

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number: **092008-001** Project Number: 2008-03-010

Parent Company: Army Installation Management Command, Northeast

Parent Company Address: 5A North Gate Road, Fort Monroe, Virginia 23651

Installation Name: Army Maneuver Support Center & Fort Leonard Wood

Installation Address: 1334 1st Street, Fort Leonard Wood, MO 65473

Location Information: Pulaski County, S21, T35N, R8W

Application for Authority to Construct was made for:

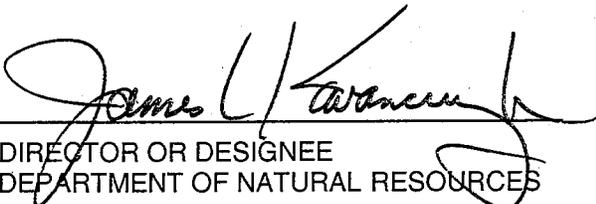
The construction of Prime Power School, for the purpose of training military personnel in the maintenance, repair, and operation of large stationary diesel generators. The following equipment will be installed for the training in the of operation, maintenance and repair of four General Motors EMD 1500 kilowatt generator sets, six Fermont 750 kilowatt generator sets, seven DPGDS Caterpillar 920 Kilowatt generator sets, and a 15,000 gallon diesel fuel tank.

This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

SEP - 3 2008

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

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

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

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

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

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

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

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

STATE OF MISSOURI



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MISSOURI AIR CONSERVATION COMMISSION

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

Permit Number: _____ Project Number: 2008-03-010
Parent Company: Army Installation Management Command, Northeast
Parent Company Address: 5A North Gate Road, Fort Monroe, Virginia 23651
Installation Name: Army Maneuver Support Center & Fort Leonard Wood
Installation Address: 1334 1st Street, Fort Leonard Wood, MO 65473
Location Information: Pulaski County, S21, T35N, R8W

Application for Authority to Construct was made for:
The construction of Prime Power School, for the purpose of training military personnel in the maintenance, repair, and operation of large stationary diesel generators. The following equipment will be installed for the training in the of operation, maintenance and repair of four General Motors EMD 1500 kilowatt generator sets, six Fermont 750 kilowatt generator sets, seven DPGDS Caterpillar 920 Kilowatt generator sets, and a 15,000 gallon diesel fuel tank. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

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

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

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

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

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

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Page No.	3
Permit No.	
Project No.	2008-03-010

SPECIAL CONDITIONS:

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

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

Army Maneuver Support Center & Fort Leonard Wood
Pulaski County, S21, T35N, R8W

1. Emission Limitation of Nitrogen Oxides (NOx)
 - A. Army Maneuver Support Center & Fort Leonard Wood shall emit less than 40 tons of Nitrogen Oxides (NOx) from the emission points defined as Prime Power in any consecutive 12-month period. This is an equipment limitation that applies to the equipment listed below in Table 1 as defined in this permit and the application.

Table 1: Emission Sources.

Description	Kilowatt Size
General Motors EMD*	1500
General Motors EMD	1500
General Motors EMD	1500
General Motors EMD	1500
Fermont heavy weight #1	750
Fermont heavy weight #2	750
Fermont heavy weight #3	750
Fermont light weight #1	750
Fermont light weight #2	750
Fermont light weight #3	750
Caterpillar DPGDS**	920
Caterpillar DPGDS	920

* EMD implies Electro-Motive Diesel.

** DPGDS implies Deployable Power Generation and Distribution.

Page No.	4
Permit No.	
Project No.	2008-03-010

SPECIAL CONDITIONS:

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

- B. Attachment A or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A). Each of the electric generator sets shall be equipped with a non-resettable hour meter to record the hours of operation for that unit. Army Maneuver Support Center & Fort Leonard Wood shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

- C. Army Maneuver Support Center & Fort Leonard Wood shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(B) indicate that the source exceeds the limitation of Special Conditions Number 1(A).

