

217/782-2113

CERTIFIED MAIL
7007 0220 0000 0148 9419

CONSTRUCTION PERMIT GRANT -- OPERATING PERMIT DENIAL-- NSPS SOURCE

PERMITTEE

Austin-Tyler Construction LLC
Attn: Gary Schumal
23343 South Ridge Road
Elwood, Illinois 60421

Application No.: 09010016

I.D. No.: 197445AAJ

Applicant's Designation:

Date Received: January 12, 2009

Subject: Hot Mix Asphalt Plant

Date Issued: March 24, 2009

Location: 3590 South Ridge Road, Joliet, Will County

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of

- One (1) 400 tons/hour No. 2 distillate fuel oil/used oil-fired drum-mix asphalt plant with baghouse;
- One (1) 2 mmBtu/hour No.2 distillate fuel oil-fired asphalt tank heater;
- Two (2) 30,000 gallon liquid asphalt storage tanks;
- One (1) 1-15,000 gallon liquid asphalt storage tank;
- Three (3) 300 tons asphalt storage silos;
- One (1) 1072 hp (800 kW) diesel-powered generator; and
- One (1) 100 hp (75 kW) diesel-powered generator

as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit is issued based on the construction of the Hot Mix Asphalt Plant and diesel powered generators not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the volatile organic material (VOM) emissions from the above-listed emission units below the levels that would trigger the applicability of these rules.
- b. The drum-mix asphalt plant may be operated for a period of 12 months under this Construction Permit.
- c. The drum-mix asphalt plant shall not begin operation until construction, including construction of any air pollution control equipment, is complete and reasonable measures short of actual operation have been taken to verify proper operation.

- 2a. The Drum Mix Asphalt Plant is subject to the New Source Performance Standards (NSPS) for Hot Mix Asphalt Plants, 40 CFR 60, Subparts A and I. 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 60.92(a), On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart I shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:
 - i. Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
 - ii. Exhibit 20 percent opacity or greater.
- 3a. The diesel-powered generators are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and I. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.4201(a), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.
- c. Pursuant to 40 CFR 60.4204(b), owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE as applicable.
- d. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
- 4a. Pursuant to 40 CFR 89.112(a), exhaust emission from nonroad engines to which 40 CFR 89 Subpart B is applicable shall not exceed the applicable exhaust emission standards contained in Table 1, as follows:

Table 1.—Emission Standards (g/kW-hr)

Rated Power (kW)	Tier	Model Year ¹	NO _x	HC	NMHC + NO _x	CO	PM
75 < kW < 130	Tier 1	1997	9.2	--	--	--	--
	Tier 2	2003			6.6	5.0	0.30
	Tier 3	2007		--	4.0	5.0	
kW>560	Tier 1	2000	9.2	1.3	--	11.4	0.54
	Tier 2	2006	--	--	6.4	3.5	0.20

¹ The model years listed indicates the model years for which the specified tier of standards take effect.

- b. Pursuant to 40 CFR 89.112(d), in lieu of the NO_x standards, NMHC + NO_x standards, and PM standards specified in 40 CFR 89.112(a), manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in 40 CFR 89 Subpart C. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in Table 2. The FEL established by the manufacturer serves as the standard for that engine family. Table 2 follows:

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

Rated Power (kW)	Tier	Model Year ¹	NO _x FEL	NMHC+NO _x FEL	PM FEL
75 < kW < 130	Tier 1	1997	14.6	--	1.2
	Tier 2	2003	--	11.5	
	Tier 3	2007	--	6.6	
kW>560	Tier 1	2000	14.6	--	--
	Tier 2	2006	--	10.5	0.54

¹ The model years listed indicates the model years for which the specified tier of standards take effect.

