

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT  
- NSPS & NESHAP SOURCE - REVISED

PERMITTEE

US Air Force, 375 CES/CEAN  
Attn: Mark McCoy  
702 Hangar Road, Building 56  
Scott Air Force Base, Illinois 62225-5035

<u>Application No.:</u> 00120075	<u>I.D. No.:</u> 163815AAA
<u>Applicant's Designation:</u>	<u>Date Received:</u> December 4, 2009
<u>Subject:</u> Air Force Base	
<u>Date Issued:</u> February 9, 2010	<u>Expiration Date:</u> October 7, 2013
<u>Location:</u> 702 Hangar Road, Scott Air Force Base, St. Clair County, 62225	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of five (5) jet fuel storage tanks (2 - 210,000 gallons, 2 - 206,000 gallons, and 1 - 147,000 gallons) equipped with internal floating roofs, sixty-three (63) diesel-powered emergency generators, one (1) emergency diesel-powered generator/fire suppression system, natural gas-fired boilers and heaters, six (6) gasoline storage tanks (2 - 10,000 gallons, 4 - 12,000 gallons), gasoline dispensing operations, one (1) 10,000 gallon propylene glycol storage tank, indoor shooting range controlled by baghouse, sulfur dioxide generator and waste water treatment plant controlled by a flare pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO) and Nitrogen Oxides (NO<sub>x</sub>), 10 tons/year for a single Hazardous Air Pollutant (HAP), and 25 tons/year for any combination of such HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
- 2a. Jet fuel storage tanks (ILAG 1, ILAG 2 and 87-32) are subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60 Subparts A and Kb. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

- b. Pursuant to 40 CFR 60.112b(a)(1), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
    - A. A foam-or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam-or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
    - B. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
    - C. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
  - iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with

a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

- v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
  - viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- 3a. Six diesel-powered generators, which were manufactured after April 1, 2006 and one fire pump engine constructed after July 11, 2005, are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and I III. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.4205(a), owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to 40 CFR 60 Subpart I III:

<u>Pollutant</u>	<u>g/kW-Hour</u>	<u>g/HP-Hour</u>
Carbon Monoxide (CO)	11.4	8.5
Nitrogen Oxides (NO <sub>x</sub> )	9.2	6.9
Particulate Matter(PM)	0.54	0.4
Hydrocarbons	1.3	1.0

- c. Pursuant to 40 CFR 60.4205(b), owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- d. Pursuant to 40 CFR 60.4202(a)(2), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and greater than or equal to 37 KW (50 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines, to the emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR

89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

- e. Pursuant to 40 CFR 60.4205(c), owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to 40 CFR 60 Subpart IIII, for all pollutants.

Table 4 to Subpart IIII of Part 60 -- Emission Standards for Stationary Fire Pump Engines in g/KW-hour (g/HP -hour)

<u>Maximum engine power</u>	<u>Model year(s)</u>	<u>NMHC + NO<sub>x</sub></u>	<u>CO</u>	<u>PM</u>
KW > 560 (HP > 750)	2008+	6.4 (4.8)	--	0.20 (0.15)

- f. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
- 4a. Pursuant to 40 CFR 89.112(a), exhaust emission from non-road engines to which 40 CFR 89 Subpart B is applicable shall not exceed the applicable exhaust emission standards contained in Table 1, as follows:

Table 1. - Emission Standards (g/kW-hour)

<u>Rated Power (kW)</u>	<u>Tier</u>	<u>Model Year<sup>1</sup></u>	<u>NO<sub>x</sub></u>	<u>HC</u>	<u>NMHC + NO<sub>x</sub></u>	<u>CO</u>	<u>PM</u>
kW>560	Tier 1	2000	9.2	1.3	--	11.4	0.54
	Tier 2	2006	--	--	6.4	3.5	0.20

<sup>1</sup> The model years listed indicate the model years for which the specified tier of standards take effect.

- b. Pursuant to 40 CFR 89.112(d), in lieu of the NO<sub>x</sub> standards, NMHC + NO<sub>x</sub> standards, and PM standards specified in 40 CFR 89.112(a), manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in 40 CFR 89 Subpart C. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in Table 2. The FEL established by the manufacturer serves as the standard for that engine family. Table 2 follows:

Table 2. - Upper Limit for Family Emission Limits (g/kW-hour)

<u>Rated Power (kW)</u>	<u>Tier</u>	<u>Model Year<sup>1</sup></u>	<u>NO<sub>x</sub> FEL</u>	<u>NMHC + NO<sub>x</sub> FEL</u>	<u>PM FEL</u>
kW>560	Tier 1	2000	14.6	--	--
	Tier 2	2006	--	10.5	0.54

<sup>1</sup> The model years listed indicate the model years for which the specified tier of standards take effect.

