, Installed 1998
Building 5060 ZEP Parts Washers, 3 each, Installed 1998
Building 5053 ZEP Parts Washers, 4 each, Installed 1998
Building 881 ZEP Parts Washers, 2 each, Installed 1999
Building 880 ZEP Parts Washers, 2 each, Installed 1999
Building 873 ZEP Parts Washers, 2 each, Installed 1999
Building 872 ZEP Parts Washers, 2 each, Installed 1999
Building 990 ZEP Parts Washer, Installed 1998
Building 1549 ZEP Parts Washers, 22 each, Installed 1998
Building 5051 ZEP Parts Washers, 2 each, Installed 1998
Building 5074 ZEP Parts Washers, 3 each, Installed 1998
Building 5070 ZEP Parts Washer, Installed 1998
Building 5071 ZEP Parts Washer, Installed 1998
Building 5072 ZEP Parts Washer, Installed 1998
Building 1383 ZEP Parts Washer, Installed 1999
Building 1612 ZEP Parts Washer, Installed 2000
Building 486 ZEP Parts Washer, Installed 1999
Building 5156 ZEP Parts Washer, Installed 2000
Building 992 ZEP Parts Washers, 3 each, Installed 2000, 2001, 2002
Building 5052 ZEP Parts Washers, 4 each, Installed 2001, 2002
Building 656 ZEP Parts Washers, 7 each, Installed 2001
Building 655 ZEP Parts Washers, 8 each, Installed 2001
Building 735 ZEP Parts Washers, 2 each, Installed 2001
Building 659 ZEP Parts Washers, 2 each, Installed 2001
Building 731 ZEP Parts Washers, 2 each, Installed 2001
Building 730 ZEP Parts Washers, 2 each, Installed 2001
Building TA-190 ZEP Parts Washer, Installed 2001
MPs ZEP Parts Washers, 2 each, Installed 2001
Quarry ZEP Parts Washer, Installed 2002
Chemical Defense Training Facility

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

1. Air Pollution Control Program Construction Permit #062003-015
2. Air Pollution Control Program Construction Permit #082002-024A
3. Air Pollution Control Program Construction Permit #082002-024
4. Air Pollution Control Program Construction Permit #022002-009
5. Air Pollution Control Program Construction Permit #052001-011
6. Air Pollution Control Program Construction Permit #052001-010
7. Air Pollution Control Program Construction Permit #052000-004A
8. Air Pollution Control Program Construction Permit #0794-011
9. Air Pollution Control Program Construction Permit #0392-011

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Permit Condition PW001

10 CSR 10-6.060

Construction Permits Required

Air Pollution Control Program Construction Permit #0392-011

Air Pollution Control Program Construction Permit #082002-024

Emission Limitation:

If a continuing situation of demonstrated nuisance dust exists where the presence of particulate matter less than ten microns (PM₁₀) in the ambient air exists in quantities and durations that directly or proximately cause or contribute to injury to human, plant, or animal life or health, or to property, or that unreasonably interferes with the enjoyment of life or the use of property, the Director may require USA MANSCEN-FLW to submit a corrective action plan within ten days adequate to timely and significantly mitigate the emission of PM₁₀. USA MANSCEN-FLW shall implement any such plan immediately upon its approval by the Director. Failure to either submit or implement such a plan shall be a violation of this permit

Monitoring/Record Keeping/Reporting:

1. The permittee shall monitor the requested information in an approved corrective action plan. Note: No monitoring is required if a corrective action plan is not required.
2. The permittee shall keep records of the requested information in an approved corrective action plan. Note: No record keeping is required if a corrective action plan is not required.
3. The permittee shall submit a corrective action plan to the Air Pollution Control Program if required by the Director.

Permit Condition PW002

10 CSR 10-6.060

Construction Permits Required

Air Pollution Control Program Construction Permit #082002-024

Equipment and Operation Parameters:

1. USA MANSCEN-FLW shall immediately render inoperable all boilers and/or heaters designed to burn #6 residual oil located in USA MANSCEN-FLW 's Building #645 (EP: FLW 002J, 002K, 002L & 002M).
2. USA MANSCEN-FLW shall immediately render inoperable all woodworking operations located in USA MANSCEN-FLW's Building 1448 (EP: FLW 016).
3. USA MANSCEN-FLW shall immediately render inoperable the hospital waste incinerator (EP: FLW 014) constructed under APCP Permit No. 0590-004.
4. The above removed emission sources may not be operated without first obtaining a New Source Review permit from the APCP.

Permit Condition PW003

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area;

or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director; or

2. The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary.

Monitoring/Record Keeping:

The permittee shall conduct and record inspections of its facilities sufficient to determine compliance with this regulation, if required by the Director. If a violation of this regulation is discovered, the source shall undertake corrective action to eliminate the violation.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU9010 through EU9060		
Building 185 Generator Building 3203 Generator Building 10250 Generator Building 10252 Generator Building 5101 Diesel Emergency Generator #1 Building 5101 Diesel Emergency Generator #2		
Emission Unit	Description	2002 EIQ Reference #
EU9010	Building 185 – Sewage Treatment Plant 400 kW diesel generator (1.37 mmBtu/hr).	EP003W
EU9020	Building 3203 – 650 kW diesel generator (2.22 mmBtu/hr).	EP003AA
EU9030	Building 10250 – 365 kW diesel generator (1.25 mmBtu/hr).	EP003II
EU9040	Building 10252 – 365 kW diesel generator (1.25 mmBtu/hr).	EP003Z
EU9050	Building 5101 - 600 kW emergency diesel generator (2.05 mmBtu/hr).	EP003EE
EU9060	Building 5101 - 300 kW emergency diesel generator (1.02 mmBtu/hr).	EP003FF

Permit Condition (EU9010 through EU9060)-001
10 CSR 10-6.260 ¹
Restriction of Emission of Sulfur Compounds

Emission Limitation:

1. Emissions from any existing or new source operation shall not contain more than 500 parts per million by volume (500 ppmv) of sulfur dioxide.
2. Stack gasses shall not contain more than 35 mg per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.
3. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) & 10 CSR 10-6.010 Ambient Air Quality Standards]

¹ 10 CSR 10-6.260(4) is state-only.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 1 and fuel oil no. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain an accurate record of the sulfur content for fuel oil no. 1 and fuel oil no. 2. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

EU9070 Building 5003 Generator		
Emission Unit	Description	2002 EIQ Reference #
EU9070	Building 5003 – 400 kW diesel generator (3.50 mmBtu/hr).	003KK

Permit Condition EU9070-001
10 CSR 10-6.060 Construction Permits Required Air Pollution Control Program Construction Permit #062003-015

Emission Limitation:

The U.S. Army Manuever Support Center and Fort Leonard Wood shall emit less than 40.0 tons of Nitrogen Oxides (NO_x) for emission unit EU9070 in any consecutive 12 month period.

Monitoring/Record Keeping:

1. The U.S. Army Maneuver Support Center and Fort Leonard Wood shall maintain an accurate record of NO_x emitted into the atmosphere from emission unit EU9070 and shall record the monthly and running 12 month totals of NO_x emissions for this source.
2. The U.S. Army Maneuver Support Center and Fort Leonard Wood shall use Attachment Q, Monthly NO_x Emissions Tracking Record – Diesel Generator (EP003KK) or an equivalent form for this purpose.
3. The U.S. Army Maneuver Support Center and Fort Leonard Wood shall maintain all records for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition EU9070-002

10 CSR 10-6.260²

Restriction of Emission of Sulfur Compounds

Emission Limitation:

1. Emissions from any existing or new source operation shall not contain more than 500 parts per million by volume (500 ppmv) of sulfur dioxide.
2. Stack gasses shall not contain more than 35 mg per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.
3. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) & 10 CSR 10-6.010 Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 1 and fuel oil no. 2.

² 10 CSR 10-6.260(4) is state-only.

Monitoring/Record Keeping:

1. The permittee shall maintain an accurate record of the sulfur content for fuel oil no. 1 and fuel oil no. 2. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

EU9080 through EU9110		
Building 5138 Vehicle Paint Booth Building 5265 Vehicle Paint Booth Building 5265 Furniture Paint Booth Building 5266 Vehicle Paint Booth		
Emission Unit	Description	2002 EIQ Reference #
EU9080	Building 5138 – Vehicle paint booth with fabric filter to control particulate emissions.	EP30
EU9090	Building 5265 – Vehicle paint booth with fabric filter to control particulate emissions.	EP08
EU9100	Building 5265 – Furniture paint booth with water curtain to control particulate emissions.	EP08
EU9110	Building 5266 – Vehicle paint booth with fabric filter to control particulate emissions.	EP09

Permit Condition (EU9080 through EU9110)-001

10 CSR 10-6.060

Construction Permits Required

Air Pollution Control Program Construction Permit #052001-010

Emission Limitation:

U.S. Army Maneuver Support Center and Fort Leonard Wood (USAMSC-FLW) shall not discharge into the atmosphere from the paint booth(s) and any related operation(s) located in Buildings No. 5138, No. 5265 and No. 5266, Volatile Organic Compounds (VOC) in excess of 30.0 tons in any consecutive 12-month period.