- c. Pursuant to 40 CFR 89.112(e), naturally aspirated nonroad engines to which 40 CFR 89 Subpart B is applicable shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision applies to all Tier 2 engines and later models. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.
- d. Pursuant to 40 CFR 89.113(a), exhaust opacity from compression-ignition nonroad engines for which 40 CFR 89 Subpart B is applicable must not exceed:
- i. 20 percent during the acceleration mode;

- ii. 15 percent during the lugging mode; and
 - iii. 50 percent during the peaks in either the acceleration or lugging modes.
- 5a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, 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 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).
- e. 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).
- 6a. Pursuant to 35 Ill. Adm. Code 214.122(b), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively:
- i. To exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residential fuel oil is burned (0.8 lbs/mmBtu); and

- ii. To exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122).
- 7a. Pursuant to 35 Ill. Adm. Code 218.122(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 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).
- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8.0 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- 8. 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.
- 9a. Pursuant to 40 CFR 60.4207(a), beginning October 1, 2007, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- b. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

- 10a. Pursuant to 40 CFR 80.510(a), beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:
 - i. Sulfur content. 500 parts per million (ppm) maximum.
 - ii. Cetane index or aromatic content, as follows:
 - A. A minimum cetane index of 40; or
 - B. A maximum aromatic content of 35 volume percent.
- b. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:
 - i. Sulfur content 15 ppm maximum for NR diesel fuel.
 - ii. Cetane index or aromatic content, as follows:
 - A. A minimum cetane index of 40; or
 - B. A maximum aromatic content of 35 volume percent.
- 11a. Pursuant to 40 CFR 60.4211(a), if you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- b. Pursuant to 40 CFR 60.4211(c), if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.
- 12a. The baghouse shall be in operation at all times when the associated drum dryer is in operation and emitting air contaminants.

- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse such that the baghouse is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
 - c. 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 nuisance.
 - d. The drum mixer and drum dryer shall only be operated with distillate fuel oil or used oil as the fuel. The use of any other fuel in the drum mixer and drum dryer 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.
 - f. The asphalt tank heaters and the generators associated with the drum-mix asphalt plant shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the asphalt tank heaters or the generators 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.
 - g. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. The wt. percent given by the formula: Maximum wt. percent sulfur = $(0.000015) \times (\text{Gross heating value of oil, Btu/lb})$.
 - h. The Permittee shall not keep, store or use residual fuel oil (Grade No. 4, 5 and 6) with a sulfur content greater than that given by the formula:
$$\text{Maximum Wt percent sulfur} = (0.00005) \times (\text{Gross heating value of oil, Btu/lb}).$$
 - i. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
 - j. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 13a. Emissions and operation of the asphalt plant shall not exceed the following limits:
- i. Asphalt Production Limits:

Asphalt Concrete Production Rate		
<u>(Tons/Hour)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
400	142,000	850,000

ii. Emissions from Drum Mixer/Dryer:

<u>Pollutant</u>	<u>Emission Rate</u>	<u>Emissions</u>	
	<u>(lbs/Ton)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	0.130	9.23	55.25
Nitrogen Oxides (NO _x)	0.055	3.91	23.38
Particulate Matter (PM)	0.033	2.34	14.03
Sulfur Dioxide (SO ₂)	0.058	4.12	24.65
Volatile Organic Material (VOM)	0.032	2.27	13.60

iii. Emissions from Asphalt Silos Loading and Truck Loadout:

<u>Pollutant</u>	<u>Emission Rate</u>	<u>Emissions</u>	
	<u>(lbs/Ton)</u>	<u>(lbs/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	0.0007	99.40	0.30
Particulate Matter (PM)	0.0007	99.40	0.30
Volatile Organic Material (VOM)	0.0048	681.60	2.04

These limits are based on the maximum asphalt production and standard emission factors (Tables 11.1-3, 11.1-7, 11.1-8, and 11.1-14, AP-42, Volume I, Fifth Edition, Update 2001, December 2000).

b. Operation and emissions of the asphalt tank heater shall not exceed the following limits:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lbs/10³ Gal)</u>	<u>(lb/hr)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	5.00	0.07	0.31
Nitrogen Oxides (NO _x)	20.00	0.29	1.25
Particulate Matter (PM)	2.00	0.03	0.13
Sulfur Dioxide (SO ₂)	39.76	0.57	2.49
Volatile Organic Material (VOM)	0.34	0.01	0.02

These limits are based on the maximum firing rate (2.0 mmBtu/hr), a heat content of 140,000 Btu/gallon for No. 2 distillate fuel oil, 8,760 hours/year of operation, and standard emission factors (Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1998).

c. This permit is issued based on negligible emissions of VOM from the three liquid asphalt storage tanks. For this purpose, emissions from each tank shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year total.

d. Emissions and operation of the two diesel-powered generators shall not exceed the following limits:

i. Total hours of operation: 600 hours/month, 6,000 hours/year

ii. Total emissions from the diesel-powered generators:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lb/Hp-hr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Carbon Monoxide (CO)	0.0077	1.85	18.51
Nitrogen Oxides (NO _x)	0.014	3.39	33.84
Particulate Matter (PM)	0.00044	0.11	1.06
Sulfur Dioxide (SO ₂)	0.0004	0.13	1.30
Volatile Organic Material (VOM)	0.0007	0.17	1.69

The above emission factors and emission limits are derived from 40 CFR 89.112 and 40 CFR 89.113 as referenced in 40 CFR 60.4202(a) for units with a power rating of 800 KW (1072HP) with the exception of sulfur dioxide which was calculated from fuel sulfur content (0.05%). Emission totals, except for SO₂, shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant. SO₂ emissions shall be calculated as noted above.

e. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

14a. Pursuant to 40 CFR 60.8(a), within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and 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.
- 15a. Pursuant to 40 CFR 60.93(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 60.93, except as provided in 40 CFR 60.8(b).
- b. Pursuant to 40 CFR 60.93(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.92 as follows:
 - i. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
 - ii. Method 9 and the procedures in §60.11 shall be used to determine opacity.
- 16a. Pursuant to 40 CFR 60.4212(a), the performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F.
- b. Pursuant to 40 CFR 60.4212(c), exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

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

Where:

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

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

- 17a. 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 18, 19, and 20 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 18a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.
- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data

reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

- c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
 - d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
 - e. 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.
- 19a. Within 60 days after achieving the maximum production rate at which the drum-mix asphalt plant will be operated, the PM emissions and opacity of the drum-mix asphalt plant shall be measured during conditions which are representative of maximum emissions. These tests shall determine compliance with 40 CFR 60.92(a).
- b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A, and 40 CFR 61, Appendix B, for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Opacity	USEPA Method 9

- 20a. Within 60 days after achieving the maximum production rate at which the diesel-powered generators will be operated, the emissions and opacity of the diesel-powered generators shall be measured during conditions which are representative of maximum emissions. These tests shall

determine compliance with 40 CFR 60.4204(b), 40 CFR 89.112(a), 40 CFR 89.112(d), and 40 CFR 89.113(a).

- b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR Part 1039, Subpart F for USEPA test methods.
- 21a. At least 30 days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Compliance Section. This plan shall include as a minimum:
- i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;
 - ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;
 - iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;
 - iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;
 - v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;
 - vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;
 - vii. Any proposed use of an alternative test method, with detailed justification; and
 - viii. The format and content of the Source Test Report.
- b. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

- c. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by facsimile, at least 5 days prior to the scheduled date of testing or immediately, if the delay occurs in the 5 days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.
- d. The Permittee shall submit the Final Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA without delay, within 30 days after the results are compiled, but no later than 60 days after the date of testing or sampling. The Final Report shall include as a minimum:
 - i. General information describing the test, including the name and identification of the emission source which was tested, date of test, names of personnel performing the tests, and Illinois EPA observers, if any;
 - ii. A summary of results;
 - iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;
 - iv. Detailed description of test conditions, including:
 - A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate/throughput, fuel or raw material consumption rate, and heat content of the fuels);
 - B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and
 - C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards, and a statement whether the test(s) demonstrated compliance with the applicable standards;
 - vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;
 - vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

- viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.
- e. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(a), (b) and (c).
- 22a. Pursuant to 40 CFR 60.4209, if you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in 40 CFR 60.4211.
- b. Pursuant to 40 CFR 60.4209(b), If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- 23. Inspections of the affected drum-mix asphalt plant and control systems equipment and operations shall be performed as necessary but at least once per week when the affected drum-mix asphalt plant is in operation to confirm compliance with the requirements of this permit.
- 24a. 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.
- 25. Pursuant to 40 CFR 60.4214(c), if the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- 26. 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.

27. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 218.119 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 provisions of 35 Ill. Adm. Code Part 218 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.
- 28a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Records addressing use of good operating practices for the baghouse:
 - A. Operating logs for the drum-mix asphalt plant baghouse, including operating data (pressure drop or stack condition), daily upon startup;
 - B. Records for periodic inspection of the baghouse with date, individual performing the inspection, and nature of inspection; and
 - C. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Asphalt concrete production (tons/month and tons/year);
 - iii. Distillate fuel oil usage (gallons/month and gallons/year);
 - iv. Used oil usage (gallons/month and gallons/year);
 - v. The sulfur content of the distillate fuel oil and the used oil used in the drum-mix asphalt plant (% weight), this shall be recorded for each shipment of oil delivered to the source;
 - vi. Hours of operation of each engine (hours/month and hours/year);
 - vii. An inspection, maintenance and repair log of the engines listing each activity performed with date; and
 - ix. Monthly and Annual CO, NO_x, PM, SO₂, and VOM emissions, 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) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

- 29a. Pursuant to 40 CFR 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:
- i. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
 - iii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.
30. 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.
- 31a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the record 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
9511 West Harrison
Des Plaines, Illinois 60016

33. The assembly of this plant at a new location will require a construction permit for the new location. This permit must be obtained prior to commencing construction at the new location.

The OPERATING permit application is DENIED because the Illinois Environmental Protection Act, Section 9, and 35 Ill. Adm. Code 201.160(b) might be violated.

Pursuant to Section 201.160(b), an operating permit may not be issued until the equipment has been constructed or modified in accordance with applicable conditions in this construction permit. The Illinois EPA suggests that you apply for the operating permit after the construction and testing are successfully completed in accordance with the construction permit. This information must be submitted in triplicate and should reference the application and I.D. numbers assigned above.

Satisfactory completion of above test so to demonstrate compliance with applicable emission limits is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160.

It should be noted that this permit does not authorize the acceptance of waste. The appropriate permit must be obtained from the Bureau of Land before waste can be accepted. If the used oil is not "on-spec" and not burned in a unit for energy recovery as allowed by 35 Ill. Adm. Code 739.161, the used oil will be considered a solid waste and not a fuel. This makes the used oil subject to the manifest requirements of 35 Ill. Adm. Code 809 and the facility subject to the permitting requirements of 35 Ill. Adm. Code 807, as a solid waste management site. Furthermore, the used oil must provide surplus energy beyond the necessary to sustain combustion to be considered a fuel and not a waste.

It should also be noted that during the analysis of this permit application, it was determined that your facility has the potential to emit more than 100 tons per year of carbon monoxide (CO) and nitrogen oxides (NO_x) and will be classified as a major source under the Clean Air Act Permit Program (CAAPP). To avoid the CAAPP permitting requirements, you may want to consider applying for a Federally Enforceable State Operating Permit (FESOP).

Page 20

A FESOP is an operating permit containing federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source thresholds, thereby excluding the source from the CAAPP. The necessary application forms are available on the Illinois EPA's website at <http://www.epa.state.il.us/air/caapp/permit-forms.html>.

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

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

Date Signed: _____

ECB:GMK:jws

cc: Illinois EPA, FOS Region 1