- 5a. The gasoline dispensing operations at this source are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Dispensing Facilities, 40 CFR 63 Subparts A and CCCCC. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 63.11113(b), if you have an existing affected source, you must comply with the standards in 40 CFR 63 Subpart CCCCC no later than January 10, 2011.
- c. Pursuant to 40 CFR 63.11116(a), you must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- i. Minimize gasoline spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- d. Pursuant to 40 CFR 63.11117(b), except as specified in 40 CFR 63.11117(c), you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in 40 CFR 63.11132, and as specified in 40 CFR 63.11117(b)(1) or 40 CFR 63.11117(b)(2).
- i. Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.
  - ii. Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.
- e. Pursuant to 40 CFR 63.11117(c), gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in 40 CFR 63.11117(b), but must comply only with all of the requirements in 40 CFR 63.11116.

- f. Pursuant to 40 CFR 63.11118(b), except as provided in 40 CFR 63.11118(c), you must meet the requirements in either 40 CFR 63.11118(b)(1) or 40 CFR 63.11118(b)(2).
  - i. Each management practice in Table 1 to 40 CFR 63 Subpart CCCCCC that applies to your GDF.
  - ii. If, prior to January 10, 2008, you satisfy the requirements in both 40 CFR 63.11118(b)(2)(i) and (ii), you will be deemed in compliance with 40 CFR 63.11118(b)(2).
    - A. You operate a vapor balance system at your GDF that meets the requirements of either 40 CFR 63.11118(b)(2)(i)(A) or 40 CFR 63.11118(b)(2)(i)(B).
      - I. Achieves emissions reduction of at least 90 percent.
      - II. Operates using management practices at least as stringent as those in Table 1 to 40 CFR 63 Subpart CCCCCC.
    - B. Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either 40 CFR 63.11118(b)(2)(i)(A) or paragraph (b)(2)(i)(B).
- g. Pursuant to 40 CFR 63.11118(c), the emission sources listed in 40 CFR 63.11118(c)(1) through (3) are not required to comply with the control requirements in 40 CFR 63.11118(b), but must comply with the requirements in 40 CFR 63.11117.
  - i. Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.
  - ii. Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.
  - iii. Gasoline storage tanks equipped with floating roofs, or the equivalent.
- h. Pursuant to 40 CFR 63.11118(d), cargo tanks unloading at GDF must comply with the management practices in Table 2 to 40 CFR 63 Subpart CCCCCC.
- 6a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

- c. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 7a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to excess 2000 ppm.
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan area shall comply with the applicable Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)(2)).
- 8a. Pursuant to 35 Ill. Adm. Code 219.121(b)(1), no person shall cause or allow the storage of any volatile petroleum liquid (VPL) with a vapor pressure of 10.34 kPa (1.5 psia) or greater at 294.3°K (70°F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gallons) capacity unless such tank, reservoir or other container is designed and equipped with a floating roof which rests on the surface of the VPL and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the VPL has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.
- b. Pursuant to 35 Ill. Adm. Code 219.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108.

- c. Pursuant to 35 Ill. Adm. Code 219.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 219.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 219.121(b)(2).
- d. Pursuant to 35 Ill. Adm. Code 219.123(b), subject to 35 Ill. Adm. Code 219.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any VOL in the tank unless:
  - i. The tank is equipped with one of the vapor loss control devices specified in 35 Ill. Adm. Code 219.121(b);
  - ii. There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;
  - iii. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
    - A. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
    - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
    - C. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
- e. Pursuant to 35 Ill. Adm. Code 219.141(a), no person shall use any single or multiple compartment effluent water separator which receives effluent water containing 757 liters/day (200 gallons/day) or more of organic material from any equipment processing, refining, treating, storing or handling organic material unless such effluent water separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. Exception: If no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.141 shall not apply if the vapor pressure of the organic material is below 17.24 kPa (2.5 psia) at 294.3°K (70°F).
- f. Pursuant to 35 Ill. Adm. Code 219.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 219 Subpart G shall apply only to photochemically reactive material.