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

Project Number: 2008-03-010
Installation ID Number: 169-0004
Permit Number:

Army Maneuver Support Center & Fort Leonard Wood Complete: June 05, 2008
1334 1st. Street
Fort Leonard Wood, MO 65473-8944

Parent Company:
Army Installation Management Command, Northeast Region
5A North Gate Road,
Fort Monroe, Virginia, 23651-1048

Pulaski County, S21, T35N, R8W

REVIEW SUMMARY

- Army Maneuver Support Center & Fort Leonard Wood has applied for authority to install four (4) General Motors EMD 1500 kilowatt generator sets, six (6) Fermont 750 kilowatt generator sets, seven (7) DPGDS Caterpillar 920 Kilowatt generator sets and a 15,000 gallon diesel fuel tank.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are HAPs associated with diesel combustion.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- Subpart ZZZZ, the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines does not apply because the installation is not a major source of HAPs. None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of Sulfur Dioxide (SO_x), Nitrogen Oxide (NO_x), Carbon Monoxide (CO) are above major source levels, but indirectly limited to less than de minimis level by the 40 ton per year NO_x limit. Potential emissions of Volatile Organic Compounds (VOC), are above de minimis levels, but conditionally limited to less than 40 tons by the NO_x limit.

- This installation is located in Pulaski County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed since potential emissions of the application are limited to below de minimis levels.
- Emissions testing is not required for the equipment.
- Revision of the P70 operating permit is required is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

U.S. Army Manuever Support Center and Fort Leonard Wood (USA MANSCEN-FLW) is a federal military installation located on approximately 63,000 acres of land in Pulaski County. The primary purpose of the installation is to train enlisted and officer personnel (including all branches of the service) in basic combat training, military engineering and motor vehicle operations. This includes: bridging, demolitions, placement and removal of land mines; placement and breaching of obstacles designated to prevent movement; and construction and maintenance of buildings, utility systems and roads. Training is also provided in operations, repair, and maintenance of heavy equipment, and tracked/wheeled vehicles.

As a result of this wide range of training activities, a large number of very diverse types of air pollution emitting sources are being operated and/or are located at this installation. For New Source Review Permits USA MANSCEN-FLW is not considered an existing major source of air emissions. USA MANSCEN-FLW submitted a Part 70 Operating Permit application on May 15, 1997 and the draft permit is currently awaiting EPA review.

USA MANSCEN-FLW has applied for and been issued a number of New Source Review (NSR) permits from the Air Pollution Control Program since 1979. The following table provides a listing of these permits and other USA MANSCEN-FLW projects that have been completed by the Air Pollution Control Program along with a brief description for each permit or project.

Table 2: Permits and Other Projects for USA MANSCEN-FLW.

Project Number	Permit Number	Description of Permit or Project
2008-03-097	pending	Soil &Vegetation Sampling Changes
2007-10-028	pending	Monitoring Network Changes
2007-05-036	082002-024C	Soil and Vegetation Sampling
2006-07-026		Smoke Generators-applicability determination
2005-10-039	082002-024B	Reporting requirements
2005-09-013	072003-022A	Sulfur and nitrogen determinations
2005-09-014	082002-024A	New Training Areas
2005-03-037		Obscurants- applicability determination
2004-05-116	082002-024A	Monitor Location
2004-05-001		An applicability determination request for emergency generators. A no permit required letter was sent June 18, 2004.
2003-06-026	072003-022	A Section (5) permit issued to install one new dual-fuel 400 horsepower (HP) steam boiler in Building 311A to provide steam for space heating and other hospital uses.
2003-04-125		A Section (5) permit application for a new 400 kW generator at the Forney Air Field to replace several of the existing emergency generators.
2003-04-124	062003-005	A Section (5) permit issued to install two (2) new dry cleaning machines to the existing installation to replace the two (2) existing dry cleaning units.
2003-03-088	--	An applicability determination request for the replacement of several emergency generators at the Forney Air Field with one (1) new 400 kW diesel generator. A Permit Required letter was sent on April 2, 2002 for this activity.
2003-03-076	--	An applicability determination request for the replacement of two (2) dry cleaning machines with one(1) larger unit and one(1) smaller unit. A Permit Required letter was sent on April 4, 2002 for this activity.
2003-01-058	52000-004A	An amendment to Permit Number 052000-004 approved on March 24, 2003 to remove the quarterly reporting requirements for the fire training activities included in the original permit.
2002-09-005	--	An applicability determination request for the construction of a laundry facility consisting of one (1) 50 HP steam boiler, one (1) 200 gallon water heater, one (1) 95 pound dryer, one (1) ironer and two (2) 275 pound dyers. All of the new equipment is to be operated burning only natural gas for fuel. A No Permit Required letter was sent on October 9, 2002 for this activity.
2001-12-051	082002-024	A Section (6) permit issued as a corrective action to entirely replace and vacate two (2) previously issued Prevention of Significant Deterioration permits (Numbers 0695-010 and 1099-001) and any subsequent amendments related to these permits that were issued by the Missouri Air Pollution Control Program. This "corrective action" permit was issued as a result of the new guidance received from the Environmental Protection Agency, Region VII on December 14, 2001 concerning this installation.

