



- iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the Maximum Achievable Control Technology (MACT) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations, 40 CFR 63 Subpart Y.
  - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permit(s) for this location.
- 2a. The 25.1 mmBtu/hour boiler is subject to the New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. 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.
- 3a. The four internal floating roof storage tanks 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 these standards 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> (39,889.67 gallons) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa (0.75 psia) but less than 76.6 kPa (11.1 psia) or with a design capacity greater than or equal to 75 m<sup>3</sup> (19,815.75 gallons) but less than 151 m<sup>3</sup> (39,889.67 gallons) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa (4.00 psia) but less than 76.6 kPa (11.11 psia), 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 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; and
  - 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.
- 4a. The truck loading rack with vapor collection/combustion system is subject to a New Source Performance Standard (NSPS) for Bulk Gasoline Terminals, 40 CFR 60, Subparts A and XX. The Illinois EPA is administering NSPS on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.500(a), the affected facility to which the provisions of 40 CFR 60 Subpart XX apply is the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks.
- b. Pursuant to 40 CFR 60.501, gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines. Gasoline tank truck means a delivery tank truck used at bulk gasoline terminals which is loading gasoline or which has loaded gasoline on the immediately previous load.
  - c. Pursuant to 40 CFR 60.502, on and after the date on which 40 CFR 60.8(a) requires a performance test to be completed, the owner or operator of each bulk gasoline terminal containing an affected facility shall comply with the requirements of 40 CFR 60.502.
    - i. Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.
    - ii. The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in 40 CFR 60.502(c).
    - iii. For each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.
    - iv. Each vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.
- 5a. This permit is issued based upon the source being subject to the Reasonably Available Control Technology (RACT) standards of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for

Marine Tank Vessel Tank Loading Operations, 40 CFR 63 Subparts A and Y. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 63.560(b)(1), the provisions of 40 CFR Subpart Y pertaining to Reasonably Available Control Technology (RACT) standards in 40 CFR 63.562(c) and (d) are applicable to sources with throughput of 10 M barrels or 200 M barrels, as that term is defined in 40 CFR 63.561, except as specified in 40 CFR 63.560(d).

- b. Pursuant to 40 CFR 561, commodity means a distinct product that a source loads onto marine tank vessels. Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kPa (4.0 psia) or greater, that is used as a fuel for internal combustion engines. Marine tank vessel loading operation means any operation under which a commodity is bulk loaded onto a marine tank vessel from a terminal, which may include the loading of multiple marine tank vessels during one loading operation. Marine tank vessel loading operations do not include refueling of marine tank vessels. Marine vessel or Marine tank vessel means any tank ship or tank barge that transports liquid product such as gasoline or crude oil in bulk. Terminal means all loading berths at any land or sea based structure(s) that loads liquids in bulk onto marine tank vessels.
- c. Pursuant to 40 CFR 63.562(a), the emissions limitations in 40 CFR 63.562(b), (c), and (d) apply during marine tank vessel loading operations.
- d. Pursuant to 40 CFR 63.562(c), RACT standards:
  - i. A. The owner or operator of a source with throughput of 10 M barrels or 200 M barrels shall equip each terminal with a vapor collection system that is designed to collect VOC vapors displaced from marine tank vessels during loading and to prevent VOC vapors collected at one loading berth from passing through another loading berth to the atmosphere, except for those commodities exempted under 40 CFR 63.560(d).
  - B. The owner or operator of a source with throughput of 10 M barrels or 200 M barrels shall limit marine tank vessel loading operations to those vessels that are equipped with vapor collection equipment that is compatible with the terminal's vapor collection system, except for those commodities exempted under 40 CFR 63.560(d).
  - C. The owner or operator of a source with throughput of 10 M barrels or 200 M barrels shall limit marine tank vessel loading operations to those vessels that are vapor-tight and to those vessels that are connected to the vapor collection system, except for those commodities exempted under 40 CFR 63.560(d).
- ii. The owner or operator of a source with throughput of 10 M barrels or 200 M barrels, except the VMT source, shall reduce captured

VOC emissions from marine tank vessel loading operations by 98 weight-percent when using a combustion device or reduce captured VOC emissions by 95 weight-percent when using a recovery device, as determined using methods in 40 CFR 63.565(d) and (1).

- iii. The owner or operator of a source with throughput of 10 M barrels or 200 M barrels, except the VMT source, may meet the requirements of 40 CFR 63.562(c)(3) by reducing gasoline loading emissions to, at most, 1,000 ppmv outlet VOC concentration.
- 6a. This source is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 CFR Part 63 Subparts A and BBBBBB. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.11083(b), if you have an existing affected source, you must comply with the standards in 40 CFR 63 Subpart BBBBBB no later than January 10, 2011.
- b. Pursuant to 40 CFR 63.11088(a), you must meet each emission limit and management practice in Table 2 to 40 CFR 63 Subpart BBBBBB that applies to you.
  - c. Pursuant to 40 CFR 63.11088(c), you must comply with the requirements of 40 CFR 63 Subpart BBBBBB by the applicable dates specified in 40 CFR 63.11083.
  - d. Pursuant to 40 CFR 63.11088(d), you must comply with the applicable testing and monitoring requirements specified in 40 CFR 63.11092.
  - e. Pursuant to 40 CFR 63.11088(e), you must submit the applicable notifications as required under 40 CFR 63.11093.
  - f. Pursuant to 40 CFR 63.11088(f), you must keep records and submit reports as specified in 40 CFR 63.11094 and 63.11095.
- 7a. 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 meter (1000 foot) 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 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- d. 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).
- 8a. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hour) to exceed 200 ppm, corrected to 50 percent excess air.
- 9a. Pursuant to 35 Ill. Adm. Code 219.122(a), no person shall cause or allow the discharge of more than 3.6 kgs/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.
- b. 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 l (250 gal), 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).
- c. Pursuant to 35 Ill. Adm. Code 219.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) 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.
- d. Pursuant to 35 Ill. Adm. Code 219.302, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 (Use of Organic Material) Emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 219.301 (Use of Organic Material) are allowable if such emissions are controlled by one of the following methods:

- i. Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,
  - ii. A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or,
  - iii. Any other air pollution control equipment approved by the Agency and approved by the USEPA as a SIP revision capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted to the atmosphere.
- e. Pursuant to 35 Ill. Adm. Code 219.303, the provisions of 35 Ill. Adm. Code 215.301 and 215.302 (Use of Organic Material) shall not apply to fuel combustion emission sources.
- f. Pursuant to 35 Ill. Adm. Code 219.582(a), no person shall cause or allow the transfer of gasoline into any delivery vessel from any bulk gasoline terminal unless:
- i. The bulk gasoline terminal is equipped with a vapor control system that limits emission of VOM to 80 mg/liter (0.00067 lbs/gallon) of gasoline loaded;
  - ii. The vapor control system is operating and all vapors displaced in the loading of gasoline to the delivery vessel are vented only to the vapor control system;
  - iii. There is no liquid drainage from the loading device when it is not in use;
  - iv. All loading and vapor return lines are equipped with fittings which are vapor tight; and
  - v. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 219.584(b) or (d); or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with 35 Ill. Adm. Code 219.582 when terminal access authorization is limited to those owners and/or operators of delivery vessels who have provided a current certification as required by 35 Ill. Adm. Code 219.584(c)(3).
- g. Pursuant to 35 Ill. Adm. Code 219.762(a), except as provided at 35 Ill. Adm. Code 219.762(c), every owner or operator of a subject marine terminal subject to the requirements of 35 Ill. Adm. Code 219 Subpart GG shall equip each terminal with a vapor collection and control system that:
- i. Captures the vapors displaced during the loading event and reduces overall VOM emissions by at least 95 percent by weight

through the use of either a vapor combustion system or a vapor recovery system;

- ii. Is maintained and operated so that it prevents visible liquid leaks, significant odors, and visible fumes in the liquid transfer and the vapor collection lines, and appurtenances during loading; and
  - iii. Has been certified as required by Coast Guard regulations found at 33 CFR 154.
9. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR 63 Subpart R. Pursuant to 40 CFR 63.420(a)(2), the affected source to which the provisions of 40 CFR 63 Subpart R apply is each bulk gasoline terminal, except those bulk gasoline terminals for which the owner or operator has documented and recorded to the Illinois EPA's or the USEPA's satisfaction that the facility is not a major source, or is not located within a contiguous area and under common control of a facility that is a major source, as defined in 40 CFR 63.2.
- 10a. This permit is issued based upon the source not being subject to the Maximum Achievable Control Technology (MACT) standards of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Tank Loading Operations, 40 CFR 63 Subpart Y. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 63.560(a)(1), the provisions of 40 CFR 63 Subpart Y pertaining to the Maximum Achievable Control Technology (MACT) standards in 40 CFR 63.562(b) and (d) are applicable to existing and new sources with emissions of 10 or 25 tons, as that term is defined in 40 CFR 63.561, except as specified in 40 CFR 63.560(d), and are applicable to new sources with emissions less than 10 and 25 tons, as that term is defined in 40 CFR 63.561, except as specified in 40 CFR 63.560(d).
  - c. Pursuant to 40 CFR 63.560(d)(1), 40 CFR 63 Subpart Y does not apply to emissions resulting from marine tank vessel loading operations, as that term is defined in 40 CFR 63.561, of commodities with vapor pressures less than 10.3 kilopascals (kPa) (1.5 pounds per square inch, absolute) (psia) at standard conditions, 20°C and 760 millimeters Hg (mm Hg).
  - d. This permit is issued based on the boilers at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), a gas-fired boiler as defined in 40 CFR 63 Subpart JJJJJJ are not subject to 40 CFR 63 Subpart JJJJJJ and to any requirements in 40 CFR 63 Subpart JJJJJJ.

11. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 12a. Pursuant to 35 Ill. Adm. Code 219.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- b. Pursuant to 35 Ill. Adm. Code 219.123(a)(5), the requirements of 35 Ill. Adm. Code 219.123(b) shall not apply to any stationary storage tank subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR 60, as regulations promulgated by the USEPA under Section 111 of the Clean Air Act (42 USC 7411), as amended.
- 13a. 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.
- b.
  - i. Pursuant to 40 CFR 60.18(c)(1), flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
  - ii. Pursuant to 40 CFR 60.18(c)(2), flares shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f).
  - iii. Pursuant to 40 CFR 60.18(c)(3), an owner/operator has the choice of adhering to either the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or adhering to the requirements in 40 CFR 60.18(c)(3)(i).
    - A. I. Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the

velocity,  $V_{max}$ , as determined by the equation in 40 CFR 60.19(c)(3)(i)(A).

- II. The actual exit velocity of a flare shall be determined by the method specified in 40 CFR 60.18(f)(4).
  - B. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3).
    - iv. A. Pursuant to 40 CFR 60.18(c)(4)(i), steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18(c)(4)(ii) and (iii).
      - B. Pursuant to 40 CFR 60.18(c)(4)(ii), steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
      - C. Pursuant to 40 CFR 60.18(c)(4)(iii), steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than the velocity,  $V_{max}$ , as determined by the method specified in 40 CFR 60.18(f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
    - v. Pursuant to 40 CFR 60.18(c)(5), air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{max}$ , as determined by the method specified in 40 CFR 60.18(f)(6).
    - vi. Pursuant to 40 CFR 60.18(c)(6), flares used to comply with 40 CFR 60.18 shall be steam-assisted, air-assisted, or nonassisted.
  - c. Pursuant 40 CFR 60.18(e), flares used to comply with provisions of 40 CFR 60 Subpart A shall be operated at all times when emissions may be vented to them.
- 14a. Pursuant to 40 CFR 60.502(e), loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

- i. The owner or operator shall obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck which is to be loaded at the affected facility.
  - ii. The owner or operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.
  - iii. A. The owner or operator shall cross-check each tank identification number obtained in 40 CFR 60.502(e)(2) with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:
    - I. If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
    - II. If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.
  - B. If either the quarterly or semiannual cross-check provided in 40 CFR 60.502(e)(3)(i)(A) through (B) reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.
  - iv. The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in 40 CFR 60.502(e)(3).
  - v. The terminal owner or operator shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.
- b. Pursuant to 40 CFR 60.502(f), the owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
  - c. Pursuant to 40 CFR 60.502(g), the owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.
  - d. Pursuant to 40 CFR 60.502(h), the vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in

the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 CFR 60.503(d).

- e. Pursuant to 40 CFR 60.502(i), no pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).
  - f. Pursuant to 40 CFR 60.502(j), each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.
- 15a. Pursuant to 40 CFR 63.562(e), at all times, including periods of startup, shutdown, and malfunction, owners or operators of affected sources shall operate and maintain a source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether acceptable operation 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, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- i. The Illinois EPA or USEPA will determine compliance with design, equipment, work practice, or operational emission standards by evaluating an owner or operator's conformance with operation and maintenance requirements.
  - ii. The owner or operator of an affected source shall develop a written operation and maintenance plan that describes in detail a program of corrective action for varying (i.e., exceeding baseline parameters) air pollution control equipment and monitoring equipment, based on monitoring requirements in 40 CFR 63.564, used to comply with these emissions standards. The plan shall also identify all routine or otherwise predictable continuous monitoring system (thermocouples, pressure transducers, continuous emissions monitors (CEMS), etc.) variances.
    - A. The plan shall specify procedures (preventive maintenance) to be followed to ensure that pollution control equipment and monitoring equipment functions properly and variances of the control equipment and monitoring equipment are minimal.
    - B. The plan shall identify all operating parameters to be monitored and recorded for the air pollution control device as indicators of proper operation and shall establish the

frequency at which the parameters will be monitored (see 40 CFR 63.564).

- C. Owners or operators of affected sources shall incorporate a standardized inspection schedule for each component of the control device used to comply with the emissions standards in 40 CFR 63.562(b), (c), and (d). To satisfy the requirements of this paragraph, the owner or operator may use the inspection schedule recommended by the vendor of the control system or any other technical publication regarding the operation of the control system.
  - D. Owners or operators shall develop and implement a continuous monitoring system (CMS) quality control program. The owner or operator shall develop and submit to the Illinois EPA or USEPA for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in 40 CFR 63.8(e). Each quality control program shall include, at a minimum, a written protocol that describes procedures for initial and any subsequent calibration of the CMS; determination and adjustment of the calibration drift of the CMS; preventive maintenance of the CMS; including spare parts inventory, data recording, calculations, and reporting; and accuracy audit procedures, including sampling and analysis methods. The owner or operator shall maintain records of the procedures that are part of the quality control program developed and implemented for CMS.
- iii. Based on the results of the determination made under 40 CFR 63.562(e)(2), the Illinois EPA or USEPA may require that an owner or operator of an affected source make changes to the operation and maintenance plan for that source. Revisions may be required if the plan:
- A. Does not address a variance of the air pollution control equipment or monitoring equipment that has occurred that increases emissions;
  - B. Fails to provide for operation during a variance of the air pollution control equipment or the monitoring equipment in a manner consistent with safety and good air pollution control practices; or
  - C. Does not provide adequate procedures for correcting a variance of the air pollution control equipment or monitoring equipment as soon as reasonable.
- iv. If the operation and maintenance plan fails to address or inadequately addresses a variance event at the time the plan was initially developed, the owner or operator shall revise the operation and maintenance plan within 45 working days after such an event occurs. The revised plan shall include procedures for operating and maintaining the air pollution control equipment or

monitoring equipment during similar variance events and a program for corrective action for such events.

- v. The operation and maintenance plan shall be developed by the source's compliance date. The owner or operator shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Illinois EPA or USEPA for the life of the source. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection upon request by the Illinois EPA or USEPA for a period of 5 years after each revision to the plan.
  - vi. To satisfy the requirements of the operation and maintenance plan, the owner or operator may use the source's standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan, or other existing plans provided the alternative plans meet the requirements of this section and are made available for inspection when requested by the Illinois EPA or USEPA.
- b. Pursuant to 40 CFR 63.563(a)(1), the following procedures shall be used to determine compliance with the emissions limits under 40 CFR 63.562(b)(1), (c)(2), and (d)(1).
- i. A. In accordance with 40 CFR 63.562(b)(1)(i), (c)(2)(i), and (d)(1)(i), each valve in the terminal's vapor collection system that would route displaced vapors to the atmosphere, either directly or indirectly, shall be secured closed during marine tank vessel loading operations either by using a car-seal or a lock-and-key type configuration, or the by-pass line from the valve shall be equipped with a flow indicator, except for those valves used for pressure/vacuum relief, analyzers, instrumentation devices, sampling, and venting for maintenance. Marine tank vessel loading operations shall not be performed with open by-pass lines.
  - B. Repairs shall be made to valves, car-seals, or closure mechanisms no later than 15 days after a change in the position of the valve or a break in the car-seal or closure mechanism is detected or no later than prior to the next marine tank vessel loading operation, whichever is later.
- ii. Following the date on which the initial performance test is completed, marine tank vessel loading operations must be performed only if the marine tank vessel's vapor collection equipment is compatible to the terminal's vapor collection system; marine tank vessel loading operations must be performed only when the marine tank vessel's vapor collection equipment is connected to the terminal's vapor collection system, as required in 40 CFR 63.562(b)(1)(ii), (c)(2)(ii), and (d)(1)(ii).