- g. Pursuant to 35 Ill. Adm. Code 219.583(a), subject to 35 Ill. Adm. Code 219.583(b), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless:
  - i. The tank is equipped with a submerged loading pipe; and
  - ii. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
    - A. A vapor collection system that meets the requirements of 35 Ill. Adm. Code 219.583(d)(4); or
    - B. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
    - C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 219.584(b) or (d); and
  - iii. By March 15, 1995, all tank vent pipes are equipped with pressure/vacuum relief valves with the following design specifications:
    - A. The pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column; or
    - B. The pressure/vacuum relief valve shall meet the requirements of 35 Ill. Adm. Code 219.586(c); and
  - iv. The owner or operator of a gasoline dispensing operation demonstrates compliance with 35 Ill. Adm. Code 219.583(a)(3), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or operator shall maintain any records required by 35 Ill. Adm. Code 219.583(a) for a period of three years.
- 9. Pursuant to 40 CFR 89.113(c)(3), constant-speed engines are exempt from the requirements of 40 CFR 89.113.
- 10. Pursuant to 35 Ill. Adm. Code 219.123(a), the requirements of 35 Ill. Adm. Code 219.123(b) shall not apply to any stationary storage tank:

- i. With a capacity of less than 151.42 cubic meters (40,000 gallons); or
  - ii. Subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR 60, as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended;
- 11. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 12a. Pursuant to 40 CFR 60.4207(a), beginning October 1, 2007, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- b. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- 13a. Pursuant to 40 CFR 80.510(a), beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:
  - i. Sulfur content: 500 parts per million (ppm) maximum.
  - ii. Cetane index or aromatic content, as follows:
    - A. A minimum cetane index of 40; or
    - B. A maximum aromatic content of 35 volume percent.
- b. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:
    - i. Sulfur content 15 ppm maximum for NR diesel fuel.
    - ii. Cetane index or aromatic content, as follows:
      - A. A minimum cetane index of 40; or
      - B. A maximum aromatic content of 35 volume percent.

- 14a. Pursuant to 40 CFR 4211(a), if you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- b. Pursuant to 40 CFR 4211(b)(1), if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance by purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- c. Pursuant to 40 CFR 60.4211(c), if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.
- d. Pursuant to 40 CFR 60.4011(e), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under 40 CFR 60.4205 but not 40 CFR 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in 40 CFR 60.4011, is prohibited.
- 15a. Pursuant to 35 Ill. Adm. Code 219.583(c), subject to 35 Ill. Adm. Code 219.583(b), each owner of a gasoline dispensing facility shall:

- i. Install all control systems and make all process modifications required by 35 Ill. Adm. Code 219.583(a);
    - ii. Provide instructions to the operator of the gasoline dispensing facility describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and
    - iii. Repair, replace or modify any worn out or malfunctioning component or element of design.
  - b. Pursuant to 35 Ill. Adm. Code 219.583(d), subject to 35 Ill. Adm. Code 219.583(b), each operator of a gasoline dispensing operation shall:
    - i. Maintain and operate each vapor control system in accordance with the owner's instructions;
    - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
    - iii. Maintain gauges, meters or other specified testing devices in proper working order;
    - iv. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
      - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, and
      - B. Avoidable leaks of liquid during the filling of storage tanks; and
    - v. Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of 35 Ill. Adm. Code 219.583(d)(4)(A).
- 16a. The diesel-powered generator sets and diesel-powered generator/fire suppression system shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the diesel generator or the diesel-powered generator/fire suppression system set requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- b. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent, or

- ii. The wt. percent given by the formula: Maximum Wt percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
- c. Organic liquid by-products or waste materials shall not be used in the emergency generators, boilers, and heaters without written approval from the Illinois EPA.
- d. The Illinois EPA shall be allowed to sample fuel stored at the source associated with the emergency generators.
- e. The flare associated with the wastewater treatment plant shall be in operation at all times with a flame present whenever there is flow to the flare.
- f. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- g. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse associated with the indoor shooting range and the flare associated with the wastewater treatment plant such that the baghouse is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 17a. This permit is issued based on negligible emission of volatile organic material from the jet fuel and propylene glycol storage tanks. For this purpose, emissions from each emission sources shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 ton/year.
- b. Facility-wide emissions of the sixty-three (63) diesel-powered emergency generators and one (1) fire suppression system shall not exceed the following limits:
  - i. Fuel Oil Usage of the diesel-powered generators: 22,083 gallons/month, 132,500 gallons/year.
  - ii. Emissions from the diesel-powered generators:

<u>Pollutant</u>	<u>Emission</u>	
	<u>Factors</u> <u>(lbs/10<sup>3</sup> Gal)</u>	<u>Emissions</u> <u>(Tons/Mo) (Tons/Yr)</u>
Carbon Monoxide (CO)	130	1.43 8.6
Nitrogen Oxides (NO <sub>x</sub> )	604	6.67 40.0
Particulate Matter (PM)	14.0	0.15 0.9
Sulfur Dioxide (SO <sub>2</sub> )	39.7	0.43 2.6
Volatile Organic Material (VOM)	49.3	0.55 3.3

These limits are based on maximum fuel usage, sulfur content of the fuel less than 0.28% and standard emission factors (FIRE, SCC 20100102, Version 6.25, September 2004).

- iii. The above limitations were established in Permit 09120008, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration

(PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the Clean Air Act, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

c. Emissions and operation of the boilers and heaters shall not exceed the following limits:

i. Natural Gas Usage: 75 mmscf/month, 500 mmscf/year

ii. Emissions from the boilers and heaters:

<u>Pollutant</u>	<u>Emission</u>	
	<u>Factors</u> <u>(lbs/mmscf)</u>	<u>Emissions</u> <u>(Tons/Mo) (Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	3.8 25.0
Carbon Monoxide (CO)	84	3.2 21.0
Particulate Matter (PM)	7.6	0.3 1.9
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.02 0.15
Volatile Organic Material (VOM)	5.5	0.2 1.4

These limits are based on the maximum fuel use and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Operation and emissions of the gasoline storage tanks (total) shall not exceed the following limits:

<u>Gasoline Throughput</u>		<u>Emission Factor</u> <u>(Lb/10<sup>3</sup> Gal)</u>	<u>VOM Emissions</u>	
<u>(10<sup>3</sup> Gal/Mo)</u>	<u>(10<sup>3</sup> Gal/Yr)</u>		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
468	4,440	1.3	0.3	2.9

These limits are based on the maximum production rate and standard emission factors given by (Table 5.2-7, AP-42, Fifth Edition, Volume I, July 2008).

e. This permit is issued based on negligible emissions of sulfur dioxide from sulfur dioxide generator. For this purpose, emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year. These limits are based on sulfur usage less than 15 tons/year and effluent water pH being less than 3.0.

f. This permit is issued based on negligible emissions of particulate matter from the shooting range. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

g. This permit is issued based on negligible emissions of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>) from the flare controlling waste water treatment plant. For this purpose, emissions of each pollutant shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

h. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9

tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA.

18. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 19a. Pursuant to 40 CFR 60.8(a), at such other times as may be required by the Illinois EPA or USEPA under Section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).
- b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
  - i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  - ii. Approves the use of an equivalent method;
  - iii. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
  - iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or
  - v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.
- c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior

notice of any performance test, except as specified under other subparts, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

- e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
  - i. Sampling ports adequate for test methods applicable to such facility. This includes:
    - A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures; and
    - B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
  - ii. Safe sampling platform(s).
  - iii. Safe access to sampling platform(s).
  - iv. Utilities for sampling and testing equipment.
- f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.
- 20a. Pursuant to 40 CFR 60.4211(b)(5), if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance by conducting an

initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.

- b. Pursuant to 40 CFR 60.4212, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to 40 CFR 60 Subpart IIII must do so according to 40 CFR 60.4212(a) through (d).
  - i. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F.
  - ii. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for non-road diesel engines under 40 CFR part 1039.
  - iii. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in 40 CFR 60.4213, as appropriate.

- iv. Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in 40 CFR 60.4204(a), 40 CFR 60.4205(a), or 40 CFR 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 60.4204(a), 40 CFR 60.4205(a), or 40 CFR 60.4205(c), determined from the equation in 40 CFR 60.4212(c).

Where:

STD = The standard specified for that pollutant in §60.4204(a), 40 CFR 60.4205(a), or 40 CFR 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in 40 CFR 60.4204(a), 40 CFR 60.4205(a), or 40 CFR 60.4205(c) may follow

the testing procedures specified in 40 CFR 60.4213, as appropriate.

21. This permit is issued based on the diesel-powered emergency generator sets and fire suppression systems having a displacement of less than 30 liters per cylinder and have been certified by the manufacturer to meet the standards of 40 CFR 60.4201(a) through (c). As a result, this permit is issued based on these diesel-powered emergency generator sets and fire suppression systems not being subject to the testing requirements of 40 CFR 60.8.
- 22a. Pursuant to 40 CFR 63.11120(a), each owner or operator, at the time of installation of a vapor balance system required under 40 CFR 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in 40 CFR 63.11120(a)(1) and (2).
  - i. You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to 40 CFR 63 Subpart CCCCCC, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in 40 CFR 63.11120(a)(1)(i) or 40 CFR 63.11120(a)(1)(ii).
    - A. California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,--Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003.
    - B. Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).
  - ii. You must demonstrate compliance with the static pressure performance requirement, specified in item 1(h) of Table 1 to 40 CFR 63 Subpart CCCCCC, for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in 40 CFR 63.11120(a)(2)(i) or 40 CFR 63.11120(a)(2)(ii).
    - A. California Air Resources Board Vapor Recovery Test Procedure TP-201.3,--Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999.
    - B. Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).
- b. Pursuant to 40 CFR 63.11120(b), each owner or operator choosing, under the provisions of 40 CFR 63.6(g), to use a vapor balance system other than that described in Table 1 to 40 CFR 63 Subpart CCCCCC must demonstrate to the Illinois EPA or USEPA or delegated authority under paragraph 40 CFR 63.11131(a), the equivalency of their vapor balance system to that described in Table 1 to 40 CFR 63 Subpart CCCCCC using the procedures specified in 40 CFR 63.11120(b)(1) through (3).

- i. You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,--Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003.
  - ii. You must, during the initial performance test required under 40 CFR 63.11120(b)(1), determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to 40 CFR 63 Subpart CCCCCC and for the static pressure performance requirement in item 1(h) of Table 1 to 40 CFR 63 Subpart CCCCCC.
  - iii. You must comply with the testing requirements specified in 40 CFR 63.11120(a).
- 23a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 24 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
24. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter

emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

- 25a. Pursuant to 40 CFR 60.113b(a), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
- i. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - ii. For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Illinois EPA or USEPA in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
  - iii. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
    - A. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(4) at least every 5 years; or
    - B. Visually inspect the vessel as specified in 40 CFR 60.113b(a)(2).
  - iv. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the

gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and (a)(3(ii)) and at intervals no greater than 5 years in the case of vessels specified in 40 CFR 60.113b(a)(3)(i).

26. Pursuant to 40 CFR 60.4209(a), if you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.
- 27a. Pursuant to 35 Ill. Adm. Code 219.123(b), Subject to 35 Ill. Adm. Code 219.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any VOL in the tank unless:
  - i. Routine inspections of floating roof seals are conducted through roof hatches once every six months; and
  - ii. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect;
- 28a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
  - b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- 29a. Pursuant to 40 CFR 60.115b(a)(2), the owner or operator of each storage vessel as specified in 40 CFR 60.112b(a) shall keep records as required by 40 CFR 60.115b(a), (b), or (c) depending upon the control equipment installed to meet the requirements of 40 CFR 60.112b. The owner or operator shall keep copies of all reports and records required by 40 CFR 60.115b, except for the record required by 40 CFR 60.115b(c)(1), for at least 2 years. The record required by 40 CFR 60.115b(c)(1) will be kept for the life of the control equipment. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof

and internal floating roof), the owner or operator shall keep a record of each inspection performed as required by 40 CFR 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

- b. Pursuant to 40 CFR 60.116b(a), the owner or operator shall keep copies of all records required by 40 CFR 60.116b, except for the record required by 40 CFR 60.116b(b), for at least 2 years. The record required by 40 CFR 60.116b(b) will be kept for the life of the source.
  - c. Pursuant to 40 CFR 60.116b(b), the owner or operator of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
  - d. Pursuant to 40 CFR 60.116b(c), except as provided in 40 CFR 60.116b(f) and (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- 30a. Pursuant to 40 CFR 60.4211(b), if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(2) through (4):
- i. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR 60 Subpart IIII and these methods must have been followed correctly.
  - ii. Keeping records of engine manufacturer data indicating compliance with the standards.
  - iii. Keeping records of control device vendor data indicating compliance with the standards.
- b. Pursuant to 40 CFR 60.4214(b), if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour

meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

31. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- 32a. Pursuant to 40 CFR 63.11125(a), each owner or operator subject to the management practices in 40 CFR 63.11118 must keep records of all tests performed under 40 CFR 63.11120(a) and (b).
- b. Pursuant to 40 CFR 63.11125(b), records required under 40 CFR 63.11125(a) shall be kept for a period of 5 years and shall be made available for inspection by the Illinois EPA or USEPA during the course of a site visit.
33. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 34a. Pursuant to 35 Ill. Adm. Code 219.123(b)(6), subject to 35 Ill. Adm. Code 219.123(a) no owner or operator of a stationary storage tank shall cause or allow the storage of any VOL in the tank unless a record of the results of each inspection conducted under 35 Ill. Adm. Code 219.123(b)(4) or (b)(5) is maintained.
- b. Pursuant to 35 Ill. Adm. Code 219.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 219.119 shall maintain

readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provision of 35 Ill. Adm. Code Part 219 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

- 35a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the baghouse associated with the shooting range and the flare associated with the wastewater treatment plant:
    - A. Records for periodic inspection of the pollution baghouse associated with the shooting range and the flare associated with the wastewater treatment plant with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
  - ii. Diesel-powered generator sets runtime (hours/month, hours/year);
  - iii. Certification from the fuel supplier of weight percent sulfur content of each fuel shipment received;
  - iv. Amount of fuel used in the diesel-powered generators (gallons/month, gallons/year);
  - v. Hours of operations of the flare (hours/month, hours/year);
  - vi. An inspection, maintenance and repair log of the generators listing each activity performed with date;
  - vii. Gasoline throughput for the storage tanks and dispensing operation (gallons/month, gallons/year);
  - viii. Jet fuel throughput for the storage tanks (gallons/month and gallons/year); and
  - ix. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM, and HAPs from the source with supporting calculations (tons/month, tons/year).
- b. All records and logs required by this permit shall be completed by the last day of the month following the reported month and retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

- 36a. Pursuant to 40 CFR 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:
- i. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
  - ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
  - iii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.
- 37a. Pursuant to 40 CFR 60.113b(a)(5), after installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall notify the Illinois EPA or USEPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford the Illinois EPA or USEPA the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(a)(4) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Illinois EPA or USEPA at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
- b. Pursuant to 40 CFR 60.115b(a), the owner or operator of each storage vessel as specified in 40 CFR 60.112b(a) shall furnish reports as required by 40 CFR 60.115b(a), (b), or (c) depending upon the control equipment installed to meet the requirements of 40 CFR 60.112b. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.
- i. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR

60.113b(a)(2), a report shall be furnished to the Illinois EPA or USEPA within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

- ii. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Illinois EPA or USEPA within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 60.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
- 37. Pursuant to 40 CFR 63.11126, each owner or operator subject to the management practices in 40 CFR 63.11118 shall report to the Illinois EPA or USEPA the results of all volumetric efficiency tests required under 40 CFR 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.
- 38. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 39a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
2009 Mall Street  
Collinsville, Illinois 62234

It should be noted that this permit has been revised to include operation of the equipment described in Construction Permit 09120008.

If you have any questions on this, please call Valeriy Brodsky at 217/782-2113.

Edwin C. Bakowski, P.E.  
Manager of Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

ECB:VJB:jws

cc: Illinois EPA, FOS Region 3  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emission from the air force base operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such source. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of CO and NO<sub>x</sub> and 10 tons per year for a single HAP, and 25 tons per year for any combination of such HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

<u>Equipment</u>	E M I S S I O N S (Tons/Year)						Single	Total
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	<u>HAP</u>	<u>HAP</u>	
Diesel Engines	8.6	40.0	0.9	4.2	3.3			
Boilers and Heaters	21.0	25.0	1.9	----	1.4			
Gasoline Storage Tanks	----	----	----	----	2.9			
Five Jet Fuel Storage Tanks	----	----	----	----	0.44			
Ethylene Glycol Storage Tank	----	----	----	----	0.44			
Shooting Range	----	----	0.44	----	----			
Sulfur Dioxide Generator	----	----	----	0.44	----			
Wastewater Treatment Plant	<u>0.44</u>	<u>0.44</u>	<u>0.44</u>	<u>0.44</u>	----			
Total:	30.0	65.4	3.68	5.08	8.48	9.0	22.5	

VJB:jws