Table 2: Permits and Other Projects for USA MANSCEN-FLW - Continued.

Project Number	Permit Number	Description of Permit or Project
2001-12-052	022002-009	A Section (5) permit issued as a corrective action for the addition of a new 150 ton per hour asphalt plant in March of 1995 that replaced an existing grand-fathered asphalt plant of the same size. Project number 3860-0004-029 incorrectly concluded that this replacement of the asphalt plant would not have required a New Source Review (NSR) permit and a No Permit Required letter was sent on March 13, 1995.
2001-11-033	--	An applicability determination request for two (2) 10,000 gallon storage tanks. A No Permit Required letter was sent on January 14, 2002.
2001-07-017	1099-001C	An amendment to Permit Number 1099-001 to include language that would allow the usage of an automated Look-Up Table system as an alternate compliance mechanism after final approval was obtained from the Air Pollution Control Program.
2001-02-142	--	An applicability determination request to conduct smoke grenade training at two (2) new sites not currently approved in Permit Number 1099-001. A Permit Required letter was sent to the installation on May 15, 2001 for this activity.
2001-02-085	--	An applicability determination request to increase the number of non-1995 Base Realignment and Closure (BRAC) related soldiers trained. A No Permit Required letter was sent on February 27, 2001.
2001-02-056	1099-001B	An amendment to Permit Number 1900-001 to approve one (1) additional smoke training site to be added to the list of approved site locations for this activity.
2000-12-021	--	An applicability determination request about building a perimeter fence and associated patrol road. A No Permit Required Letter was sent on December 15, 2000.
2000-11-040	052001-011	A Section (5) permit issued to establish a 25 ton per year Volatile Organic Compounds (VOC) limitation on a number of existing fuel storage tanks. The permit also supersedes some existing throughput, capacity and material stored restrictions that were established in Permit Number's 0294-007, 0294-007A, and 0895-030.
2000-10-072	052001-010	A Section (5) permit issued to establish a 30 ton per year VOC limitation on the painting operations in Buildings Number 5138, Number 5265 and Number 5266. The permit also supersedes some existing throughput limitations on these same painting operations that were established in Permit Number's 0294-007, 0294-007A, 0697-0903, and 0998-032.
2000-09-086	--	An applicability determination request to move and replace boilers. A No Permit Required Letter was sent on October 16, 2000.
2000-09-058	--	An applicability determination request to add additional natural gas household heating units. A No Permit Required Letter was sent on September 20, 2000.
2000-05-011	1099-001A	An amendment to Permit Number 1099-001 issued to increase the allowable insignificant level of fog oil usage to 876 pounds per year due to a rule change and to allow a vegetable based fog oil product to be tested.

Table 2: Permits and Other Projects for USA MANSCEN-FLW - Continued.