- c. Pursuant to 40 CFR 63.563(b)(1), if the 3-hour or 3-cycle block average operating parameters in 40 CFR 63.563(b)(4) through (9), outside the acceptable operating ranges, are measured and recorded, i.e., variances of the pollution control device or monitoring equipment, the owner or operator of the affected source shall perform an unscheduled inspection of the control device and monitoring equipment and review of the parameter monitoring data. The owner or operator of the affected source shall perform an inspection and review when total parameter variance time for the control device is greater than 10 percent of the operating time for marine tank vessel loading operations on a 30-day, rolling-average basis. The inspection and review shall be conducted within 24 hours after passing the allowable variance time of 10 percent. The inspection checklist from the requirements of 40 CFR 63.562(e)(2)(iii) and the monitoring data from requirements in 40 CFR 63.562(e)(2)(ii) and 40 CFR 63.564 should be used to identify any maintenance problems that may be associated with the variance. The unscheduled inspection should encompass all components of the control device and monitoring equipment that can be inspected while in operation. If any maintenance problem is identified during the inspection, the owner or operator of the affected source must take corrective action (e.g., adjustments to operating controls, etc.) as soon as practicable. If no immediate maintenance problems are identified from the inspection performed while the equipment is operating, a complete inspection in accordance with 40 CFR 63.562(e)(2) must be conducted prior to the next marine tank vessel loading operation and corrective action (e.g., replacement of defective parts) must be taken as soon as practicable for any maintenance problem identified during the complete inspection.
- d. Pursuant to 40 CFR 63.563(c), the following procedures are required for all sources subject to 40 CFR 63.562(b), (c), or (d).
  - i. The owner or operator of an affected source shall inspect and monitor all ductwork and piping and connections to vapor collection systems and control devices once each calendar year using Method 21.
  - ii. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, all ductwork and piping and connections to vapor collection systems and control devices shall be inspected to the extent necessary to positively identify the potential leak and any potential leaks shall be monitored within 5 days by Method 21. Each detection of a leak shall be recorded, and the leak shall be tagged until repaired.
  - iii. When a leak is detected, a first effort to repair the vapor collection system and control device shall be made within 15 days or prior to the next marine tank vessel loading operation, whichever is later.
- 16a. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or

treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

- b. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
  - c. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
    - i. The name and address of the source;
    - ii. The name and address of the owner or operator responsible for execution of the operating program;
    - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
    - iv. Location of unloading and transporting operations with pollution control equipment;
    - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
    - vi. Estimated frequency of application of dust suppressants by location of materials; and
    - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
  - d. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- 17a. Pursuant to 35 Ill. Adm. Code 219.582(b), the operator of a bulk gasoline terminal shall:
- i. Operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:

- A. Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water as measured as close as possible to the vapor hose connection;
  - B. 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
  - C. Avoidable leaks of liquid during loading or unloading operations.
- ii. Provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of 35 Ill. Adm. Code 219.582(d)(1)(A).
  - iii. 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 219.582(a)(1)(A) or (B).
- b. Pursuant to 35 Ill. Adm. Code 219.762(b), from May 1 to September 15, the regulatory control period, every owner or operator of a marine terminal subject to the requirements of this 35 Ill. Adm. Code 219 Subpart GG shall load gasoline or crude oil only into marine vessels that are:
    - i. Equipped with vapor collection equipment that has been certified as required by Coast Guard regulations found at 46 CFR 39;
    - ii. Connected to the vapor collection system; and
    - iii. Vapor-tight as described in the following 35 Ill. Adm. Code 219.762(b)(3)(A), (b)(3)(B), (b)(3)(C), or (b)(3)(D):
      - A. The owner or operator of the marine terminal shall load each marine vessel with a vacuum assisted vapor collection system, instrumented in such a way that the pump(s) transferring gasoline or crude oil to the marine vessel will not operate unless the vapor collection system is properly connected and properly operating.
      - B. As an alternative to 35 Ill. Adm. Code 219.762(b)(3)(A), the owner or operator of the marine terminal shall obtain documentation as described in 35 Ill. Adm. Code 219.770(b) that the marine vessel has been vapor-tightness tested within either the preceding 12 months or the preceding 14 months, if the test is being conducted as part of the Coast Guard's reinspection of the vessel required under 46 CFR 31.10-17, using Method 21 of Part 60, Appendix A, as described in 35 Ill. Adm. Code 219.768(b).
      - C. If there is no documentation of a successful leak test conducted on the marine vessel in either the preceding 12

months or in the preceding 14 months, if the test is being conducted as part of the Coast Guard's reinspection of the vessel required under 46 CFR 31.10-17, the owner or operator of the marine terminal shall require that a leak test of the marine vessel be conducted during the final 20 percent of loading of the marine vessel or shall not load the vessel. The test shall be conducted when the marine vessel is being loaded at the maximum liquid transfer rate for that transfer operation. The owner or operator of the marine terminal shall require that the documentation described in 35 Ill. Adm. Code 219.770(b) is completed prior to departure of the vessel.

- D. If the marine vessel has failed its most recent vapor-tightness leak test at the marine terminal, before the marine vessel can be loaded, the owner or operator of the marine terminal shall require that the owner or operator of the marine vessel provide documentation that the leaks detected during the previous vapor-tightness leak test have been repaired and that the marine vessel has been vapor-tightness tested since the leak(s) has been repaired pursuant to 35 Ill. Adm. Code 219.762(b)(3)(B).
- c. Pursuant to 35 Ill. Adm. Code 219.766, the owner or operator of a marine terminal shall comply with the requirements of 35 Ill. Adm. Code 219.445 with respect to all equipment associated with the vapor collection and control system required by 35 Ill. Adm. Code 219.762(a).
- d. Pursuant to 35 Ill. Adm. Code 219.445, the owner or operator of a petroleum refinery shall:
  - i. Develop a monitoring program plan consistent with the provisions of 35 Ill. Adm. Code 219.446;
  - ii. Conduct a monitoring program consistent with the provisions of 35 Ill. Adm. Code 219.447;
  - iii. Record all leaking components which have a volatile organic material concentration exceeding 10,000 ppm consistent with the provisions of 35 Ill. Adm. Code 219.448;
  - iv. Identify each component consistent with the monitoring program plan submitted pursuant to 35 Ill. Adm. Code 219.446;
  - v. Repair and retest the leaking components as soon as possible within 22 days after the leak is found, but no later than June 1 for the purposes of 35 Ill. Adm. Code 219.447(a)(1), unless the leaking components cannot be repaired until the unit is shut down for turnaround; and
  - vi. Report to the Illinois EPA consistent with the provisions of 35 Ill. Adm. Code 219.449.

- 18a. 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.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Marine Vapor Combustion Unit (MVCU) and the Truck/Rail Vapor Destruction Unit (TRCU) such that the Marine Vapor Combustion Unit (MVCU) and the Truck/Rail Vapor Destruction Unit (TRCU) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- c. This permit is issued based on the source handling (unloading, storing, and loading) only denatured ethanol, gasoline, gasoline blends (including blends containing ethanol), distillate petroleum products, and crude oil.
- i. Gasoline and gasoline blend means any commercial quality gasoline and blend stocks for use as fuel in a motor vehicle without further processing.
- ii. A petroleum product shall be considered to be a distillate material if the true vapor pressure is less than 0.01 psia at 70°F.
- iii. For the purposes of this permit, denatured ethanol is not considered to be gasoline.
- d. The 25.1 mmBtu/hour boiler shall only be operated with natural gas as the fuel. The use of any other fuel in the boiler 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.
- 19a. Emissions and operation of the ethanol and petroleum terminal shall not exceed the following limits:

VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
10.0	90.0

These limits are based on maximum material throughput and emissions calculated using the following formulas:

$$E_{FW} = E_{G-B} + E_{G-R/T} + E_{TANKS} + E_{MVCU} + E_{TRCU} + E_{BOILER}$$

Where:

$$E_{FW} = \text{Source Wide VOM (Tons);}$$

$$E_{G-B} = \text{Emissions from Barge Loadout}$$

$$E_{G-B} = [(Ethanol\ loadout\ (gal)) \times (L_E\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb)] + [(Gasoline\ loadout\ (gal)) \times (L_G\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) + (Crude\ oil\ loadout\ (gal)) \times (L_C\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) + (Distillate\ loadout\ (gal)) \times (L_D\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb)] \times (1 - Control\ Efficiency\ for\ MVCU^*/100)$$