Equipment and Operation Parameters:

All paints, cleaning solvents and any other material(s) associated with the paint booth operations located in Buildings No. 5138, No. 5265 and No. 5266 that emit VOCs shall be kept in sealed containers when not in use and during transport.

Monitoring/Record Keeping:

1. USAMSC-FLW shall maintain an accurate record of the emissions of VOC into the atmosphere from the paint booth(s) and related operation(s) located in Buildings No. 5138, No. 5265 and No. 5266 and shall record the monthly and running 12-month totals of VOC emissions from these sources.
2. USAMSC-FLW shall use Attachment O, *Monthly VOC Tracking Record – Paint Booth Operations in Buildings No. 5138, No. 5265 and No. 5266*, or an equivalent form for this purpose.
3. USAMSC-FLW shall maintain these records on-site for not less than five years.
4. All such records required by this permit shall be immediately made available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9080 through EU9110)-002

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Observations must be made once per month. If a violation is noted:
 1. Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 2. Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

Record Keeping:

1. The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions (see Attachment D).
3. The permittee shall maintain records of any USEPA Method 9 opacity test performed (see Attachment C) in accordance with this permit condition.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records shall be kept for a period of five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9080 through EU9110)-003

10 CSR 10-6.400

Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

1. The permittee shall not emit particulate matter in excess of 0.36 lb/hr from emission unit EU9080.
2. The permittee shall not emit particulate matter in excess of 0.18 lb/hr from each emission unit EU9090 through EU9110.

Monitoring:

1. Fabric filters shall be inspected for holes, imperfections, proper installation, or other problems that could hinder the effectiveness of the filter.
2. The filters shall be inspected each shift before spraying begins in a booth and after installation of a new filter.
3. For emission unit EU9100, the water curtain shall be in operation at all times when EU9100 is in use.

Record Keeping:

1. The permittee shall maintain records of the inspections of fabric filters when they occur.
 - a) All inspections, corrective actions, and instrument calibrations shall be recorded.
 - b) Attachment D contains a log including these record keeping requirements. This log, or an equivalent form created by the permittee, must be used to certify compliance with this permit condition.
2. All records shall be kept on-site for a minimum of five years and made available to Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

EU9120 through EU9220
 Building 181 Boiler No. 2
 Building 490 Boiler No. 1
 Building 490 Boiler No. 2
 Building 498 Boiler
 Building 1134 Boiler
 Building 1390 Boiler
 Building 1549 Boiler
 Building 2322 Boiler
 Building 2553 Boiler
 Building 5051 Boiler
 Building 5053 Boiler

Emission Unit	Description	Manufacturer/Model #	2002 EIQ Reference #
EU9120	Building 181 – 1.965 mmBtu/hr fuel oil no. 2 boiler; Installed in 1980 for heating hot water.	Weil-McClain	EP21A
EU9130	Building 490 – 2.65 mmBtu/hr fuel oil no. 2 boiler; Installed in 1974 for heating hot water.	Fulton	EP21A
EU9140	Building 490 – 2.65 mmBtu/hr fuel oil no. 2 boiler; Installed in 1980 for heating hot water.	Fulton	EP21A
EU9150	Building 498 – 1.26 mmBtu/hr fuel oil no. 2 boiler; Installed in 1980 for heating hot water.	NA	EP21A
EU9160	Building 1134 – 1.071 mmBtu/hr fuel oil no. 2 boiler; Installed in 1981 for generating steam.	Kewanee	EP21A
EU9170	Building 1390 – 2.65 mmBtu/hr fuel oil no. 2 boiler; Installed in 1976 for heating hot water.	Fulton	EP21A
EU9180	Building 1549 - 1.08 mmBtu/hr fuel oil no. 2 boiler; Installed in 1980 for generating steam.	Kewanee	EP21A
EU9190	Building 2322 – 1.172 mmBtu/hr fuel oil no. 2 boiler; Installed in 1978 for generating steam.	Kewanee	EP21A
EU9200	Building 2553 – 3.347 mmBtu/hr fuel oil no. 2 boiler; Installed in 1981 for generating steam.	Kewanee	EP21A
EU9210	Building 5051 – 1.296 mmBtu/hr fuel oil no. 2 boiler; Installed in 1979 for heating hot water.	NA	EP21A
EU9220	Building 5053 – 3.35 mmBtu/hr fuel oil no. 2 boiler; Installed in 1979 for heating hot water.	NA	EP21A

Permit Condition (EU9120 through EU9220)-001

10 CSR 10-3.060

Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of the emission limit, in pounds per million BTU of heat input from each of the emission units EU9120 through EU9220, as defined below.

$$E = 1.31(Q)^{-0.338}$$

where

E = the maximum allowable particulate emission rate in pound per million Btu of heat input; and

Q = the installation heat input in million of Btu per hour.

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain the installation total heat input and emission limitation calculations.
2. The permittee shall maintain potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in each of the emission units EU9120 through EU9220.
3. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
3. Attachments E and F contains a log including these record keeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9120 through EU9220)-002

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating, burning fuel oil and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Observations must be made once per month. If a violation is noted:

1. Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
2. Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

Record Keeping:

1. The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions (see Attachment D).
3. The permittee shall maintain records of any USEPA Method 9 opacity test performed (see Attachment C) in accordance with this permit condition.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records shall be kept for a period of five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9120 through EU9220)-003

10 CSR 10-6.260³

Restriction of Emission of Sulfur Compounds

Emission Limitation:

1. No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period
2. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) & 10 CSR 10-6.010 Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain an accurate record of the sulfur content for fuel oil no. 2. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

³ 10 CSR 10-6.260(4) is state-only.

EU9230 through EU9240

Building 599 Boiler
Building 2563 Boiler

Emission Unit	Description	Manufacturer/Model #	2002 EIQ Reference #
EU9230	Building 599 – 2.511 mmBtu/hr fuel oil no. 2 boiler; Installed in 1941 for generating steam.	Kewanee	EP21A
EU9240	Building 2563 – 4.185 mmBtu/hr fuel oil no. 2 boiler; Installed in 1941 for heating hot water.	Kewanee	EP21A

Permit Condition (EU9120 through EU9220)-001

10 CSR 10-3.060

Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of the emission limit, in pounds per million BTU of heat input from each of the emission units EU9230 through EU9240, as defined below.

$$E = 0.90(Q)^{-0.174}$$

where

E = the maximum allowable particulate emission rate in pound per million Btu of heat input; and

Q = the installation heat input in million of Btu per hour.

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain the installation total heat input and emission limitation calculations.
2. The permittee shall maintain potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in each of the emission units EU9230 through EU9240.
3. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
4. Attachments E and F contains a log including these record keeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9230 through EU9240)-001

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating, burning fuel oil and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Observations must be made once per month. If a violation is noted:
 1. Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 2. Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

Record Keeping:

1. The permittee shall maintain records of all observation results (see Attachment B), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions (see Attachment D).
3. The permittee shall maintain records of any USEPA Method 9 opacity test performed (see Attachment C) in accordance with this permit condition.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records shall be kept for a period of five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition (EU9230 through EU9240)-002

10 CSR 10-6.260⁴

Restriction of Emission of Sulfur Compounds

Emission Limitation:

1. No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period
2. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) & 10 CSR 10-6.010 Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Equipment and Operation Parameters:

These emission units shall be limited to burning fuel oil no. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain an accurate record of the sulfur content for fuel oil no. 2. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

⁴ 10 CSR 10-6.260(4) is state-only.

EU9250 Firefighter Training		
Emission Unit	Description	2002 EIQ Reference #
EU9250	The firefighter training involves a three-story structure containing four propane-burning fireplaces (2 - 2.35 mmBtu/hr and 2 - 1.175 mmBtu/hr) and uses a smoke agent material to train firefighters in extinguishment and rescue procedures for interior structure fires.	EP35

Permit Condition EU9250-001

10 CSR 10-6.060

Construction Permits Required

Air Pollution Control Program Construction Permit #052000-004A

Emission Limitation:

U.S. Army Maneuver Support Center and Fort Leonard Wood (FLW) shall not discharge into the atmosphere from the fire training structure operations in excess of 4,174 pounds of Volatile Organic Compounds (VOC) in any consecutive 12-month period.

Monitoring/Record Keeping:

1. FLW shall maintain an accurate record of emission of VOC into the atmosphere from this fire training structure operation.
2. FLW shall record the monthly and running 12-month totals of VOC emissions from the fire training structure operation.
3. FLW shall use Attachment P, *Fire Training Operations – Monthly VOC Emission Tracking Record*, or an equivalent form for this purpose.
4. FLW shall maintain an accurate record of the number of days of operation during each calendar quarter.
5. USAMSC-FLW shall maintain all records required for this permit for not less than five years.
6. All such records required by this permit shall be immediately made available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

IV. Core Permit Requirements

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

10 CSR 10-3.030, Open Burning Restrictions

1. The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
2. Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
3. Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
 - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 - b) The schedule of burning operations;
 - c) The exact location where open burning will be used to dispose of the trade wastes;
 - d) Reasons why no method other than open burning is feasible; and
 - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
4. Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt U.S. Army MANSCEN and Fort Leonard Wood from the provisions of any other law, ordinance or regulation.
5. The permittee shall maintain files with letters from the director approving the open burning operation and previous Department of Natural Resources' inspection reports.

10 CSR 10-3.090, Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions

1. In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days in writing the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and

- j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph (1.) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
 3. Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (1.) list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
 4. Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
 5. Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060, Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065, Operating Permits

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants
40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

1. The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
2. The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.100, Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information

1. The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
2. The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
3. The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130, Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150, Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.180, Measurement of Emissions of Air Contaminants

1. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

10 CSR 10-6.280, Compliance Monitoring Usage

1. The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:

- a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
2. Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
- a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
 1. 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 2. 10 CSR 10-6.040, "Reference Methods";
 3. 10 CSR 10-6.070, "New Source Performance Standards";
 4. 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

Title VI – 40 CFR Part 82, Protection of Stratospheric Ozone

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

V. General Permit Requirements

Permit Duration

10 CSR 10-6.065(6)(C)1.B.

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

General Record Keeping and Reporting Requirements

10 CSR 10-6.065(6)(C)1.C

1. Record Keeping

- a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
- b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

2. Reporting

- a) The permittee shall submit a report of all required monitoring by:
 1. October 1st for monitoring which covers the January through June time period, and
 2. April 1st for monitoring which covers the July through December time period.
 3. Exception: Monitoring requirements which require reporting more frequently than semi annually, the permittee shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- b) Each report must identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
- c) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
- d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 1. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 2. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
 3. Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.
 4. These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

Risk Management Plans Under Section 112(r)

10 CSR 10-6.065(6)(C)1.D.

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

1. June 21, 1999;
2. Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3. The date on which a regulated substance is first present above a threshold quantity in a process.

Severability Clause

10 CSR 10-6.065(6)(C)1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

General Requirements

10 CSR 10-6.065(6)(C)1.G

1. The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2. The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
3. The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
4. This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5. The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

Incentive Programs Not Requiring Permit Revisions

10 CSR 10-6.065(6)(C)1.H.

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

Compliance Requirements

10 CSR 10-6.065(6)(C)3.

1. Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3. All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4. The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification,
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
 - c) Whether compliance was continuous or intermittent,
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(6)(C)6.

1. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit; or

- b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2. Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The administrator's authority to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

Emergency Provisions

10 CSR 10-6.065(6)(C)7.

1. An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2. Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility

10 CSR 10-6.065(6)(C)8.

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program and the Administrator at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1. Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program and to the Administrator, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are

affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and this agency at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.

- b) The permit shield shall not apply to these changes.

Off-Permit Changes

10 CSR 10-6.065(6)(C)9.

1. Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

Responsible Official

10 CSR 10-6.020(2)(R)12.

The application utilized in the preparation of this was signed by Scott Murrell, Chief, Energy, Environmental, and Natural Resources Division. U.S. Army MANSCEN and Fort Leonard Wood has provided the Missouri Department of Natural Resources with the appropriate supporting documentation designating Ms. Susan S. Halter, Deputy Garrison Commander, as the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Reopening Permit For Cause

10 CSR 10-6.065(6)(E)6.

In accordance with 10 CSR 10-6.065(6)(E)6.A., this permit may be reopened with cause if:

1. The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2. The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
3. Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
4. The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5. The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

Statement of Basis

10 CSR 10-6.065(6)(E)1.C.

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

Attachment E

This attachment may be used to help meet the record keeping requirements of Permit Condition (EU9120 through EU9220)-001 and (EU9230 through EU9240)-001.

Unit Description	Heat Input (Q)
Building 181 Boiler No. 2	1.97 MMBtu/hr
Building 490 Boiler No. 1	2.65 MMBtu/hr
Building 490 Boiler No. 2	2.65 MMBtu/hr
Building 498 Boiler	1.26 MMBtu/hr
Building 599 Boiler	2.51 MMBtu/hr
Building 1134 Boiler	1.07 MMBtu/hr
Building 1390 Boiler	2.65 MMBtu/hr
Building 1549 Boiler No. 1	1.07 MMBtu/hr
Building 1549 Boiler No. 2	1.08 MMBtu/hr
Building 2322 Boiler	1.17 MMBtu/hr
Building 2553 Boiler	3.35 MMBtu/hr
Building 2563 Boiler	4.19 MMBtu/hr
Building 5101 Boiler No. 1	1.00 MMBtu/hr
Building 5101 Boiler No. 2	1.00 MMBtu/hr
Building 5101 Boiler No. 3	1.00 MMBtu/hr
Building 5101 Boiler No. 4	1.00 MMBtu/hr
Building 5101 Boiler No. 5	1.00 MMBtu/hr
Building 5101 Boiler No. 6	1.00 MMBtu/hr
Building 5101 Boiler No. 7	4.50 MMBtu/hr
Building 5051 Boiler	1.30 MMBtu/hr
Building 5053 Boiler	3.35 MMBtu/hr
Space Heating	80.18 MMBtu/hr
Additional Small Boilers	78.95 MMBtu/hr
Heat Input (Q) for Project #169-0004-020G	199.89 MMBtu/hr
Total Installation Heat Input	
Heat Input (Q) for Project #169-0004-020A	261.35 MMBtu/hr
Heat Input (Q) for Project #169-0004-020B	2.50 MMBtu/hr
Heat Input (Q) for Project #169-0004-020C	0.00 MMBtu/hr
Heat Input (Q) for Project #169-0004-020E	16.65 MMBtu/hr
Heat Input (Q) for Project #169-0004-020F	64.00 MMBtu/hr
Heat Input (Q) for Project #169-0004-020G	199.89 MMBtu/hr
Total Installation Heat Input (Q)	544.39 MMBtu/hr
PM Allowable Emission Limitation for "New" Units ¹ E = 1.31(Q) ^{-0.338}	0.16 lb PM/MMBtu
PM Allowable Emission Limitation for "Existing" Units ¹ E = 0.90(Q) ^{-0.174}	0.30 lb PM/MMBtu

¹Compliance calculations for the unit subject to 10 CSR 10-5.030 can be found in Attachment F.

Attachment F

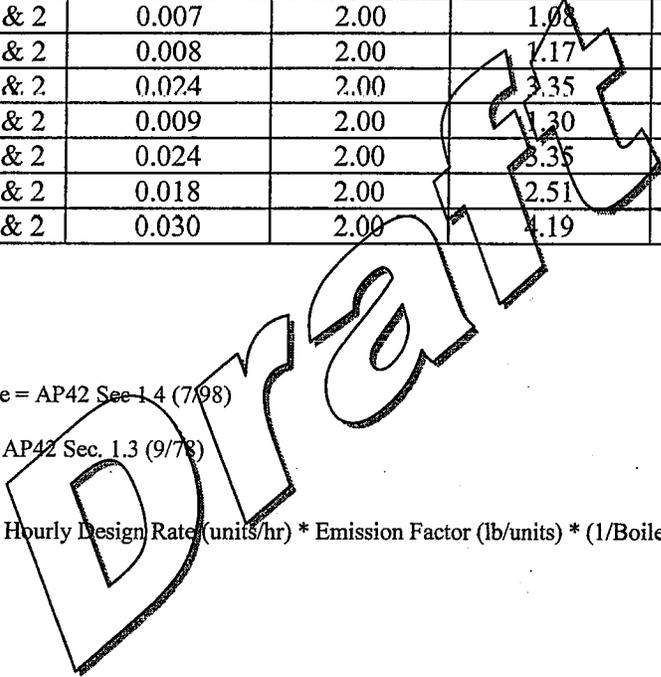
This attachment may be used to help meet the record keeping requirements of Permit Condition (EU9120 through EU9220)-001 and (EU9230 through EU9240)-001.

Unit	Fuel	Maximum Hourly Design Rate ¹	Emission Factor ²	Boiler Heat Capacity (MMBtu/hr)	Potential Emission Rate ³ (lbs/MMBtu)	Emission Limitation (lbs/MMBtu)
EU9120	Fuel Oil No. 1 & 2	0.014	2.00	1.97	0.01	0.16
EU9130	Fuel Oil No. 1 & 2	0.019	2.00	2.65	0.01	0.16
EU9140	Fuel Oil No. 1 & 2	0.019	2.00	2.65	0.01	0.16
EU9150	Fuel Oil No. 1 & 2	0.019	2.00	2.65	0.01	0.16
EU9160	Fuel Oil No. 1 & 2	0.007	2.00	1.07	0.01	0.16
EU9170	Fuel Oil No. 1 & 2	0.019	2.00	2.65	0.01	0.16
EU9180	Fuel Oil No. 1 & 2	0.007	2.00	1.07	0.01	0.16
EU9190	Fuel Oil No. 1 & 2	0.008	2.00	1.17	0.01	0.16
EU9200	Fuel Oil No. 1 & 2	0.024	2.00	3.35	0.01	0.16
EU9210	Fuel Oil No. 1 & 2	0.009	2.00	1.30	0.01	0.16
EU9220	Fuel Oil No. 1 & 2	0.024	2.00	3.35	0.01	0.16
EU9230	Fuel Oil No. 1 & 2	0.018	2.00	2.51	0.01	0.30
EU9240	Fuel Oil No. 1 & 2	0.030	2.00	4.19	0.01	0.30

¹Natural Gas: 1050 MMBtu/MMCF
 Units: MMCF/hr
 Fuel Oil: 140 MMBtu/10³ gallons
 Units: 10³ gallons/hr

²Natural Gas: Emission Factor Source = AP42 Sec. 1.4 (7/98)
 Units: lb PM/MMCF
 Fuel Oil: Emission Factor Source = AP42 Sec. 1.3 (9/78)
 Units: lb PM/10³ gallons

³Potential PM Emission Rate = Max. Hourly Design Rate (units/hr) * Emission Factor (lb/units) * (1/Boiler Heat Capacity [MMBtu/hr])



Attachment G

This Attachment G is used to verify compliance with the limitations of 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.

Emission Unit	Emission Unit Description	SO ₂ Emission Factor (lb/MMBtu) ¹	SO ₂ Emissions (lb/MMBtu)	SO ₂ Limit (lb/MMBtu)
EU9120	Bldg. 181 Boiler #2	0.52 AP42 Tbl 1.3-1 (09/98)	0.52	8.0
EU9130	Bldg. 490 Boiler #1			
EU9140	Bldg. 490 Boiler #2			
EU9150	Bldg. 498 Boiler			
EU9160	Bldg. 1134 Boiler			
EU9170	Bldg. 1390 Boiler			
EU9180	Bldg. 1549 Boiler			
EU9190	Bldg. 2322 Boiler			
EU9200	Bldg. 2553 Boiler			
EU9210	Bldg. 5051 Boiler			
EU9220	Bldg. 5053 Boiler			
EU9230	Bldg. 599 Boiler			
EU9240	Bldg. 2563 Boiler			

¹SO₂ emission factor converted 71 lb/10³ gal to lb/MMBtu by dividing by 137 mmbTU/10³ gal for Diesel Fuel.

Emission Unit	Emission Unit Description	SO ₂ Emission Factor (lb/MMBtu) ¹	SO ₂ Emissions (ppmv) ²	SO ₂ Limit (ppmv)
EU9010	Bldg. 185 Generator	0.29 AP42 Tbl 3.3-1 (10/96)	169	500
EU9020	Bldg. 3203 Generator			
EU9030	Bldg. 10250 Generator			
EU9040	Bldg. 10252 Generator			
EU9050	Bldg. 5101 Generator			
EU9060	Bldg. 5101 Generator			
EU9070	Bldg. 5003 Generator			

¹S = the sulfur content of the fuel
²General Equation: ppmv SO₂ = SO₂ Emission Factor ÷ F factor ÷ Conversion Factor

- The SO₂ emission factor is the emission factor presented in the following table. It assumes that all of the sulfur in the fuel is converted to SO₂ emissions.
- The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor is 10,320 wscf/MMBtu. For natural gas the F factor is 10,610 wscf/MMBtu. (40 CFR Part 60 Appendix A Method 19 Tbl 19-1).
- The conversion factor is 1.660E-7lb/scf per ppmv (40 CFR Part 60 Appendix A Method 19).

Sulfur emissions in the form of SO₃ converted from SO₂ are considered insignificant and it is highly unlikely that the limitations of 10 CSR 10-6.260(3)(B) will ever be exceeded.

Attachment P

Fire Training Operations – Monthly VOC Emission Tracking Record

This attachment may be used to help meet the record keeping requirements of Permit Condition EU9250-001.

Month	Column 1 Amount of Symtron Type II Used (Gallons)	Column 2 VOC Emission Factor (lbs/Gallon)	Column 3 [1] Monthly VOC Emissions (Pounds)	Column 4 Amount of Propane Burned (1000 Gallons)	Column 5 VOC Emission Factor (lbs/1000 gallons)	Column 6 [2] Monthly VOC Emissions (Pounds)	Column 7 [3] 12-Month VOC Emissions (Pounds/Year)

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[1] Column 3 = Column 1 x Column 2

[2] Column 6 = Column 4 x Column 5

[3] Sum of last 12-months of Column 3 and Column 6. Note: A 12-Month total VOC emission rate of no more than 4,174 pound of VOC for Column 7 indicates compliance. This limitation is based on an annual consumption rate of 12,000 gallons of propane and 500 gallons of Symtron Type II per year.

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1. Part 70 Operating Permit Application, received May 15, 1997
2. 2000 Emissions Inventory Questionnaire, received April 2, 2001, revised May 25, 2001;
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
4. Air Pollution Control Program Construction Permit #072003-022;
5. Air Pollution Control Program Construction Permit #062003-005;
6. Air Pollution Control Program Construction Permit #082000-006;
7. Air Pollution Control Program Construction Permit #082000-004;
8. Air Pollution Control Program Construction Permit #1099-001C;
9. Air Pollution Control Program Construction Permit #1099-001B;
10. Air Pollution Control Program Construction Permit #1099-001A;
11. Air Pollution Control Program Construction Permit #1099-001;
12. Air Pollution Control Program Construction Permit #0999-015;
13. Air Pollution Control Program Construction Permit #0699-002;
14. Air Pollution Control Program Construction Permit #0998-032;
15. Air Pollution Control Program Construction Permit #0897-013;
16. Air Pollution Control Program Construction Permit #0697-003;
17. Air Pollution Control Program Construction Permit #0895-030;
18. Air Pollution Control Program Construction Permit #0695-010A;
19. Air Pollution Control Program Construction Permit #0695-010;
20. Air Pollution Control Program Construction Permit #0495-013A;
21. Air Pollution Control Program Construction Permit #0495-013;
22. Air Pollution Control Program Construction Permit #0294-007A;
23. Air Pollution Control Program Construction Permit #0294-007;
24. Air Pollution Control Program Construction Permit #0891-003;
25. Air Pollution Control Program Construction Permit #0790-007;
26. Air Pollution Control Program Construction Permit #0590-004;
27. Air Pollution Control Program Construction Permit #0983-019;
28. Air Pollution Control Program Construction Permit #0979-030;
29. Air Pollution Control Program Construction Permit #0879-(010-011);
30. Air Pollution Control Program Construction Permit #0179-(006-016).

Applicable Requirements Included in the Operating Permit but Not in the Application

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

1. 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*,
This rule has been included in the operating permit in order to provide citing for the allowance of requests for emissions data results. On past forms issued by the Air Pollution Control Program, including the application for this permit, it was automatically marked as an administrative rule not required to be listed as an applicable

requirement. It is no longer judged to be solely administrative and is, therefore, included in the operating permit as a core permit requirement.

2. 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, has been rescinded and removed from the SIP. It has been replaced by 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*, which is an applicable requirement in the operating permit.
3. 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
This rule has essentially replaced 10 CSR 10-3.100, *Restriction of Emission of Sulfur Compounds*, and 10 CSR 10-3.150, *Restriction of Emission of Sulfur Compounds From Indirect Heating Sources*. It has been determined to be applicable to the installation and therefore has been included in the operating permit.
4. 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*
10 CSR 10-3.050, *Restriction of Emission of Particulate Matter from Industrial Processes*, has been rescinded and removed from the SIP. It has been replaced by 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*, which is an applicable requirement in the operating permit.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

- 10 CSR 10-6.240, *Asbestos Abatement Projects – Registration, Notification, and Performance Requirements*.
This rule has been determined not to apply to the installation and omitted from the operating permit.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1. Air Pollution Control Program Construction Permit #0297-007 and its amendment Permit #0297-007A placed requirements on parts washing, paint booths located in Buildings 1448, 5266, 5265 and 5138 and various fuel storage tanks. Air Pollution Control Program Construction Permit #052001-011 specifically superceded the storage tank requirements of these permits. Air Pollution Control Program Construction Permit #1099-001 rendered the paint booth in Building 1448 (as part of the woodworking operation in that building) inoperable. Air Pollution Control Program Construction Permit #052001-010 superceded the special conditions of these permits for the paint booths located in Buildings 5138, 5265 and 5266. The result is that the special conditions associated with these construction permits only apply to the parts washing operations.
2. The special conditions associated with Air Pollution Control Program Construction Permit #0495-013 are applicable to an incinerator that was never installed per Air Pollution Control Program Construction Permit #0495-013A. These conditions were not included in the Title V permit since the incinerator has never been and is not part of the installation.

NSPS Applicability

40 CFR Part 60, Subpart Dc does not apply to any of the boilers covered under this permit because the units were installed prior to the applicability date of the subpart and/or the maximum rated capacity of the boiler is below the applicability threshold of the subpart (< 10 mmBtu/hr).

MACT Applicability

1. 40 CFR Part 63, Subpart T does not apply to the parts washers at the installation because they do not use the solvent types covered by the subpart.
2. 40 CFR Part 63, Subpart JJ does not apply to Building 5265 Furniture Paint Booth (EU9100) because the furniture repair operations occurring in the building do not meet the definition of a wood furniture manufacturer.
3. The vehicle paint booths located in Buildings No. 5138 (EU9080), No. 5265 (EU9090) and No. 5266 (EU9110) are not subject to 40 CFR Part 63, Subpart IIII since the installation is not a major source of Hazardous Air Pollutants.

NESHAP Applicability

40 CFR Part 61, Subpart M, *National Emission Standard for Asbestos*, applies to the installation because of the renovation and demolition parts of the subpart which makes the subpart applicable to all sources. It is included as a core permit requirement.

Other Regulatory Determinations

1. The units listed in the "Emission Units Without Limitations" section in the front of this permit either have no applicable regulations associated with them or are considered insignificant activities by the operating permit application. Those units include, but are not limited to, all natural gas/LPG units with a maximum heat input of less than 10 mmBtu/hr and those that burn other fuels and have a heat input of less than 1 mmBtu/hr.
2. 10 CSR 10-6.170, *Restriction of Particulate Matter to the Ambient Air Beyond the Premise of Origin*, is applicable to the installation. Due to the size and unique geographical aspects of the installation it is highly unlikely that the installation will ever exceed the emission limitations of 10 CSR 10-6.170, therefore no monitoring, record keeping and reporting is necessary unless required by the Director.
3. 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, is applicable to all boiler units and is included in the Title V permit for those units not specifically exempted from the operating permit requirements by 10 CSR 10-6.065. 10 CSR 10-6.220 does not, however, apply to the generators as internal combustion units are specifically exempted from the rule. This rule was not applied to any emission units specifically exempted from 10 CSR 10-6.400 as particulate matter emissions are not of significant quantity to result in opacity issues.

10 CSR 10-6.220 also does not apply to the Firefighter Training (EU9250) since that activity is specifically exempted from the opacity requirements per the rule itself.

4. 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*. Attachment G represents compliance calculations necessary to verify compliance with this regulation.
5. 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter*, was not included as an applicable regulation for the boilers since indirect heating is specifically exempted by the rule. The generators are also exempted from 10 CSR 10-6.400 because the rule specifically states that liquid and gaseous fuels are not to be considered in determining the "process weight" introduced into the emission unit. The emission units listed in Table 1 below are also exempt from the process weight rate rule because potential uncontrolled particulate matter emissions are less than 0.5 pounds per hour per 10 CSR 10-6.400.

Potential PM Emission Rate =
MHDR(tons/hr)*Emission Factor(lb/ton)

Table 1: Emission Units Without Limitations Potential PM Emissions

Emission Unit	Maximum Hourly Design Rate (tons/hr)	PM Emission Factor (lb/ton)	Emission Factor Reference	Potential PM Emission Rate (lb/hr)
Building 486 Woodworking	0.39	0.2	AP42	0.08
Building 2215 Woodworking	0.27	0.2	AP42	0.05
Building 5265 Woodworking	0.16	0.2	AP42	0.03

Particulate Matter Emissions for the Paint Booths (Table 2):

Maximum Allowable PM Emissions = $E \text{ (lb/hr)} = 4.1(P)^{0.67}$ if $P \leq 30$ tons/hr
 = $E \text{ (lb/hr)} = 55(P)^{0.11} - 40$ if $P > 30$ tons/hr

P = Process weight rate (tons/hr)
 E = Allowable emission rate limit (lb/hr)

Potential PM Emission Rate =
 $MHDR(\text{tons/hr}) * \text{Emission Factor}(\text{lb/ton}) * [1 - ((\text{Control Eff}/100)(\text{Capture Eff}/100))] * [1 - (\text{Transfer Eff}/100)]$

NOTE: Control device efficiency will only be accounted for if necessary to comply with the allowable PM emission rate limit.

Table 2: Process Rate Weight Rule Compliance Calculations

Emission Unit	Maximum Hourly Design Rate (tons/hr)	PM Emission Factor (lb/ton)	Emission Factor Reference	Transfer Eff. (%)	Capture Eff. (%)	Control Device Eff. (%)	Potential PM Emission Rate (lb/hr)	Allowable PM Emission Rate (lb/hr)
EU9080	0.026	1334	Mass Balance	30	100	99	0.24	0.36
EU9090	0.010	1334	Mass Balance	30	100	99	0.09	0.18
EU9100	0.010	1334	Mass Balance	30	100	99	0.09	0.18
EU9110	0.010	1334	Mass Balance	30	100	99	0.09	0.18

The compliance calculations for particulate matter emitted from the paint booths (EU9080 through EU9110) was based on data obtained from the Fort Leonard Wood in February 2004. The solvent with the highest density (10.42 lb/gal) was used to determine the emission unit's maximum hourly design rate. The solvent with the lowest percent (33%) volatile organic compounds by weight was used to determine the emission unit's emission factor by assuming that the remaining percent was solids by weight. A conservative 30% transfer efficiency was determined based on the air-sprayed application of the paint. These emission units are equipped with fabric filters and water curtains for particulate control. Control efficiency for each of the paint booths is deemed to be 99%.

Emission units (EU9080 through EU9110) have a maximum emission rate that is in compliance (Table 2) with the allowable limitation with the use of a control device. The monitoring and record keeping

requirements for these units will be on the visual inspection and maintenance on the filters associated with the booths.

6. 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*. Attachments E and F represent emission limit and compliance calculations necessary to verify compliance with this regulation. It was determined that the four propane fireplaces are direct-fired units and, therefore, not subject to 10 CSR 10-3.060.
7. Several Air Pollution Control Program Construction Permits have been issued to various emission units associated with this Title V permit. However, not all were included in this permit for the following reasons.
 - a) Air Pollution Control Program Construction Permit #082000-006 was issued for a Bureau of Alcohol, Tobacco and Firearms (ATF) explosive range and classroom. The emission units addressed in the construction permit were never built and will not be built. As such, the special conditions of the construction permit were not included in the operating permit.
 - b) Air Pollution Control Program Construction Permit #0899-027 was issued for the 7 natural gas combustion units listed under Emission Units Without Limitations section of the Title V permit. The construction permit does not impose any requirements on the combustion units and the combustion units it covers are exempt from the operating permit requirements per 10 CSR 10-6.065.
 - c) Air Pollution Control Program Construction Permit #0699-022 was issued for the 300 kW emergency generator (EU9060). However, it contains no special conditions that impose requirements on the generator.
 - d) Air Pollution Control Program Construction Permit #0998-032 was issued to increase the CARC paint usage in the Building 5138 paint booth. However, all conditions of Permit #0998-032 were superceded by Air Pollution Control Program Construction Permit #052001-010.
 - e) Air Pollution Control Program Construction Permit #0697-003 was issued for the addition of a second paint booth to Building 5266. However, all conditions of Permit #0998-032 were superceded by Air Pollution Control Program Construction Permit #052001-010.
 - f) Air Pollution Control Program Construction Permit #0897-013 was issued for six used oil heaters. This permit has no special requirements associated with it and, therefore, was not included in the Title V permit. In addition, all heaters covered by the construction permit have heat inputs below 1 mmBtu/hr making them exempt from operating permit requirements per 10 CSR 10-6.065.
 - g) Air Pollution Control Program Construction Permit #0294-007 and #0294-007A was issued for Safety Kleen part washers that are no longer at the installations. Therefore the special conditions associated with this construction permit were not included in the operating permit.
 - h) Air Pollution Control Program Construction Permit #0979-030 was issued for a no. 2 fuel oil boiler to be used for space heating. The permit imposes no special conditions on the installation and, as such, was not included in the Title V permit.
 - i) Air Pollution Control Program Construction Permit #0590-004 and its amendment #0590-004A were issued for a medical waste incinerator. However, Air Pollution Control Program Construction Permit #1099-001 required that this incinerator be rendered inoperable and, as such, these permits were not included in the Title V permit.
 - j) Air Pollution Control Program Construction Permit #0983-019, #0879-002, #0879-010 and #0879-011 were issued for several incinerators. These incinerators were either never installed or have been removed from service. Therefore, the special conditions associated with these permits have not been included in the Title V permit.
8. Air Pollution Control Program Construction Permit #052000-004 includes several propane combustion units each with a heat input of less than 10 mmBtu/hr that are tied to firefighter training operations. Since the

size of the units exempts them from the operating permit requirements per 10 CSR 10-6.065, they are not included as separate emission units within the Title V permit but are included as part of the firefighter training operation emission unit (EU9250).

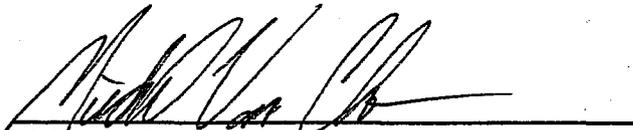
Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one (1) or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one (1) or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:



Michael Van Cleave
Environmental Engineer

Attachment SB-A

This table provides a description of the space heating units found at the Fort Leonard Wood installation.

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
170 (No. 1)	50,000	LP gas	Modine	1985
170 (No. 2)	150,000	LP gas	Peerless (unit heater)	1981
170 (No. 3)	250,000	LP gas	AFCO (unit heater)	1981
170 (No. 4)	250,000	LP gas	Trane	1985
204 (No. 1)	275,000	#2 Oil	Armstrong	1978
204 (No. 2)	275,000	#2 Oil	Armstrong	1978
320 (No. 1)	100,000	Nat Gas	Fraizer Johnson	1992
320 (No. 2)	100,000	Nat Gas	Fraizer Johnson	1992
386 (No. 1)	150,000	LP gas	Trane	1983
386 (No. 2)	150,000	LP gas	Trane	1983
430	168,000	#2 Oil	Lennox	NA
430	105,000	#2 Oil	Lennox	NA
443	100,000	#2 Oil	Singer	NA
441	125,000	LP Gas	Rudd	1994
444	120,000	#2 Oil	Weather King	1965
446	120,000	LP gas	Singer	1978
448	112,000	#2 Oil	Armstrong	1968
467 (No. 1)	160,370	LP Gas	Carrier	1986
467 (No. 2)	160,370	LP Gas	Carrier	1986
467 (No. 3)	92,400	LP Gas	Carrier	1986
467 (No. 4)	92,400	LP Gas	Carrier	1986
497 (No. 1)	167,000	Nat Gas	Trane	1986
497 (No. 2)	167,000	Nat Gas	Trane	1986
560 (No. 1)	80,000	Nat Gas	York	1995
560 (No. 2)	80,000	Nat Gas	York	1995
560 (No. 3)	80,000	Nat Gas	York	1995
560 (No. 4)	80,000	Nat Gas	York	1995
560 (No. 5)	80,000	Nat Gas	York	1995
561	150,000	LP Gas	Rudd	1989
562	140,000	#2 Oil	Dornback	1989
563	140,000	#2 Oil	Dornback	1989
564	140,000	#2 Oil	Dornback	1989
565 (No. 1)	200,000	#2 Oil	American Standard	1966
565 (No. 2)	200,000	#2 Oil	American Standard	1966
566	140,000	#2 Oil	Dornback	1989
567	140,000	#2 Oil	Dornback	1989
568	140,000	#2 Oil	Cleveland	1989
569	140,000	#2 Oil	Cleveland	1989
664	140,000	#2 Oil	Dornback	1989

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
665	140,000	#2 Oil	Dornback	1989
666	140,000	#2 Oil	Dornback	1989
667	140,000	#2 Oil	Dornback	1989
668	140,000	#2 Oil	Dornback	1989
669	140,000	#2 Oil	American Standard	1966
672 (No. 1)	250,000	#2 Oil	Power Matic	1983
672 (No. 2)	250,000	#2 Oil	Power Matic	1983
672 (No. 3)	235,000	Waste Oil	Shenandoah	1996
673 (No. 1)	250,000	#2 Oil	Power Matic	1983
673 (No. 2)	250,000	#2 Oil	Power Matic	1983
680 (No. 1)	360,000	LP Gas	Co-Ray-Vac (infrared)	1983
680 (No. 2)	235,000	Waste Oil	Shenandoah	1996
681 (No. 1)	250,000	#2 Oil	Power Matic	1983
681 (No. 2)	235,000	Waste Oil	Shenandoah	1996
686	140,000	#2 Oil	Dornback	1989
687	140,000	#2 Oil	Dornback	1989
688 (No. 1)	200,000	#2 Oil	American Standard	1966
688 (No. 2)	200,000	#2 Oil	American Standard	1966
689	140,000	#2 Oil	Dornback	1989
690	140,000	#2 Oil	Dornback	1989
691	140,000	#2 Oil	Dornback	1989
692	140,000	#2 Oil	Dornback	1989
693	140,000	#2 Oil	Dornback	1989
694	140,000	#2 Oil	Dornback	1989
701	140,000	#2 Oil	Dornback	1989
702	140,000	#2 Oil	Dornback	1989
703 (No. 1)	200,000	#2 Oil	American Standard	1966
703 (No. 2)	200,000	#2 Oil	American Standard	1966
704	140,000	#2 Oil	Dornback	1989
705	140,000	#2 Oil	Dornback	1989
706	140,000	#2 Oil	Dornback	1989
707	140,000	#2 Oil	Dornback	1989
709	150,000	LP Gas	Rudd	1994
710	150,000	LP Gas	Rudd	1994
711	140,000	#2 Oil	Dornback	1989
712	140,000	#2 Oil	Dornback	1989
713 (No. 1)	200,000	#2 Oil	American Standard	1966
713 (No. 2)	200,000	#2 Oil	American Standard	1966
714	140,000	#2 Oil	Dornback	1989
715	140,000	#2 Oil	Dornback	1989
716	140,000	#2 Oil	Dornback	1989
717	140,000	#2 Oil	Dornback	1989
718	140,000	#2 Oil	Dornback	1989

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
719	140,000	#2 Oil	Dornback	1989
720	150,000	LP Gas	Rudd	1990
721	150,000	LP Gas	Rudd	1990
722 (No. 1)	200,000	#2 Oil	American Standard	1966
722 (No. 2)	200,000	#2 Oil	American Standard	1966
723	125,000	#2 Oil	Dornback	1989
724	140,000	#2 Oil	Dornback	1989
725	140,000	#2 Oil	Dornback	1989
726	140,000	#2 Oil	Dornback	1989
727	140,000	#2 Oil	Dornback	1989
728	140,000	#2 Oil	Dornback	1989
758	140,000	#2 Oil	Dornback	1989
759	140,000	#2 Oil	Dornback	1989
760 (No. 1)	200,000	#2 Oil	American Standard	1966
760 (No. 2)	200,000	#2 Oil	American Standard	1966
761	140,000	#2 Oil	Dornback	1989
762	140,000	#2 Oil	Dornback	1989
763	150,000	LP Gas	Rudd	1994
764	150,000	LP Gas	Rudd	1994
765	150,000	LP Gas	Rudd	1994
766	150,000	LP Gas	Rudd	1994
772 (No. 1)	250,000	#2 Oil	Power Matic	1983
772 (No. 2)	250,000	#2 Oil	Power Matic	1983
773 (No. 1)	250,000	#2 Oil	Power Matic	1983
773 (No. 2)	250,000	#2 Oil	Power Matic	1983
780 (No. 1)	250,000	#2 Oil	Power Matic	1983
780 (No. 2)	250,000	#2 Oil	Power Matic	1983
781 (No. 1)	250,000	#2 Oil	Power Matic	1983
781 (No. 2)	250,000	#2 Oil	Power Matic	1983
790	140,000	#2 Oil	Dornback	1989
791	140,000	#2 Oil	Dornback	1989
792 (No. 1)	200,000	#2 Oil	American Standard	1966
792 (No. 2)	200,000	#2 Oil	American Standard	1966
793	140,000	#2 Oil	Dornback	1989
794	140,000	#2 Oil	Dornback	1989
795	140,000	#2 Oil	Dornback	1989
796	140,000	#2 Oil	Dornback	1989
797	140,000	#2 Oil	Dornback	1989
798	140,000	#2 Oil	Dornback	1989
805	875,000	Nat Gas	Fulton	1993
806	150,000	LP Gas	Rudd	1992
807	150,000	LP Gas	Rudd	1992
808	150,000	LP Gas	Rudd	1992

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
809	150,000	LP Gas	Rudd	1992
810	150,000	LP Gas	Rudd	1992
811 (No. 1)	150,000	LP Gas	Rudd	1992
811 (No. 2)	150,000	LP Gas	Rudd	1992
812	150,000	LP Gas	Rudd	1992
813	150,000	LP Gas	Rudd	1990
814	150,000	LP Gas	Rudd	1990
851	150,000	LP Gas	Rudd	1990
852	150,000	LP Gas	Rudd	1990
853 (No. 1)	200,000	#2 Oil	American Standard	1966
853 (No. 2)	200,000	#2 Oil	American Standard	1966
854	140,000	#2 Oil	American Standard	1966
855	140,000	#2 Oil	American Standard	1966
856	140,000	#2 Oil	American Standard	1966
857	140,000	#2 Oil	American Standard	1966
858	150,000	LP Gas	Rudd	1990
859	150,000	LP Gas	Rudd	1990
872 (No. 1)	250,000	#2 Oil	Power Matic	1983
872 (No. 2)	250,000	#2 Oil	Power Matic	1983
873 (No. 1)	250,000	#2 Oil	Power Matic	1983
873 (No. 2)	250,000	#2 Oil	Power Matic	1983
880 (No. 1)	250,000	#2 Oil	Power Matic	1983
880 (No. 2)	250,000	#2 Oil	Power Matic	1983
881 (No. 1)	250,000	#2 Oil	Power Matic	1983
881 (No. 2)	250,000	#2 Oil	Power Matic	1983
990	360,000	LP gas	Co-Ray-Vac	1985
991	360,000	LP gas	Co-Ray-Vac	1985
998	360,000	LP gas	Co-Ray-Vac	1985
999	360,000	LP gas	Co-Ray-Vac	1985
1026 (No. 1)	123,000	LP gas	Weathermaker	1987
1026 (No. 2)	160,000	LP gas	Weathermaker	1987
1026 (No. 3)	91,200	LP gas	Weathermaker	1987
1026 (No. 4)	90,600	LP gas	Weathermaker	1987
1026 (No. 5)	75,000	LP gas	Weathermaker	1987
1026 (No. 6)	300,000	LP gas	Reznor	1987
1067 (No. 1)	200,000	Nat Gas	Reznor	1996
1067 (No. 2)	200,000	Nat Gas	Reznor	1996
1067 (No. 3)	200,000	Nat Gas	Reznor	1996
1067 (No. 4)	200,000	Nat Gas	Reznor	1996
1178	240,000	LP gas	Air Temp	1982
1226	120,000	#2 Oil	Weather King	1982
1228	120,000	#2 Oil	Weather King	1982
1231 (No. 1)	125,000	LP Gas	Trane	1992

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
1231 (No. 2)	84,000	#2 Oil	Trane	1982
1232	250,000	#2 Oil	Carrier	NA
1234	120,000	#2 Oil	Weather King	1982
1236	250,000	#2 Oil	Carrier	NA
1237 (No. 1)	120,000	#2 Oil	Weather King	1982
1237 (No. 2)	120,000	#2 Oil	Weather King	1982
1239	250,000	#2 Oil	Carrier	1982
1240	250,000	#2 Oil	Carrier	1982
1241	250,000	#2 Oil	Carrier	1975
1242 (No. 1)	120,000	#2 Oil	Weather King	1982
1242 (No. 2)	120,000	#2 Oil	Weather King	1982
1244	250,000	#2 Oil	Carrier	1975
1247	124,000	#2 Oil	Trane	NA
1248	250,000	#2 Oil	Carrier	1982
1249	250,000	#2 Oil	Carrier	1982
1250	120,000	#2 Oil	Weather King	1982
1251	120,000	#2 Oil	Weather King	1982
1252	120,000	#2 Oil	Weather King	1982
1253	250,000	#2 Oil	Carrier	1982
1254	250,000	#2 Oil	Carrier	1982
1255	124,000	#2 Oil	Trane	NA
1259	250,000	#2 Oil	Carrier	1982
1260	250,000	#2 Oil	Carrier	1982
1261	250,000	#2 Oil	Carrier	1982
1265	140,000	#2 Oil	American Standard	1965
1266	120,000	#2 Oil	Weather King	1982
1267	140,000	#2 Oil	Lennox	NA
1268	124,000	#2 Oil	Trane	NA
1269	120,000	#2 Oil	Weather King	1982
1271 (No. 1)	120,000	#2 Oil	Weather King	1982
1271 (No. 2)	120,000	#2 Oil	Weather King	1982
1272	120,000	#2 Oil	Weather King	1965
1273	250,000	#2 Oil	Carrier	1982
1274	250,000	#2 Oil	Carrier	1982
1275	250,000	#2 Oil	Carrier	1982
1276	250,000	#2 Oil	Carrier	1982
1277	95,000	#2 Oil	Heat Controller	1972
1278	250,000	#2 Oil	Carrier	1982
1279	250,000	#2 Oil	Carrier	1982
1281 (No. 1)	150,000	LP Gas	Heil	1989
1281 (No. 2)	125,000	LP Gas	Tempstar	1989
1282	250,000	#2 Oil	Carrier	1982
1283	120,000	#2 Oil	Weather King	1982

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
1284	250,000	#2 Oil	Carrier	1982
1285	250,000	#2 Oil	Carrier	1982
1286	120,000	#2 Oil	Weather King	1982
1287	250,000	#2 Oil	Carrier	1982
1288 (No. 1)	75,000	LP Gas	Reznor (space heater)	1994
1288 (No. 2)	75,000	LP Gas	Reznor (space heater)	1994
1289	95,000	#2 Oil	Heat Controller	1982
1314	112,000	#2 Oil	Borg Warner	1966
1315	140,000	#2 Oil	American Standard	NA
1316	350,000	#2 Oil	Beck	1976
1317	350,000	#2 Oil	Beck	1976
1318	NA	NA	2 space heaters	NA
1319	140,000	#2 Oil	American Standard	NA
1321	350,000	#2 Oil	Beck	1976
1322 (No. 1)	150,000	LP Gas	Carrier	1992
1322 (No. 2)	150,000	LP Gas	Carrier	1992
1323	112,000	#2 Oil	Borg Warner	1966
1324	112,000	#2 Oil	Borg Warner	1966
1350	NA	electric	Trane	1987
1367	250,000	#2 Oil	Carrier	1982
1368	250,000	#2 Oil	Carrier	1982
1371	250,000	#2 Oil	Carrier	1982
1372	250,000	#2 Oil	Carrier	1982
1383 (No. 1)	140,000	LP gas	Bryant	1972
1383 (No. 2)	140,000	LP gas	Bryant	1972
1383 (No. 3)	140,000	LP gas	Bryant	1972
1383 (No. 4)	140,000	LP gas	Bryant	1972
1383 (No. 5)	140,000	LP gas	Bryant	1972
1383 (No. 6)	140,000	LP gas	Bryant	1972
1383 (No. 7)	140,000	Waste Oil	Reznor	1995
1391 (No. 1)	140,000	LP Gas	Carrier	1986
1391 (No. 2)	140,000	LP Gas	Carrier	1986
1422	110,000	electric	York	1980
1448	1,600,000	#2 Oil	Rheem National	1975
1588	350,000	#2 Oil	Armstrong	1967
1614	150,000	LP Gas	Rudd	1995
1621	NA	Electric	Carrier	1975
1621	NA	Electric	Carrier	1975
2041	52,000	LP gas	Air Temp	1982
2042	52,000	LP gas	Air Temp	1982
2043	52,000	LP gas	Air Temp	1983
2101	125,000	LP gas	Carrier	1986
2102	120,000	LP gas	Carrier	1986

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
2103	350,000	#2 Oil	Mammoth	1968
2112	160,000	LP Gas	Borg Warner	1988
2142	350,000	LP gas	Armstrong	1968
2145	350,000	LP gas	Armstrong	1968
2150	120,000	#2 Oil	Weather King	1982
2151	350,000	LP gas	Armstrong	1968
2152	350,000	#2 Oil	Armstrong	1968
2153	350,000	LP gas	Armstrong	1968
2155	120,000	#2 Oil	Weather King	1982
2156	350,000	LP gas	Armstrong	1968
2157	350,000	LP gas	Armstrong	1968
2163	350,000	LP gas	Armstrong	1968
2164	370,000	LP gas	Mammoth	1968
2165 (No. 1)	150,000	#2 Oil	Weather King	1982
2165 (No. 2)	150,000	#2 Oil	Weather King	1982
2167	120,000	LP gas	Weather King	1982
2169	350,000	LP gas	Armstrong	1968
2171	120,000	#2 Oil	Weather King	1982
2172	280,000	#2 Oil	Jackson Church	1969
2181	350,000	LP gas	Armstrong	1968
2182	350,000	LP gas	Armstrong	1968
2183	350,000	LP gas	Armstrong	1968
2186	120,000	#2 Oil	Weather King	1982
2187	200,000	#2 Oil	American Standard	1968
2191	350,000	LP Gas	Armstrong	1968
2192	350,000	LP gas	Armstrong	1968
2196	350,000	LP gas	Armstrong	1968
2198	350,000	LP gas	Armstrong	1968
2200A	280,000	#2 Oil	Rudd	1980
2201 (No. 1)	125,000	LP Gas	Goodman	1996
2201 (No. 2)	125,000	LP Gas	Goodman	1996
2202 (No. 1)	168,000	LP Gas	Lennox	1991
2202 (No. 2)	168,000	LP Gas	Lennox	1991
2203	105,000	LP Gas	Rudd	1994
2204 (No. 1)	90,000	LP Gas	Rudd	1993
2204 (No. 2)	90,000	LP Gas	Rudd	1993
2205 (No. 1)	80,000	LP Gas	Goodman	1997
2205 (No. 2)	80,000	LP Gas	Goodman	1997
2207 (No. 1)	150,000	LP Gas	Goodman	1997
2207 (No. 2)	150,000	LP Gas	Goodman	1997
2208 (No. 1)	350,000	LP gas	Reznor	1966
2208 (No. 2)	200,000	LP gas	Singer	1968
2212 (No. 1)	350,000	#2 Oil	Armstrong	1968

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
2212 (No. 2)	227,200	LP Gas	Thermoflo	1986
2213	NA	#1 Oil	space heaters	NA
2217	350,000	#2 Oil	Magic Chef	1977
2219 (No. 2)	80,000	LP gas	Heat Wave	1966
2219B	75,000	LP Gas	Goodman	1997
2220	112,000	#2 Oil	Highboy	1979
2221	NA	#1 Oil	space heaters	NA
2222	250,000	LP Gas	Power Matic	1990
2223	NA	#1 Oil	space heater	NA
2224 (No. 1)	188,000	#2 Oil	Heat Controls	1988
2224 (No. 2)	105,000	#2 Oil	Rudd	1988
2226 (No. 1)	90,000	LP Gas	Rudd	1993
2226 (No. 2)	90,000	LP Gas	Rudd	1993
2227	100,800	#2 Oil	Luxaire	1979
2230 (No. 1)	60,000	LP Gas	Infra-Red	1994
2230 (No. 2)	60,000	LP Gas	Infra-Red	1994
2230 (No. 3)	60,000	LP Gas	Infra-Red	1994
2272	150,000	#2 Oil	McDonalداire	1988
2282	150,000	#2 Oil	American Standard	1966
2303	NA	#1 Oil	2 space heaters	NA
2304	NA	#1 Oil	2 space heaters	NA
2305	NA	#1 Oil	2 space heaters	NA
2306 (No. 1)	120,000	#2 Oil	Weather King	1982
2306 (No. 2)	120,000	#2 Oil	Weather King	1982
2307 (No. 1)	120,000	#2 Oil	Weather King	1982
2307 (No. 2)	120,000	#2 Oil	Weather King	1982
2310 (No. 1)	150,000	LP Gas	Goodman	1997
2310 (No. 2)	150,000	LP Gas	Goodman	1997
2311	140,000	#2 Oil	American Standard	1966
2313 (No. 1)	112,000	#2 Oil	CeramiFlex	1973
2313 (No. 2)	112,000	#2 Oil	Lennox	1973
2313 (No. 3)	NA	#1 Oil	space heater	NA
2314 (No. 1)	160,000	LP Gas	Dravo Hastings	1984
2314 (No. 2)	160,000	LP Gas	Dravo Hastings	1984
2318	112,000	#2 Oil	Lennox	1973
2319 (No. 1)	250,000	#2 Oil	Power Matic	1982
2319 (No. 2)	40,000	LP gas	Modine	1979
2319 (No. 3)	40,000	LP gas	Modine	1979
2320	112,000	#2 Oil	Lennox	1973
2323	112,000	#2 Oil	Air Ease	1973
2324	500,000	#2 Oil	Dravo Hastings	1981
2325	125,000	LP Gas	Goodman	1997
2326	120,000	#2 Oil	Weather King	1982

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
2332	100,000	LP Gas	Goodman	1996
2334	120,000	#2 Oil	Weather King	1982
2336 (No. 1)	500,000	#2 Oil	Mammoth	1967
2336 (No. 2)	112,000	#2 Oil	Johnson	1967
2337	500,000	#2 Oil	Beck	1978
2337	112,000	#2 Oil	Lennox	1973
2338 (No. 1)	250,000	LP Gas	Reznor Ceiling Mount	1985
2338 (No. 2)	250,000	LP Gas	Reznor Ceiling Mount	1985
2338 (No. 3)	120,000	LP Gas	Bryant	1984
2339 (No. 1)	120,000	LP Gas	Trane Ceiling Mount	1985
2339 (No. 2)	120,000	LP Gas	Trane Ceiling Mount	1985
2339 (No. 3)	140,000	#1 Oil	Commercial Standard	NA
2340	NA	#1 Oil	space heater	NA
2341 (No. 1)	150,000	LP Gas	Goodman	1997
2341 (No. 2)	150,000	LP Gas	Goodman	1997
2342	150,000	LP Gas	Rudd	1993
2343	150,000	LP Gas	Goodman	1997
2344	150,000	LP Gas	Goodman	1997
2345	150,000	LP Gas	Goodman	1997
2351 (No. 1)	200,000	LP gas	Reznor	1979
2351 (No. 2)	200,000	LP gas	Reznor	1979
2351 (No. 3)	200,000	LP gas	Reznor	1979
2390 (No. 1)	65,000	LP gas	Reznor	1972
2390 (No. 2)	65,000	LP gas	Reznor	1972
2394 (No. 1)	100,000	LP gas	Reznor	1972
2394 (No. 2)	100,000	LP gas	Reznor	1972
2395 (No. 1)	100,000	LP gas	Bryant	1972
2395 (No. 2)	100,000	LP gas	Bryant	1972
2397	100,000	#2 Oil	General Electric	1976
2435	NA	#1 Oil	space heaters	NA
2555	70,000	LP Gas	Goodman	1992
2556 (No. 1)	70,000	LP Gas	Goodman	1992
2556 (No. 2)	92,000	LP Gas	Goodman	1992
2557	92,000	LP Gas	Goodman	1992
2558	400,000	#2 Oil	Jackson Church	1968
2580	NA	LP gas	Warm Morning	1972
2831	84,000	LP gas	Air Temp	1981
2836	96,000	LP gas	Air Temp	1981
2837 (No. 1)	100,000	LP gas	Reznor	1966
2837 (No. 2)	100,000	LP gas	Reznor	1966
2840	150,000	LP gas	Bryant	1981
2841	96,000	LP gas	Air Temp	1981
2842	100,000	LP gas	BDP	1982

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
3066	140,000	#2 Oil	American Standard	1966
3067	350,000	#2 Oil	Power Matic	1981
3289 (No. 1)	350,000	LP gas	Comfort Air	1985
3289 (No. 2)	350,000	LP gas	Lennox	1965
3291	350,000	#2 Oil	Armstrong	1968
4190	140,000	#2 Oil	American Standard	1965
4191	150,000	#2 Oil	Air Temp	NA
4192	150,000	LP Gas	Goodman	1997
4193	112,000	#2 Oil	Borg Warner	NA
4194	112,000	#2 Oil	Rheem	1986
4199	200,000	#2 Oil	American Standard	NA
5002 (No. 1)	125,000	LP gas	Heil	1988
5002 (No. 2)	125,000	LP gas	Heil	1988
5004	160,000	LP gas	AFCO	1986
5007 (No. 1)	64,096	Electric	Carrier	1975
5007 (No. 2)	NA	Electric	Carrier	1975
5041	112,000	#2 Oil	Johnson	NA
5042	250,000	#2 Oil	American Standard	NA
5047 (No. 1)	280,000	#2 Oil	Jackson Church	1979
5047 (No. 2)	280,000	#2 Oil	Jackson Church	1979
5048 (No. 1)	280,000	#2 Oil	Jackson Church	1979
5048 (No. 2)	280,000	#2 Oil	Jackson Church	1979
5049 (No. 1)	280,000	#2 Oil	Jackson Church	1979
5049 (No. 2)	280,000	#2 Oil	Jackson Church	1979
5056	350,000	#2 Oil	Power Matic	1982
5059	350,000	#2 Oil	Power Matic	1982
5064	100,000	#2 Oil	Air Temp	NA
5073 (No. 1)	176,000	LP gas	Total Comfort	1982
5073 (No. 2)	176,000	LP gas	Total Comfort	1982
5073 (No. 3)	176,000	LP gas	Total Comfort	1982
5073 (No. 4)	176,000	LP gas	Total Comfort	1982
5073 (Latrine)	100,000	#2 Oil	Air Temp	1966
5075	100,800	#2 Oil	Westinghouse	1967
5076	125,000	LP Gas	Comfort-Air	1989
5077	100,800	#2 Oil	Westinghouse	1976
5078	100,800	#2 Oil	Westinghouse	1976
5079	100,800	#2 Oil	Westinghouse	1976
5082	100,800	#2 Oil	Westinghouse	1976
5083	100,800	#2 Oil	Westinghouse	1976
5084	100,800	#2 Oil	Westinghouse	1976
5085	100,800	#2 Oil	Westinghouse	1976
5124	84,000	#1 Oil	Dayton	1986
5125	84,000	#1 Oil	Dayton	1986

Building No.	BTU/HR INPUT	Fuel	Manufacturer	Date Installed
5130	150,000	#2 Oil	Carrier	1990
5150 (No. 1)	465,000	LP gas	Mammoth	1988
5150 (No. 2)	465,000	LP gas	Mammoth	1988
5280	105,000	#1 Oil	Heil	1990
5282	125,000	#2 Oil	Carrier	1978
5285	100,000	#2 Oil	Air Temp	1978
5345	NA	#1 Oil	space heater	NA
5421 (No. 1)	112,000	#2 Oil	Lennox	1969
5421 (No. 2)	112,000	#2 Oil	Lennox	1969
5431 (No. 1)	112,000	#2 Oil	Lennox	1969
5431 (No. 2)	112,000	#2 Oil	Lennox	1969
5441 (No. 1)	150,000	#2 Oil	Weather King	1980
5441 (No. 2)	119,000	#2 Oil	Rudd	1990
5451 (No. 1)	175,000	#2 Oil	Dornback	1989
5451 (No. 2)	112,000	#2 Oil	Dornback	1989
5597	NA	#1 Oil	space heater	NA
6020	413,000	LP gas	Mammoth	1985
6125	60,000	LP gas	Empire Stove Co.	1984
6505	240,000	#2 Oil	American Standard	1992
9000	80,000	Nat Gas	Gama	1982
9625	NA	Nat Gas	Trane	1992
10200 (No. 1)	NA	#1 Oil	space heaters	NA
10200 (No. 2)	80,000	LP Gas	Rudd	1991
10221 (No. 1)	137,000	LP gas	Trane	1992
10221 (No. 2)	137,000	LP gas	Trane	1992
10300	80,000	#2 Oil	Jackson Church	1966
10301 (No. 1)	140,000	LP gas	Carrier	1986
10301 (No. 2)	140,000	LP gas	Carrier	1986
10302 (No. 1)	137,000	LP gas	Lennox	1986
10302 (No. 2)	137,000	LP gas	Lennox	1986
10303 (No. 1)	175,000	LP gas	Carrier	1993
10303 (No. 2)	175,000	LP gas	Carrier	1993
10320	80,000	LP gas	Heil	1992
10321	80,000	LP gas	Janitrol	1966
10330	100,000	LP gas	Borg Warner	1980
10332	100,000	LP gas	Janitrol	1966
10380 (No. 1)	400,000	LP gas	Janitrol	1966
10380 (No. 2)	400,000	LP gas	Janitrol	1966
12310	180,000	wood/oil	Lyndale	1982
12410	180,000	wood/oil	Lyndale	1982
12610	180,000	wood/oil	Lyndale	1982