Project Number	Permit Number	Description of Permit or Project
2000-04-030	--	An applicability determination request to move a rock crusher approximately 200 yards from its present location. A No Permit Required Letter was sent on April 20, 2000 for this activity.
2000-03-057	082000-006	A Section (5) Permit issued to construct a Bureau of Alcohol, Tobacco and Firearms (BATF) explosive range and classroom.
2000-03-043	052000-004	A Section (5) Permit issued to construct a structure to conduct fire training exercises.
2000-01-079	1099-001A	An amendment to Permit Number 1099-001 issued to add additional operational scenarios to the original Look-Up Tables of the permit.
1999-09-040	0999-015	A Section (5) permit issued for the switch in fuels in the fog oil generators from unleaded gasoline as allowed in Permit Number 0695-010 to JP-8.
1999-08-142	--	An applicability determination request to allow the combustion of JP-8 in the fog oil generators in addition to the unleaded gasoline permitted in Permit Number 0695-010. A determination was made that a permit was required for this change in fuels and a Permit Required Letter was sent on September 8, 1999 for this activity.
1999-06-121	--	An applicability determination request to use a limited amount of fog oil for maintenance and repair activities of the fog oil generators. A No Permit Required letter was sent on July 7, 1999 for this activity.
1999-06-120	--	A Section (5) permit issued for the installation of six (6) 1.0 MMBTU/hr natural gas boilers and one (1) 4.5 MMBTU/hr natural gas boiler at the Chemical Defense Training Facility (CDTF). These new units were constructed at the CDTF instead of the 0.875 MMBTU/hr units originally permitted under Permit Number 0495-013A.
1999-05-046	--	An applicability determination request to use a limited amount of fog oil (<20 pounds) for a brigade activation ceremony. A No Permit Required letter was sent on June 2, 1999 for this activity.
1999-03-020	0699-022	A Section (5) permit issued for the installation of a 300 kilowatt (kW) emergency generator instead of a 175 kW generator originally permitted for the CDTF in Permit Number 0495-013A.
1999-02-086	--	An applicability determination request to use a limited amount of fog oil in a theater type fog oil generator. A No Permit Required determination for this operation was previously made in Air Pollution Control Program Project Number 1998-04-012. A letter stating this information was sent to the installation on March 19, 1999.
1998-11-105	1099-001	A Section (8) modification to Permit Number 0695-010 for the new sources related to the move of the U.S. Army Chemical and Military Police Schools to U.S. Army Engineer Center and Fort Leonard Wood that were not included in the original permit.
1998-07-115	--	An applicability determination request to store and dispense aviation gasoline in an existing underground storage tank. A No Permit Required letter was sent on August 19, 1998.
1998-07-029	0998-032	A Section (5) permit issued to increase the CARC paint usage in the Bldg. 5138 paint booth.

Table 2: Permits and Other Projects for USA MANSCEN-FLW - Continued

Project Number	Permit Number	Description of Permit or Project
1998-06-083	--	An applicability determination request for changes to the Obscurant Training and Related Sources and for other 1995 Base Realignment and Closure (BRAC) sources that were not previously permitted. A Permit Required letter for the changes and the additional BRAC sources was sent to the installation on August 13, 1998 for these activities.
1998-05-090	0695-010A	A request for a one (1) year extension to begin construction of Air Pollution Control Program Permit Number 0695-010. The extension request was granted on February 10, 1997.
1998-04-027	0495-013A	An amendment to Permit Number 0495-013 to replace the incinerator originally permitted with seven (7) new 0.875 MMBTU/hr boilers and one (1) redundant 175 kW standby generator.
1998-04-012	--	An applicability determination request for the limited usage (<200 pounds per year) of a theater type fog generator. A No Permit Required letter was sent on May 6, 1998.
169-0004-034	--	An amendment to Permit Number 0179-008 (Tank #3, Building 4054) and Permit Number 0179-009 (Tank #4, Building 4053) to remove NSPS Subpart K _a monitoring and record keeping requirements. Clarification of the issue was provided in a letter sent to the installation on October 29, 1997.
169-0004-020G	--	A Part 70 operating permit application submitted on May 15, 1997 for paint booths, woodworking and solvent cleaning operations. The operating permit is currently under Technical Review.
169-0004-020F	--	A Part 70 operating permit application submitted on May 15, 1997 for the dry cleaning operation.
169-0004-020E	--	A Part 70 operating permit application submitted on May 15, 1997 for the Chemical and Military Police Schools.
169-0004-020D	--	A Part 70 operating permit application submitted on May 15, 1997 for the Chemical Defense Training Facility.
169-0004-020C	--	A Part 70 operating permit application submitted on May 15, 1997 for storage tanks.
169-0004-020B	--	A Part 70 operating permit application submitted on May 15, 1997 for the asphalt and rock crushing operations.
169-0004-020A	--	A Part 70 operating permit application submitted on May 15, 1997 for the Central Boiler Power Plant operations.
3860-0004-033	0897-013	A Section (5) permit issued for the installation of six (6) used oil heaters.
3860-0004-032	0697-003	A Section (5) permit issued to modify Permit Number 0294-007 to reflect addition of a new paint booth.
3860-0004-031	0294-007A	An amendment to Permit Number 0294-007 issued to allow the usage of a clear coat material in Building 5266.
3860-0004-030	0590-004A	An amendment to Permit Number 0590-004 to allow the burning of Type (5) medical/infectious waste materials in the medical waste incinerator.
3860-0004-029	--	An applicability determination request for the replacement of a grandfathered asphalt plant. A No Permit Required letter was sent on March 13, 1995 for this activity.