$E_{G-R/T}$  = Emissions from Rail and Truck Loadout

$$E_{G-R/T} = E_{G-R/T} = [(Ethanol\ loadout\ (gal)) \times (L_E\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) \times (1 - Control\ Efficiency\ for\ TRCU^*/100)] + [(Gasoline\ loadout\ (gal)) \times (L_G\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) \times (1 - Control\ Efficiency\ for\ TRCU^*/100)] + [(Distillate\ loadout\ (gal)) \times (L_D\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) \times (1 - Control\ Efficiency\ for\ TRCU^*/100)] + [(Crude\ loadout\ (gal)) \times (L_C\ (lb\ VOM/1,000\ gal)) \times (1\ ton/2,000\ lb) \times (1 - Control\ Efficiency\ for\ TRCU^*/100)]$$

$E_{MVCU}$  = VOM emissions from combustion related products from the MVCU (Tons) using standard emission factor (Table 13.5-1, AP-42, Fifth edition, Volume I, September 1991)

$$E_{MVCU} = (Firing\ Rate,\ mmBtu/hr) \times (Hours\ of\ Operation) \times 0.063\ lb/mmBtu \times (1\ ton/2000\ lb)$$

$E_{TRCU}$  = VOM emissions from the combustion related products from the TRCU (Tons) using standard emission factors (Table 13.5-1, AP-42, Fifth edition, Volume I, September 1991)

$$E_{TRCU} = (Firing\ Rate,\ mmBtu/hour) \times (Hours\ of\ Operation) \times 0.063\ (lb/mmBtu) \times (1\ ton/2000\ lb)$$

Where:

L = VOM Emission Factor calculated from Equation 1 in Section 5.2, AP-42, Volume I, Fifth Edition, January 1995.

$$= 12.46 \times (S \times P \times M)/T$$

Where:

S = Saturation factor from Table 5.2-1, AP-42, Volume I, Fifth Edition, January 1995;

P = True vapor pressure of liquid loaded, (psia);

M = Molecular weight of vapors, (lb/lb-mole);

T = Temperature of bulk liquid loaded, °R (°F + 460);

$L_E$  = VOM Emission Factor for Ethanol;  
= 0.4156 lb/1000 gal (Calculated from Equation 1 above);

$L_G$  = VOM Emission Factor for Gasoline;

= 5 lb/1000 gal (Table 5.2-5, AP-42, Volume I, Fifth Edition, January 1995);

$L_D$  = VOM Emission Factor for Distillate;  
 = 0.00953 lb/1000 gal (Calculated from Equation 1 above); and

$L_C$  = VOM Emission Factor for Crude Oil;  
 = 0.006709 lb/1000 gal (Calculated from Equation 1 above).

\* MVCU and TRCU control efficiency of 98 percent (or a more representative level as determined in the latest stack test).

$E_{BOILER}$  = VOM emissions from the fuel combustion related products from the boiler (Tons) using standard emission factors ((Table 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

$E_{BOILER}$  = (Gas Usage, mmscf) X (5.5 lbs/mmscf) X (1 ton/2000 lb)

- b. The emissions of combustion related pollutants from the MVCU shall not exceed the following:

<u>Pollutant</u>	<u>MVCU Emission Factor</u> (lbs/mmBtu)	<u>Emissions</u>	
		(lbs/Hour)	(Tons/Year)
CO	0.37	16.91	43.12
NO <sub>x</sub>	0.068	3.11	7.93
PM	0.0131	0.60	1.52

These limits are based on the maximum firing rate of the MVCU (45.7 mmBtu/hour), standard emissions factors (Table 13.5-1, AP-42, Fifth edition, Volume I, September 1991), and 5,100 hours/year of operation. The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the CO emissions from the affected Marine Vapor Combustion Unit (MVCU) below the levels that would trigger the applicability of these rules.

- c. The emissions of combustion related pollutants from the TRCU shall not exceed the following:

<u>Pollutant</u>	<u>MVCU Emission Factor</u> (lbs/mmBtu)	<u>Emissions</u>	
		(lbs/Hour)	(Tons/Year)
CO	0.37	8.36	36.63
NO <sub>x</sub>	0.068	1.54	6.75
PM	0.00752	0.17	0.75

These limits are based on the maximum firing rate of the TRCU (22.6 mmBtu/hour), standard emissions factors from (Table 13.5-1, AP-42, Fifth edition, Volume I, September 1991), and 8,760 hours/year of operation. The above limitations are being established in this permit

pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the CO emissions from the affected Truck/Rail Vapor Destruction Unit (TRCU) below the levels that would trigger the applicability of these rules.

- d. Operation of and emissions from the 600 hp boiler shall not exceed the following limits:

Natural Gas Usage		Pollutant	Factor (lbs/mmscf)	Emissions	
(mmscf/Mo)	(mmscf/Yr)			(Tons/Mo)	(Tons/Yr)
21.99	219.88	CO	84.0	0.92	9.23
		NO <sub>x</sub>	120.0	1.32	13.19
		PM	7.6	0.08	0.84
		SO <sub>2</sub>	0.6	0.01	0.07
		VOM	5.5	0.06	0.60

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998) for CO, PM, SO<sub>2</sub>, and VOM and manufacturers guarantee for NO<sub>x</sub>.

- e. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 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 of Section 112(g) of the Clean Air Act.
- f. 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 months total).
- 20a. 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.
- g.
  - i. Pursuant to 40 CFR 60.18(f)(1), Method 22 of Appendix A to 40 CFR Part 60 shall be used to determine the compliance of flares with the visible emission provisions of 40 CFR 60 Subpart A. The observation period is 2 hours and shall be used according to Method 22.
  - ii. Pursuant to 40 CFR 60.18(f)(3), the net heating value of the gas being combusted in a flare shall be calculated using the equation in 40 CFR 60.18(f)(3).
  - iii. Pursuant to 40 CFR 60.18(f)(4), the actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
  - iv. Pursuant to 40 CFR 60.18(f)(5), the maximum permitted velocity,  $V_{max}$ , for flares complying with 40 CFR 60.18(c)(4)(iii) shall be determined by the equation in 40 CFR 60.18(f)(5).
  - v. Pursuant to 40 CFR 60.18(f)(6), the maximum permitted velocity,  $V_{max}$ , for air-assisted flares shall be determined by the equation in 40 CFR 60.18(f)(6).
- 21a. Pursuant to 40 CFR 60.503(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.503, except as provided in 40 CFR 60.8(b). The three-run requirement of 40 CFR 60.8(f) does not apply to 40 CFR 60 Subpart XX.
- b. Pursuant to 40 CFR 60.503(b), immediately before the performance test required to determine compliance with 40 CFR 60.502(b), (c), and (h), the owner or operator shall use Method 21 to monitor for leakage of

vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.

- c. Pursuant to 40 CFR 60.503(d), the owner or operator shall determine compliance with the standard in 40 CFR 60.502(h) as follows:
  - i. A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with  $\pm 2.5$  mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.
  - ii. During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.
- d. Pursuant to 40 CFR 60.503(e), the performance test requirements of 40 CFR 60.503(c) do not apply to flares defined in 40 CFR 60.501 and meeting the requirements in 40 CFR 60.18(b) through (f). The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in 40 CFR 60.18(b) through (f) and 60.503(a), (b), and (d).
- 22a. Pursuant to 40 CFR 63.563(a), the following procedures shall be used to determine compliance with the emissions limits under 40 CFR 63.562(b)(1), (c)(2), and (d)(1):
  - i. During the initial performance test required in 40 CFR 63.563(b)(1), the owner or operator of an affected source shall demonstrate compliance with operating pressure requirements of 33 CFR 154.814 using the procedures in 40 CFR 63.565(b).
  - ii. The owner or operator of an affected source shall use the procedures in 40 CFR 63.563(a)(4)(i), (ii), (iii), or (iv) to ensure that marine tank vessels are vapor tight, as required in 40 CFR 63.562(b)(1)(iii), (c)(2)(iii), and (d)(1)(iii).
    - A. The owner or operator of a marine tank vessel, who loads commodities containing HAP not determined to be exempt under 40 CFR 63.560(d) at an affected source, shall provide a copy of the vapor-tightness pressure test documentation described in 40 CFR 63.567(i) for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in 40 CFR 63.565(c)(1). Following the date on which the initial performance test is completed, the affected source must check vapor-tightness pressure test

documentation for marine tank vessels loaded at positive pressure.

- B. If no documentation of the vapor tightness pressure test as described in 40 CFR 63.563(a)(4)(i) is available, the owner or operator of a marine tank vessel, who loads commodities containing HAP not determined to be exempt under 40 CFR 63.560(d) at an affected source, shall provide the leak test documentation described in 40 CFR 63.567(i) for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in 40 CFR 63.565(c)(2). If the marine tank vessel has failed its most recent vapor-tightness leak test at that terminal, the owner or operator of the non-vapor-tight marine tank vessel shall provide documentation that the leaks detected during the previous vapor-tightness test have been repaired and documented with a successful vapor-tightness leak test described in 40 CFR 63.565(c)(2) conducted during loading. If the owner or operator of the marine tank vessel can document that repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the owner or operator of the affected source may load the marine tank vessel. Following the date on which the initial performance test is completed, an affected source must check the vapor-tightness leak test documentation for marine tank vessels loaded at positive pressure.
  
- C. If no documentation of vapor tightness as described in 40 CFR 63.563(a)(4)(i) or (ii) is available, the owner or operator of a marine tank vessel, who loads commodities containing HAP not determined to be exempt under 40 CFR 63.560(d) at an affected source, shall perform a leak test of the marine tank vessel during marine tank vessel loading operation using the procedures described in 40 CFR 63.565(c)(2).
  - I. If no leak is detected, the owner or operator of a marine tank vessel shall complete the documentation described in 40 CFR 63.567(i) prior to departure of the vessel.
  
  - II. If a leak is detected, the owner or operator of the marine tank vessel shall document the vapor-tightness failure for the marine tank vessel prior to departure of the vessel. The leaking component shall be repaired prior to the next marine tank vessel loading operation at a controlled terminal unless the repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel. If the owner or operator of the vessel provides documentation that repairs of such equipment is technically infeasible without cleaning and gas freeing or dry-docking the

vessel, the equipment responsible for the leak will be excluded from future Method 21 tests until repairs are affected. A copy of this documentation shall be maintained by the owner or operator of the affected source. Repair of the equipment responsible for the leak shall occur the next time the vessel is cleaned and gas freed or dry-docked. For repairs that are technically feasible without dry-docking the vessel, the owner or operator of the affected source shall not load the vessel again unless the marine tank vessel owner or operator can document that the equipment responsible for the leak has been repaired.

- D. The owner or operator of an affected source shall ensure that a marine tank vessel is loaded with the product tank below atmospheric pressure (i.e., at negative gauge pressure). The pressure shall be measured between the facility's vapor connection and its manual isolation valve, and the measured pressure must be below atmospheric pressure. Following the date on which the initial performance test is completed, marine tank vessel loading operations for nonvapor-tight vessels must be performed below atmospheric pressure (i.e., at negative gauge pressure) in the product tank.
- b. Pursuant to 40 CFR 63.563(b), the following procedures shall be used to determine compliance with the emissions limits under 40 CFR 63.562(b), (c), and (d).
    - i. An initial performance test shall be conducted using the procedures listed in 40 CFR 63.7 according to the applicability in Table 1 of 40 CFR 63.560, the procedures listed in 40 CFR 63.563, and the test methods listed in 40 CFR 63.565. The initial performance test shall be conducted within 180 days after the compliance date for the specific affected source. During this performance test, sources subject to MACT standards under 40 CFR 63.562(b)(2), (3), (4), and (5) and (d)(2) shall determine the reduction of HAP emissions, as VOC, for all combustion or recovery devices other than flares. Sources subject to RACT standards under 40 CFR 63.562(c)(3), (4), and (5) and (d)(2) shall determine the reduction of VOC emissions for all combustion or recovery devices other than flares.
    - ii. During the initial performance test required in 40 CFR 63.563(b)(1), the owner or operator shall establish that the flare used to comply with the emissions standards in 40 CFR 63.562(b)(2), (3), and (4), (c)(3) and (4), and (d)(2) is in compliance with the design requirements for flares cited in 40 CFR 63.565(e). Following the date on which the initial determination of compliance is established, the facility shall operate with the presence of a pilot flame in the flare, as determined in 40 CFR 63.564(f).

- 23a. Pursuant to 40 CFR 63.565(a), the owner or operator of an affected source in 40 CFR 63.562 shall comply with the performance testing requirements in 40 CFR 63.7 in accordance with the provisions for applicability of 40 CFR 63 Subpart A in Table 1 of 40 CFR 63.560 and the performance testing requirements in 40 CFR 63.565.
- b. Pursuant to 40 CFR 63.565(b), for the purpose of determining compliance with 40 CFR 63.563(a)(3), the following procedures shall be used:
- i. Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument) capable of measuring up to the maximum relief set pressure of the pressure-vacuum vents;
  - ii. Connect the pressure measurement device to a pressure tap in the terminal's vapor collection system, located as close as possible to the connection with the marine tank vessel; and
  - iii. During the performance test required in 40 CFR 63.563(b)(1), record the pressure every 5 minutes while a marine tank vessel is being loaded and record the highest instantaneous pressure and vacuum that occurs during each loading cycle.
- c. Pursuant to 40 CFR 63.565(c), when testing a vessel for vapor tightness to comply with the marine vessel vapor-tightness requirements of 40 CFR 63.563(a)(4)(i), the owner or operator of a source shall use the methods in either 40 CFR 63.565(c)(1) or (2).
- i. Pressure test for the marine tank vessel.
    - A. Each product tank shall be pressurized with dry air or inert gas to no more than the pressure of the lowest pressure relief valve setting.
    - B. Once the pressure is obtained, the dry air or inert gas source shall be shut off.
    - C. At the end of one-half hour, the pressure in the product tank and piping shall be measured. The change in pressure shall be calculated using the following formula:

$$P = P_i - P_f$$

Where:

P = change in pressure, inches of water.

$P_i$  = pressure in tank when air/gas source is shut off, inches of water.

$P_f$  = pressure in tank at the end of one-half hour after air/gas source is shut off, inches of water.

- D. The change in pressure,  $P$ , shall be compared to the pressure drop calculated using the following formula:

$$P_M = 0.861 P_{ia} L/V$$

Where:

$P_M$  = maximum allowable pressure change, inches of water.

$P_{ia}$  = pressure in tank when air/gas source is shut off, psia.

$L$  = maximum permitted loading rate of vessel, barrels per hour.

$V$  = total volume of product tank, barrels.

- E. If  $P \leq P_M$ , the vessel is vapor tight.
- F. If  $P > P_M$ , the vessel is not vapor tight and the source of the leak must be identified and repaired prior to retesting.
- ii. Each owner or operator of a source complying with 40 CFR 63.563(a)(4)(ii) or (iii) shall use Method 21 as the vapor-tightness leak test for marine tank vessels. The test shall be conducted during the final 20 percent of loading of each product tank of the marine vessel, and it shall be applied to any potential sources of vapor leaks on the vessel.
- d. Pursuant to 40 CFR 63.565(e), when a flare is used to comply with 40 CFR 63.562(b)(2), (3), and (4), (c)(3) and (4), and (d)(2), the source must demonstrate that the flare meets the requirements of 40 CFR 63.11. In addition, a performance test according to Method 22 of appendix A of 40 CFR Part 63 shall be performed to determine visible emissions. The observation period shall be at least 2 hours and shall be conducted according to Method 22. Performance testing shall be conducted during three complete loading cycles with a separate test run for each loading cycle. The observation period for detecting visible emissions shall encompass each loading cycle. Integrated sampling to measure process vent stream flow rate shall be performed continuously during each loading cycle. The owner or operator shall record all visible emission readings, heat content determinations, flow rate measurements, maximum permitted velocity calculations, and exit velocity determinations made during the performance test.
- 24a. 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 Conditions 24 and 25 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 25. 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.
- 26a. Pursuant to 35 Ill. Adm. Code 219.105(h)(1), the method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60, Subpart XX, Section 60.503.
- b. Pursuant to 35 Ill. Adm. Code 219.105(h)(2), other tests shall be performed consistent with:
  - i. "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", EPA-340/1-80-012.
  - ii. "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", EPA-450/2-77-026.
- 27a. Pursuant to 40 CFR 60.18(d), owners or operators of flares used to comply with the provisions of 40 CFR 60 Subpart A shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

- b. Pursuant to 40 CFR 60.18(f)(2), the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- 28a. 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, 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).

- v. 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) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of 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 Illinois EPA or USEPA at least 7 days prior to the refilling.
  - b. Pursuant to 40 CFR 60.502(j), each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.
- 29a.
- i. Pursuant to 40 CFR 63.564(a)(1), the owner or operator of an affected source shall comply with the monitoring requirements in 40 CFR 63.8 in accordance with the provisions for applicability of 40 CFR 63 Subpart A in Table 1 of 40 CFR 63.560 and the monitoring requirements in 40 CFR 63.564.
  - ii. Pursuant to 40 CFR 63.564(a)(2), each owner or operator of an affected source shall monitor the parameters specified in 40 CFR 63.564. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.
  - iii. Pursuant to 40 CFR 63.564(a)(3), except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift

adjustments, all continuous parametric monitoring systems (CPMS) and CEMS shall be in continuous operation while marine tank vessel loading operations are occurring and shall meet minimum frequency of operation requirements. Sources monitoring by use of CEMS and CPMS shall complete a minimum of one cycle of operation (sampling, analyzing, and/or data recording) for each successive 15-minute period.

- iv. Pursuant to 40 CFR 63.564(a)(4), the owner or operator of a CMS installed in accordance with these emissions standards shall comply with the performance specifications either in performance specification (PS) 8 in 40 CFR Part 60, Appendix B for CEMS or in 40 CFR 63.7(c)(6) for CPMS.
- b. Pursuant to 40 CFR 63.564(b), owners or operators of a source complying with 40 CFR 63.563(a)(1) that uses a vapor collection system that contains valves that could divert a vent stream from a control device used to comply with the provisions of this subpart shall comply with 40 CFR 63.564(b)(1), (2), or (3).
    - i. Measure and record the vent stream flowrate of each by-pass line once every 15 minutes. The owner or operator shall install, calibrate, maintain, and operate a flow indicator and data recorder. The flow indicator shall be installed immediately downstream of any valve (i.e., entrance to by-pass line) that could divert the vent stream from the control device to the atmosphere.
    - ii. Measure the vent stream flowrate of each by-pass line once every 15 minutes. The owner or operator shall install, calibrate, maintain, and operate a flow indicator with either an audio or visual alarm. The flow indicator and alarm shall be installed immediately downstream of any valve (i.e., entrance to by-pass line) that could divert the vent stream from the control device to the atmosphere. The alarm shall be checked every 6 months to demonstrate that it is functioning properly.
    - iii. Visually inspect the seal or closure mechanism once during each marine tank vessel loading operation and at least once every month to ensure that the valve is maintained in the closed position and that the vent stream is not diverted through the by-pass line; record all times when the car seals have been broken and the valve position has been changed. Each by-pass line valve shall be secured in the closed position with a car-seal or a lock-and-key type configuration.
  - c. Pursuant to 40 CFR 63.564(c), owners or operators of a source complying with 40 CFR 63.563(a)(3) shall measure continuously the operating pressure of the marine tank vessel during loading.
  - d. Pursuant to 40 CFR 63.564(d), owners or operators of a source complying with 40 CFR 63.563(a)(4)(iv) that load vessels at less than atmospheric pressure (i.e., negative gauge pressure) shall measure and record the loading pressure. The owner or operator shall install, calibrate,

maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in 40 CFR 63.563(a)(4)(iv) is not attained. The owner or operator shall place the alarm system so that it can be seen and heard where cargo transfer is controlled. The owner or operator shall verify the accuracy of the pressure device once each calendar year with a reference pressure monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent pressure measurement device dedicated for this purpose).

- e. Pursuant to 40 CFR 63.564(f), for sources complying with 40 CFR 63.563(b)(5), use of a flare, the owner or operator shall monitor and record continuously the presence of the flare pilot flame. The owner or operator shall install, calibrate, maintain, and operate a heat sensing device (an ultraviolet beam sensor or thermocouple) at the pilot light to indicate the presence of a flame during the entire loading cycle.
- 30a. Pursuant to 35 Ill. Adm. Code 219.768(a), compliance with 35 Ill. Adm. Code 219.762(a)(2) shall be determined by visual inspection and by the leak detection methods contained in 35 Ill. Adm. Code 219.105(g).
- b. Pursuant to 35 Ill. Adm. Code 219.768(b), if the control device used to comply with 35 Ill. Adm. Code 219.762(a)(1) is a flare, compliance shall be determined by methods described in 35 Ill. Adm. Code 219.429(c).
  - c. Pursuant to 35 Ill. Adm. Code 219.768(d), Compliance with 35 Ill. Adm. Code 219.762(b)(3) shall be determined by one of the methods described in 35 Ill. Adm. Code 219.768:
    - i. A marine vessel loaded in accordance with 35 Ill. Adm. Code 219.762(b)(3)(A) through the use of a vacuum assisted vapor collection system is assumed to be vapor-tight for the purposes of 35 Ill. Adm. Code 219 Subpart GG.
    - ii. A vapor-tightness test for marine vessels shall be conducted to include the final 20 percent of loading of each product tank of the marine vessel, and it shall be applied to any potential sources of vapor leaks on the vessel pursuant to Method 21 of 40 CFR 60, Appendix A. A reading of 10,000 ppmv or greater as methane shall constitute a leak.
    - iii. As an alternative to 35 Ill. Adm. Code 219.768(d)(2), an owner or operator of a marine terminal may use the vapor-tightness test described in 40 CFR 61.304(f).
  - d. Pursuant to 35 Ill. Adm. Code 219.768(e), when in the opinion of the Illinois EPA or USEPA it is necessary to conduct testing to demonstrate compliance with or verify effectiveness of the vapor collection and control system required by 35 Ill. Adm. Code 219.762(a), (c)(1), or (c)(3), the owner or operator of a marine terminal shall, at its own expense, conduct such tests in accordance with the applicable test

methods and procedures specified in 35 Ill. Adm. Code 219.768(a), (b), or (c), as applicable.

- 31a. Pursuant to 35 Ill. Adm. Code 219.766 and 219.446, the owner or operator of a petroleum refinery shall prepare a monitoring program plan which contains, at a minimum:
- i. An identification of all refinery components and the period in which each will be monitored pursuant to 35 Ill. Adm. Code 219.447;
  - ii. The format for the monitoring log required by 35 Ill. Adm. Code 219.448;
  - iii. A description of the monitoring equipment to be used pursuant to 35 Ill. Adm. Code 219.447; and
  - iv. A description of the methods to be used to identify all pipeline valves, pressure relief valves in gaseous service and all leaking components such that they are obvious to both refinery personnel performing monitoring and Agency personnel performing inspections.
- b. Pursuant to 35 Ill. Adm. Code 219.766 and 219.447(a), the owner or operator of a petroleum refinery subject to 35 Ill. Adm. Code 219.445, for the purpose of detecting leaks, conduct a component monitoring program consistent with the following provisions:
- i. Test once between March 1 and June 1 of each year, by methods referenced in 35 Ill. Adm. Code 219.105(g), all pump seals, pipeline valves in liquid service and process drains;
  - ii. Test once each quarter of each calendar year, by methods referenced in 35 Ill. Adm. Code 219.105(g), all pressure relief valves in gaseous service, pipeline valves in gaseous service and compressor seals;
  - iii. Inaccessible valves may be tested once each calendar year instead of once each quarter of each calendar year;
  - iv. Observe visually all pump seals weekly;
  - v. Test immediately any pump seal from which liquids are observed dripping;
  - vi. Test any relief valve within 24 hours after it has vented to the atmosphere; and
  - vii. Test immediately after repair any component that was found leaking.
- d. Pursuant to 35 Ill. Adm. Code 219.766 and 219.447(b), storage tank valves and pressure relief devices connected to an operating flare

header or vapor recovery device are exempt from the monitoring requirements in 35 Ill. Adm. Code 219.447(a).

- e. Pursuant to 35 Ill. Adm. Code 219.766 and 219.447(c), the Illinois EPA may require more frequent monitoring than would otherwise be required by 35 Ill. Adm. Code 219.447(a) for components which are demonstrated to have a history of leaking.
- 32a. 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.
- 33a. Pursuant to 40 CFR 60.48c(g)(1), except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each operating day.
- b. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48 shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
- 34a. Pursuant to 40 CFR 60.115b(a)(2), 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(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.
- 35a. Pursuant to 40 CFR 60.505(a), the tank truck vapor tightness documentation required under 40 CFR 60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.

- b. Pursuant to 40 CFR 60.505(b), the documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:
  - i. Test title: Gasoline Delivery Tank Pressure Test—EPA Reference Method 27.
  - ii. Tank owner and address.
  - iii. Tank identification number.
  - iv. Testing location.
  - v. Date of test.
  - vi. Tester name and signature.
  - vii. Witnessing inspector, if any: Name, signature, and affiliation.
  - viii. Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).
- c. Pursuant to 40 CFR 60.505(c), a record of each monthly leak inspection required under 40 CFR 60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:
  - i. Date of inspection.
  - ii. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
  - iii. Leak determination method.
  - iv. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
  - v. Inspector name and signature.
- d. Pursuant to 40 CFR 60.505(d), the terminal owner or operator shall keep documentation of all notifications required under 40 CFR 60.502(e)(4) on file at the terminal for at least 2 years.
- e. Pursuant to 40 CFR 60.505(e), as an alternative to keeping records at the terminal of each gasoline cargo tank test result as required pursuant to 40 CFR 60.505(a), (c), and (d), an owner or operator may comply with the requirements in either 40 CFR 60.505(e)(1) or (2).
  - i. An electronic copy of each record is instantly available at the terminal.

- A. The copy of each record pursuant to 40 CFR 60.505(e)(1) is an exact duplicate image of the original paper record with certifying signatures.
  - B. The permitting authority is notified in writing that each terminal using this alternative is in compliance with 40 CFR 60.505(e)(1).
- ii. For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame.
- A. The copy of each record pursuant to 40 CFR 60.505(e)(2) is an exact duplicate image of the original paper record with certifying signatures.
  - B. The permitting authority is notified in writing that each terminal using this alternative is in compliance with 40 CFR 60.505(e)(2).
- f. Pursuant to 40 CFR 60.505(f), the owner or operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.
36. 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.

- 37a. Pursuant to 40 CFR 63.567(a), the owner or operator of an affected source shall fulfill all recordkeeping requirements in 40 CFR 63.9 and 63.10 in accordance with the provisions for applicability of 40 CFR 63 Subpart A to 40 CFR 63 Subpart Y in Table 1 of 40 CFR 63.560 and fulfill all recordkeeping requirements in 40 CFR 63.567.
- b. Pursuant to 40 CFR 63.567(g), if a vent system, or vapor collection system, containing valves that could divert the emission stream away from the control device is used, each owner or operator of an affected source shall keep for at least 5 years up-to-date, readily accessible continuous records of:
- i. All periods when flow bypassing the control device is indicated if flow indicators are installed under 40 CFR 63.563(a)(1) and 40 CFR 63.564(b); and
  - ii. All times when maintenance is performed on car-sealed valves, when the car-seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device) if valves are monitored under 40 CFR 63.564(b).
- c. Pursuant to 40 CFR 63.567(h), the owner or operator of an affected source shall keep the vapor-tightness documentation required under 40 CFR 63.563(a)(4) on file at the source in a permanent form available for inspection.
- d. Pursuant to 40 CFR 63.567(i), the owner or operator of an affected source shall maintain a documentation file for each marine tank vessel loaded at that source to reflect current test results as determined by the appropriate method in 40 CFR 63.565(c)(1) and (2). Updates to this documentation file shall be made at least once per year. The owner or operator shall include, as a minimum, the following information in this documentation:
- i. Test title;
  - ii. Marine vessel owner and address;
  - iii. Marine vessel identification number;
  - iv. Loading time, according to 40 CFR 63.563(a)(4)(ii) or (iii), if appropriate;
  - v. Testing location;
  - vi. Date of test;

- vii. Tester name and signature;
  - viii. Test results from 40 CFR 63.565(c)(1) or (2), as appropriate;
  - ix. Documentation provided under 40 CFR 63.563(a)(4)(ii) and (iii)(B) showing that the repair of leaking components attributed to a failure of a vapor-tightness test is technically infeasible without dry-docking the vessel; and
  - x. Documentation that a marine tank vessel failing a pressure test or leak test has been repaired.
- e. Pursuant to 40 CFR 63.567(k), when each leak of the vapor collection system, or vapor collection system, and control device is detected and repaired as specified in 40 CFR 63.563(c) the following information required shall be maintained for 5 years:
- i. Date of inspection;
  - ii. Findings (location, nature, and severity of each leak);
  - iii. Leak determination method;
  - iv. Corrective action (date each leak repaired, reasons for repair interval); and
  - v. Inspector name and signature.
38. 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.
- 39a. 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.
- b. Pursuant to 35 Ill. Adm. Code 219.766 and 219.448(a), the owner or operator of a petroleum refinery shall maintain a leaking components monitoring log which shall contain, at a minimum, the following information:
- i. The name of the process unit where the component is located;
  - ii. The type of component (e.g., valve, seal);
  - iii. The identification number of the component;

- iv. The date on which a leaking component is discovered;
  - v. The date on which a leaking component is repaired;
  - vi. The date and instrument reading of the recheck procedure after a leaking component is repaired;
  - vii. A record of the calibration of the monitoring instrument;
  - viii. The identification number of leaking components which cannot be repaired until turnaround; and
  - ix. The total number of components inspected and the total number of components found leaking during that monitoring period.
- c. Pursuant to 35 Ill. Adm. Code 219.766 and 219.448(b), copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.
- d. Pursuant to 35 Ill. Adm. Code 219.766 and 219.448(c), copies of the monitoring log shall be made available to the Illinois EPA, upon verbal or written request, at any reasonable time.
- e. Pursuant to 35 Ill. Adm. Code 219.770(a), the owner or operator of sources complying with 35 Ill. Adm. Code 219.762(a) and (b), or (c)(1), or (c)(3) shall maintain records regarding the marine terminal, and each time a marine vessel is loaded during the regulatory control period. The records shall include but are not limited to:
- i. The date(s) and the time(s) at which the marine vessel was loaded from the marine terminal;
  - ii. The name, type, identification number, and owner of the vessel loaded;
  - iii. The type and amount of liquid loaded into the marine vessel;
  - iv. Records of any leaks found, repair attempts, and the results of the required fugitive monitoring and maintenance program, including appropriate dates, test methods, instrument readings, repair results, and corrective action taken as required by 35 Ill. Adm. Code 219.762(a)(2) and 219.766;
  - v. A copy of the Coast Guard certification demonstrating that the marine terminal's vapor collection and control system has been certified as required by Coast Guard regulations found at 33 CFR 154; and
  - vi. A copy of the Coast Guard certification demonstrating that the marine vessel has been inspected and certified as required by Coast Guard regulations found at 46 CFR 39. If a copy of the Coast Guard certificate is not available at the time of loading,

then the date that the marine vessel was last inspected and the authorization that the marine vessel has functioning vapor control equipment must be recorded from the certificate. Further, a copy of the certificate must be obtained by the owner or operator of the marine terminal within 21 days after the loading event.

- f. Pursuant to 35 Ill. Adm. Code 219.770(b), owners or operators complying with 35 Ill. Adm. Code 219.762(b)(3)(B), (b)(3)(C), or (b)(3)(D) shall additionally maintain the following records concerning the vapor-tightness of the marine vessel:
  - i. Test title;
  - ii. Owner of the marine vessel tested;
  - iii. The identification number of the marine vessel tested;
  - iv. Testing location;
  - v. Tester name and signature;
  - vi. Witnessing inspector, name, signature, and affiliation; and
  - vii. Test results.
- g. Pursuant to 35 Ill. Adm. Code 219.770(d), owners or operators certifying compliance under 35 Ill. Adm. Code 219.764(c) shall maintain the records specified in 35 Ill. Adm. Code 219.770(a)(1), (a)(2), and (a)(3).
- h. Pursuant to 35 Ill. Adm. Code 219.770(e), all records required by 35 Ill. Adm. Code 219.770(a), (b), (c), and (d) shall be maintained for at least three years and shall be made available to the Illinois EPA upon request.
- 40a. 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 Marine Vapor Combustion Unit (MVCU) and the Truck/Rail Vapor Destruction Unit (TRCU):
    - A. Records for periodic inspection of the Marine Vapor Combustion Unit (MVCU) and the Truck/Rail Vapor Destruction Unit (TRCU) 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. The throughput of each product through the Barge Loading/Unloading Terminal Dock (gallons/day and gallons/year)

and the operating/not-operating status of the MVCU during the loading operations for control of VOM emissions;

- iii. The throughput of each product through the Railcar and Truck Loading/Unloading Areas (gallons/day and gallons/year) and the operating/not-operating status of the TRCU during the loading operations for control of VOM emissions;
  - iv. The throughput of each product stored for each storage tank. (gallons/day and gallons/year);
  - v. Monthly and annual combustion emissions of CO, NO<sub>x</sub>, and VOM from the Marine Vapor Combustion Unit (MVCU) and the Truck/Rail Vapor Destruction Unit (TRCU) with supporting calculations (tons/month and tons/year); and
  - vi. Natural gas usage for the source (million cubic feet/month and million cubic feet/year); and
  - vii. 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 and tons/year).
- b. All records and logs required by this permit shall be 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 an Illinois EPA or USEPA request for records during the course of a source inspection.
- 41a. 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 or 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.

- b. Pursuant to 40 CFR 60.115b(a), 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. Furnish the Illinois EPA or USEPA with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
  - ii. 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.
  - iii. 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.
- 42a. Pursuant to 40 CFR 63.567(a), the owner or operator of an affected source shall fulfill all reporting requirements in 40 CFR 63.9 and 63.10 in accordance with the provisions for applicability of 40 CFR 63 Subpart A to 40 CFR 63 Subpart Y in Table 1 of 40 CFR 63.560 and fulfill all reporting requirements in this 40 CFR 63.567. These reports will be made to the Illinois EPA or USEPA at the appropriate address identified in 40 CFR 63.13.
  - i. Reports required by 40 CFR 63 Subpart A and 40 CFR 63.567 may be sent by U.S. mail, facsimile (fax), or by another courier.
    - A. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
    - B. Submittals sent by other methods shall be received by the Illinois EPA or USEPA on or before the specified date.
  - ii. If acceptable to both the Illinois EPA or USEPA and the owner or operator of a source, reports may be submitted on electronic media.
- b. Pursuant to 40 CFR 63.567(b), the owner or operator of an affected source shall fulfill all notification requirements in 40 CFR 63.9 in

accordance with the provisions for applicability of that section to 40 CFR 63 Subpart Y in Table 1 of 40 CFR 63.560 and the notification requirements in this paragraph.

- i. Initial notification for sources with startup after the effective date. The owner or operator of a new or reconstructed source or a source that has been reconstructed such that it is subject to the emissions standards that has an initial startup after the effective date but before the compliance date, and for which an application for approval of construction or reconstruction is not required under 40 CFR 63.5(d) and 40 CFR 63.566, shall notify the Illinois EPA or USEPA in writing that the source is subject to the standard no later than 365 days or 120 days after initial startup, whichever occurs before notification of the initial performance test in 40 CFR 63.9(e). The notification shall provide all the information required in 40 CFR 63.567(b)(2), delivered or postmarked with the notification required in 40 CFR 63.567(b)(4).
- ii. Initial notification requirements for constructed/reconstructed sources. After the effective date of these standards, whether or not an approved permit program is effective in the State in which a source subject to these standards is (or would be) located, an owner or operator subject to the notification requirements of 40 CFR 63.5 and 40 CF 63.566 who intends to construct a new source subject to these standards, reconstruct a source subject to these standards, or reconstruct a source such that it becomes subject to these standards, shall comply with 40 CFR 63.567(b)(4)(i), (ii), (iii), and (iv).
  - A. Notify the Illinois EPA or USEPA in writing of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in 40 CFR 63.5. The application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.
  - B. Submit a notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction was commenced after the effective date.
  - C. Submit a notification of the anticipated date of startup of the source, delivered or postmarked not more than 60 days nor less than 30 days before such date;
  - D. Submit a notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

- c. Pursuant to 40 CFR 63.567(d), the owner or operator of a source required to conduct an opacity performance test shall report the opacity results and other information required by 40 CFR 63.565(e) and 40 CFR 63.11 with the notification of compliance status.
- d.
  - i. Pursuant to 40 CFR 63.567(e)(1), excess emissions and parameter monitoring exceedances are defined in 40 CFR 63.563(b). The owner or operator of a source subject to these emissions standards that is required to install a CMS shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Illinois EPA or USEPA once each year, except, when the source experiences excess emissions, the source shall comply with a semi-annual reporting format until a request to reduce reporting frequency under 40 CFR 63.567(e)(2) is approved.
  - ii. Pursuant to 40 CFR 63.567(e)(2), an owner or operator who is required to submit excess emissions and continuous monitoring system performance and summary reports on a semi-annual basis may reduce the frequency of reporting to annual if the following conditions are met:
    - A. For 1 full year the source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance; and
    - B. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 63 Subpart Y and 40 CFR 63 Subpart A.
  - iii. Pursuant to 40 CFR 63.567(e)(3), the frequency of reporting of excess emissions and continuous monitoring system performance and summary reports required may be reduced only after the owner or operator notifies the Illinois EPA or USEPA in writing of his or her intention to make such a change and the Illinois EPA or USEPA does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Illinois EPA or USEPA may review information concerning the source's entire previous performance history during the 5-year recordkeeping prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation maintenance requirements. Such information may be used by the Illinois EPA or USEPA to make a judgment about the source's potential for noncompliance in the future. If the Illinois EPA or USEPA will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention, the notification from the Illinois EPA or USEPA to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
  - iv. Pursuant to 40 CFR 63.567(e)(4), all excess emissions and monitoring system performance reports and all summary reports, if

required per 40 CFR 63.567(e)(5) and (6), shall be delivered or postmarked within 30 days following the end of each calendar year, or within 30 days following the end of each six month period, if appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all information required in 40 CFR 63.10(c)(5) through (13) as applicable in Table 1 of 40 CFR 63.560 and information from any calibration tests in which the monitoring equipment is not in compliance with PS 8 or other methods used for accuracy testing of temperature, pressure, or flow monitoring devices. The written report shall also include the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances have occurred or monitoring equipment has not been inoperative, repaired, or adjusted, such information shall be stated in the report. This information will be kept for a minimum of 5 years and made readily available to the Illinois EPA or USEPA upon request.

- v. Pursuant to 40 CFR 63.567(e)(5), if the total duration of excess emissions or control system parameter exceedances for the reporting period is less than 5 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 10 percent of the total operating time for the reporting period, only the summary report of 40 CFR 63.10(e)(3)(vi) shall be submitted, and the full excess emissions and continuous monitoring system performance report of 40 CFR 63.567(e)(4) need not be submitted unless required by the Illinois EPA or USEPA.
  - vi. Pursuant to 40 CFR 63.567(e)(6), if the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 5 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 10 percent or greater of the total operating time for the reporting period, both the summary report of 40 CFR 63.10(e)(3)(vi) and the excess emissions and continuous monitoring system performance report of 40 CFR 63.567(e)(4) shall be submitted.
  - e. Pursuant to 40 CFR 63.567(f), each owner or operator of an affected source shall submit with the initial performance test and maintain in an accessible location on site an engineering report describing in detail the vent system, or vapor collection system, used to vent each vent stream to a control device. This report shall include all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed.
43. 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.

43a. Pursuant to 35 Ill Adm. Code 219.766 and 219.449, the owner or operator of a petroleum refinery shall:

i. Submit a report to the Illinois EPA prior to the 1st day of both July and September listing all leaking components identified pursuant to 35 Ill. Adm. Code 219.447 but not repaired within 22 days, all leaking components awaiting unit turnaround, the total number of components inspected and the total number of components found leaking; and

ii. Submit a signed statement with the report attesting that all monitoring and repairs were performed as required under 35 Ill. Adm. Code 219.445 through 219.448.

b. Pursuant to 35 Ill. Adm. Code 219.768(f), an owner or operator of a marine terminal planning to conduct a VOM emissions test to demonstrate compliance with 35 Ill. Adm. Code 219.762(a), (c)(1), or (c)(3) shall notify the Illinois EPA of that intent not less than 30 days before the planned initiation of the tests so that the Illinois EPA may observe the test.

44a. 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, a 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's 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 shall be noted that this permit has been revised to incorporate Construction Permit No. 13090008 to add one 600 hp natural gas-fired boilers and to reduce the total permitted VOM emissions in this permit to 90 tons/year in condition No. 18a pursuant to Permittee's request.

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If you have any questions on this permit, please call Mike Dragovich at 217/785-1705.

Raymond E. Pilapil  
Acting Manager, Permit Section  
Division of Air Pollution Control

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

REP:MJD:psj

cc: Illinois EPA, FOS Region 3  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the truck/railcar & barge terminal for denatured ethanol and petroleum fuels 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 a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year of CO and VOM, 10 tons/year for a single HAP, and 25 tons/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 less material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)					Single <u>HAP</u>	Total <u>HAPs</u>
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>		
4 Storage Tanks					---		
Ethanol to Barge					---		
Gasoline to Barge					---		
Ethanol to Rail or Truck					---		
Gasoline to Rail or Truck					---		
Diesel to Rail or Truck					---		
Marine Vapor Combustion Unit (MVCU)	43.12	7.93	1.52		1.52		
Truck/Rail Vapor Destruction Unit (TRCU)	36.63	6.75	0.75		0.75		
Boiler	<u>9.23</u>	<u>13.19</u>	<u>0.84</u>	<u>0.07</u>	<u>0.60</u>	----	----
Totals	88.98	27.87	3.11	0.07	90.0	7.9	19.9