Table 2: Permits and Other Projects for USA MANSCEN-FLW - Continued.

Project Number	Permit Number	Description of Permit or Project
3860-0004-028	0895-030	A Section (5) permit issued to increase the storage capacity of above ground storage tanks, an increase in throughput of RVP 7 and RVP 13 fuel and to switch to JP-8 from JP-4.
3860-0004-027	0879-002	A Section (6) permit issued for an incinerator to burn refuse.
3860-0004-026	0495-013	A Section (5) permit issued to construct a Chemical Decontamination Training Facility (CDTF) and Thermal Treatment Unit.
3860-0004-025	0995-017	A Section (5) permit issued for the addition of a new 150 ton per hour rock crushing plant. Ownership of the rock crushing plant installed under this permit has been transferred to the Missouri National Guard.
3860-0004-024	--	An applicability determination request for the removal of two (2) boilers and the modification of nineteen (19) other boilers/space heaters from fuel oil usage to natural gas/propane. All combustion units were below 10 MMBTU/hr and a No Permit Required letter was sent on June 10, 1994 for this activity.
3860-0004-023	0794-011	A Section (5) permit issued to install/modify two (2) 10.25 MMBTU/hr boilers to use either fuel oil or natural gas and for the construction of six (6) new 4.45 MMBTU/hr natural gas boilers.
3860-0004-022	0294-007	A Section (5) permit issued to construct three (3) paint booths that were installed in 1980 and also for the addition of a fourth paint booth in Building 5138.
3860-0004-021	0392-011	A Section (6) permit issued to construct a rock crushing/screening plant.
3860-0004-020	0891-003	A Section (5) permit issued to construct a rock crushing/screening plant.
3860-0004-019	0790-007	A Section (5) permit issued to construct a 150 ton per hour rock crushing/screening plant.
3860-0004-018	0590-004	A Section (5) permit issued to construct an incinerator to destroy Type 0, 1, & 4 wastes. This incinerator permit replaced the incinerator permitted under Permit Number 0983-019 and this permit was superseded by Air Pollution Control Program Permit Number 1099-001 and also later by Air Pollution Control Program Permit Number 082002-024.
3860-0004-017	0983-019	A Section (5) permit to construct a Type IV waste incinerator.
3860-0004-016	0979-030	A Section (5) permit to construct one (1) 2.1 MMBTU/hr #2 Fuel Oil fired boiler to be used for space heating.
3860-0004-015	0695-010	A Section (8) permit issued to construct a static and mobile fog oil smoke training facility. This permit was vacated after the issuance of Permit Number 082002-024.
3860-0004-010	0879-010 & 0879-011	An amendment to Permit Number 0879-002 to allow the construction of two (2) additional incinerators that are identical to the incinerator permitted under Permit Number 0879-002. This amendment was to include these two (2) additional incinerators that should have been included under the original permit.
3860-0004-005	0179-006 to 0179-016	A Section (5) permit to construct eleven (11) new petroleum storage tanks with eight (8) of the tanks being subject to NSPS Subpart K requirements.

PROJECT DESCRIPTION

The construction of the Prime Power School facility, for the purpose of training military personnel in the maintenance, repair, and operation of large, stationary diesel engine generators. This training will consist of both classroom instruction and hands on training. The hands on training will consist of the following: Operation, maintenance, and repair of four (4) General Motors EMD 1500 Kilowatt generator sets, six (6) Vermont 750 Kilowatt generator sets, seven (7) DPGS Caterpillar 920 Kilowatt generator sets. There will be training on welding and cutting operations. There will be a diesel storage tank as the only fuel considered in operating the generators is diesel. In addition to the equipment listed in Table 1, welding and cutting and fuel storage of the diesel as defined in the application are emission sources authorized by this permit. No control devices are being considered.

The installation has elected to take a NOx limitation of less than 40 tons per year. The NOx limit will cause the PM₁₀, SOx, VOC and CO to remain below de minimis levels. Also, The DPGDS units , model number MEP-810B , were formerly rated at 920 KW. They were rerated by the manufacturer to 840 KW.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, section 3.4, *Large Stationary Diesel and all Stationary Dual Fuel Engines* (10/96). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions*	Existing Actual Emissions (2007 EIQ)	Potential Emissions of the Application	New Equipment Conditioned Potential
PM ₁₀	15.0	1207.62	2.9	41.58	N/D
SOx	40.0	122.78	14.6	292.17	N/D
NOx	40.0	242.87	37.9	2314.21	<40
VOC	40.0	508.51	72.6	59.27	N/D
CO	100.0	2322.18	7.9	614.72	N/D
HAPs	10.0/25.0	6.75	0.0	1.13	N/D

N/D = Not Determined

*Existing potential emissions are from permit 082002-024 B with project number 2007-10-028. Based on these totals the installation would be considered major but these totals include fugitive and non fugitive emissions.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Because Potential to Emit NOx emissions are above major levels, the installation has elected to take a NOx limitation of less than 40 tons per year. The NOx limit will cause the PM₁₀, SOx, VOC, CO and NOx emissions to remain below de minimis levels.

APPLICABLE REQUIREMENTS

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

GENERAL REQUIREMENTS

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260

STAFF RECOMMENDATION

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

Timothy Paul Hines
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 29 of February, 2008, received 06 March, 2008, designating Army Installation Management Agency, Northwest Region as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey.

Attachment A: Monthly NOx Tracking Record
 U.S. Army Maneuver Support Center and Fort Leonard Wood
 Pulaski County, S21, T35N R8W
 Project Number: 2008-03-010
 Installation ID Number: 169-0004
 Permit Number:

This sheet covers the month of _____ in the year _____.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Description	Hours operated from meter beginning of month (hours/month)	Hours operated from meter at end of month (hours/month)	Hours end of month minus hours beginning of month	Emission Factor (tons/month)	NOx Emitted (Tons)
General Motors EMD*1500 KW					
General Motors EMD 1500 KW					
General Motors EMD 1500 KW					
General Motors EMD 1500 KW					
Fermont heavy weight #1 750 KW					
Fermont heavy weight #2 750 KW					
Fermont heavy weight #3 750 KW					
Fermont light weight #1 750 KW					
Fermont light weight #2 750 KW					
Fermont light weight #3 750 KW					
Caterpillar DPGDS**920 KW					
Caterpillar DPGDS 920 KW					
Caterpillar DPGDS 920 KW					
Caterpillar DPGDS 920 KW					
Caterpillar DPGDS 920 KW					
Caterpillar DPGDS 920 KW					
Caterpillar DPGDS 920 KW					
(b)Monthly Total of NOx emissions from all generators in tons:					
(c)12-Month NOx Emissions Total from Previous Month's Attachment A, in Tons:					
(d)Monthly NOx emissions total (b) from previous year's Attachment A, in Tons					
(e)Current 12-month Total of NOx Emissions in Tons: [(b) + (c) - (d)]					

NOTE: The emission factor of 48.62 pounds of NOx per hour of operation or 438.4 pounds of NOx per 1000 gallons of diesel fuel can be used to determine compliance or NOx performance testing can be used to determine compliance with the 40 ton per year limitation.

Instructions:

- (a) [Column 3] - [Column 2] = [Column 4] then take [Column 4] x [Column 5] = [Column 6];
- (b) Summation of [Column 6] in Tons;
- (c) 12-Month NOx emissions total (e) from last month's Attachment A, in Tons;
- (d) Monthly NOx emissions total (b) from previous year's Attachment A, in Tons; and
- (e) Calculate the new 12-month NOx emissions total. **A 12-Month NOx emissions total (e) of less than 40.0 tons for the installation indicates compliance.**

Mr. Scott Murrell
Chief, Environmental Division
Attn: IMNW-LNW-PWEE
Army Maneuver Support Center & Fort Leonard Wood
1334 1st. Street
Fort Leonard Wood, MO 65473

RE: New Source Review Permit - Project Number: 2008-03-010

Dear Mr. Murrell:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:thl

Enclosures

c: Southeast Regional Office
PAMS File: 2008-03-010

Permit Number: