

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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217/785-1705

CONSTRUCTION PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Iron Mountain Data Center - CHI1

Attn: Kevin Walker 1680 E Touhy Avenue Des Plaines, IL 60018

Application No.: 23050030 I.D. No.: 031063AUJ

Applicant's Designation: Date Received: May 19, 2023

Subject: Data Center

Date Issued: June 5, 2025 Expiration Date: See Condition 1.

Location: 1680 E Touhy Avenue, Des Plaines, Cook County

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

One (1) 1,000 kW (1,474 BHP) Diesel-Fired Life Safety Emergency Generator Set (LS-1); and

Twenty-Two (22) Diesel-Fired Critical Emergency Generator Sets (EG #2 - EG #23), consisting of a mix of:

3,213 kW (4,309 BHP) Cummins C3000 D6e Generators, and 3,000 kW (4,423 BHP) CAT C175-16 Generators,

pursuant to 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 Emergency Generator Sets (LS-1 and EG #2 EG #23) 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 emissions of Nitrogen Oxides (NOx) from the above-listed equipment below the levels that would trigger the applicability of these rules.
 - b. Operation of the Emergency Generator Sets (LS-1 and EG #2 EG #23) is allowed under this construction permit for twelve (12) months after the date of initial startup.
- 2a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and IIII. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States Environmental Protection Agency (USEPA) under a delegation agreement. Pursuant to 40 CFR 60.4200(a), the provisions of 40 CFR 60 Subpart IIII are applicable to

2125 S. First Street, Champaign, IL 61820 (217) 278-5800 115 S. LaSalle Street, Suite 2203, Chicago, IL 60603 1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120 9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000 595 S. State Street, Elgin, IL 60123 (847) 608-3131 2309 W. Maim Street, Suite 116, Marion, IL 62959 (618) 993-7200 412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022 4302 N. Main Street, Rockford, IL 61103 (815) 987-7760 manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in 40 CFR $60.4200\,(a)\,(1)$ through (4). For the purposes of 40 CFR 60 Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator.

- Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
 - A. Manufactured after April 1, 2006, and are not fire pump engines,
 - B. Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- ii. Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- iii. The provisions of 40 CFR 60.4208 are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.
- b. Pursuant to 40 CFR 60.4202(a)(2), Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in 40 CFR 60.4202(a)(1) through (2).

For engines with a rated power greater than or equal to $37~{\rm KW}$ (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.

- c. Pursuant to 40 CFR 60.4202(b)(2), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in 40 CFR 60.4202(b)(1) through (2). For 2011 model year and later, the Tier 2 emission standards as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105.
- d. Pursuant to 40 CFR 60.4205(b), owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

3a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 - EG #23) are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

New stationary RICE.

A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

b. Pursuant to 40 CFR 63.6590(c)(1), an affected source that meets any of the criteria in 40 CFR 63.6590(c)(1) through (7) must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines or 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63.

A new or reconstructed stationary RICE located at an area source;

- 4a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) are subject to 40 CFR Part 1039 per 40 CFR 60.4202(a)(2), 40 CFR 60.4202(b)(2) and 40 CFR 60.4205(b). Pursuant to 40 CFR Part 1039 Appendix I, the following standards, which EPA originally adopted under 40 CFR Part 89, apply to nonroad compression-ignition engines produced before the model years specified in 40 CFR 1039.1:
 - i. Tier 2 standards apply as summarized in the following table:

Table 2 to Appendix I - Tier 2 Emission Standards [g/kW-hr]

Rated power (kW)	Starting model year	NO _x +NMHC	со	PM
kW > 560	2006	6.4	3.5	0.20

- b. Pursuant to 40 CFR 1039.105(a), the smoke standards in 40 CFR 1039.105 apply to all engines subject to emission standards under 40 CFR Part 1039, except for the following engines:
 - i. Single-cylinder engines.
 - ii. Constant-speed engines.
 - iii. Engines certified to a PM emission standard or FEL of 0.07 g/kW-hr or lower.

- Pursuant to 40 CFR 1039.105(b), measure smoke as specified in 40 CFR 1039.501(c), smoke from your engines may not exceed the following standards:
 - i. 20 percent during the acceleration mode.
 - ii. 15 percent during the lugging mode.
 - iii. 50 percent during the peaks in either the acceleration or lugging modes.
- 5a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). 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.
- 6a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) are subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). 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 source to exceed 2000 ppm.
- b. Pursuant to 35 Ill. Adm. Code 214.305(a)(2), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:
 - The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm;
- 7. This permit is issued based on the Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) at this source not being subject to 35 Ill. Adm. Code Part 217 Subpart Q (Stationary Reciprocating Internal Combustion Engines And Turbines) because the potential to emit for $NO_{\rm x}$ from this source is less than 100 tons per year. This is a result of the federally enforceable limitations of this permit, which limit the potential to emit $NO_{\rm x}$ in an amount less than 100 tons per year.
- 8a. The Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) at this source not being subject to 35 Ill. Adm. Code 218.301, because

- these units do not use organic material as defined in $35\ \text{Ill.}$ Adm. Code 211.4250.
- b. This permit is issued based on the Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 - EG #23) not being subject to the control requirements of 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(f), the control requirements in 35 Ill. Adm. Code Part 218 Subpart TT shall not apply to fuel combustion units.
- 9a. Pursuant to 40 CFR 60.11(b), compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in Appendix A of 40 CFR Part 60, any alternative method that is approved by the Illinois EPA or USEPA, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- b. Pursuant to 40 CFR 60.11(c), the opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- c. 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.
- 10a. 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 and 60.4205 over the entire life of the engine.
 - 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 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
 - c. 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 do all of the following, except as permitted under 40 CFR 60.4211(g):

- i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- ii. Change only those emission-related settings that are permitted by the manufacturer; and
- iii. Meet the requirements of 40 CFR Part 1068, as they apply to you.
- d. 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 emission-related specifications, except as permitted in 40 CFR 60.4211(g).
- e. Pursuant to 40 CFR 60.4211(f), if you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and must meet all requirements for non-emergency engines.
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations.
 - ii. You may operate your emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2).

Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require

maintenance and testing of emergency ICE beyond 100 hours per calendar year.

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- D. The power is provided only to the facility itself or to support the local transmission and distribution system.
- E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- f. Pursuant to 40 CFR 60.4211(g)(3), if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with

the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

- 11a. Pursuant to 40 CFR 1090.305, except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of 40 CFR 1090.305:
 - b. Pursuant to 40 CFR 1090.305(b), maximum sulfur content of 15 ppm.
 - c. Pursuant to 40 CFR 1090.305(b), diesel fuel must meet one of the following standards:
 - A. Minimum cetane index of 40; or
 - B. Maximum aromatic content of 35 volume percent.

12a. Episode Action Plan

- i. Pursuant to 35 Ill. Adm. Code 244.141, the Permittee shall have on file with the Illinois EPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- ii. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on April 16, 2025, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- iii. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 Ill. Adm. Code 244.141, addressing the actions that will be implemented to reduce SO_2 , PM_{10} , NO_2 , CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 Ill. Adm. Code 244.161 through 244.165.
- iv. Pursuant to 35 Ill. Adm. Code 244.169, or as may otherwise be required under 35 Ill. Adm. Code 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.

- v. Pursuant to 35 Ill. Adm. Code 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- vi. Pursuant to Section 35 Ill. Adm. Code 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- vii. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.
- 13a. 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 Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) shall only be operated with distillate fuel oil (Grades No. 1 and 2 (i.e., diesel)) as the fuel. The use of any other fuel in any of the engines powering Emergency Generators LS-1 and EG #2 EG #23 may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
 - c. 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.
 - d. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 14a. Emissions from and operation of the 1,000 kW (1,474 BHP) Diesel-Fired Life Safety Emergency Generator (LS-1) shall not exceed the following:

	Emission Factor	Emiss	ions
Pollutant	(g/hp-hr)	(lbs/Hr)	(Ton/Yr)
Carbon Monoxide (CO)	6.03	1.78	0.06
Nitrogen Oxides (NO _x)	5.97	17.65	0.57
Particulate Matter (PM)	0.25	0.18	0.01
Sulfur Dioxide (SO ₂)	0.00550	0.02	0.01
Volatile Organic Material (VOM)	0.73	0.22	0.01

These limits are based on the rated output of the engine powering the generators 1,000 kW (1,474 BHP), 65 total hours/year of operation,

emission factors for CO, NO_x , PM, and VOM are based on the manufacture data sheet, emission factor for SO_2 is based on the standard emission factor (Table 3.4-1, AP-42, Fifth Edition, Volume I, Supplement B, October 1996) with a fuel sulfur content of 0.0015% by weight.

- b. Emissions from and operation of from CAT C175-16 are shall not exceed the following limits:
 - i. Maximum Hours of operation from each CAT C175-16 Emergency Generator shall not exceed 36 hours per year.
 - ii. Emission Rates from CAT C175-16 Emergency Generators are listed in the table as follows::

<u>Pollutant</u>	Emission Factor (lb/gal)	CAT C175-16 (4,423 BHP Engine) (lbs/hr)
Carbon Monoxide (CO) Nitrogen Oxides (NO _x)	0.0246	5.28 53.22
Particulate Matter (PM)	0.00535	1.15
Sulfur Dioxide (SO ₂) Volatile Organic Material (VOM)	0.00023 0.0091	0.05 1.95

- iii. Maximum Hours of operation for each Cummins C3000 D6e Emergency Generator shall not exceed 65 hours per year.
- iv. Emission Rates from Cummins C3000 D6e Emergency Generators are listed in the table as follows:

Pollutant	Emission Factor (lb/gal)	Cummins C3000 D6e (4,309 BHP Engine) (lb/hr)
Carbon Monoxide (CO)	0.00971	1.99
Nitrogen Oxides (NO _x)	0.2414	49.49
Particulate Matter (PM)	0.00229	0.47
Sulfur Dioxide (SO ₂)	0.000244	0.05
Volatile Organic Material (VOM)	0.00463	0.95

The combined emissions from the Diesel-Powered Generator Sets EG #2 - EG #23 shall not exceed the following limits:

	EG #2 = EG #23
	combined
Pollutant	(ton/year)
Carbon Monoxide (CO)	2.09
Nitrogen Oxides (NO _x)	35.39
Particulate Matter (PM)	0.46
Sulfur Dioxide (SO ₂)	0.04
Volatile Organic Material (VOM)	0.77

These limits are based on the maximum rated output of the engines

powering each Cummins C3000 D6e Generators 3,213 kW (4,309 BHP), and CAT C175-16 Generators 3,000 kW (4,423 BHP), worst-case hourly emission rates for CO, NOx, PM, and VOM for EG #2 - EG #23 at any load identified on manufacturer data sheets, and the emission factor for sulfur dioxide is based on the standard emission factor (Table 3.4-1, AP-42, Fifth Edition, Volume I, Supplement B, October 1996) with a fuel sulfur content of 0.0015%.

- c. Compliance with annual limits 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).
- 15. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Emergency Generator Sets (LS-1 and EG #2 EG #23) being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of the conditions in this permit, the emissions of all HAPs from the above-listed equipment do not trigger the requirements of Section 112(g) of the Clean Air Act.
- 16. This permit is issued based on the Diesel-Powered Emergency Generator Sets (LS-1 and EG #2 EG #23) each having a displacement of less than 30 liters per cylinder and has been certified by the manufacturer to meet the standards of 40 CFR 60 60.4202(a) through (d). As a result, this permit is issued based on the diesel-powered emergency generator sets not being subject to the testing requirements of 40 CFR 60.8.
- 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 Condition 18 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- c. During testing of any emergency generator, no other unit shall operate during this time; instead, only one generator may be operated at a time for testing purposes.
- d. One generator shall be tested every four months at 80% for one hour.
- 18. 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.
- 19. Pursuant to 40 CFR 60.4209(a), if you are an owner or operator, you must meet the monitoring requirements of 40 CFR 60.4209. In addition, you must also meet the monitoring requirements specified in 40 CFR 60.4211.
 - If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- 20. Pursuant to 40 CFR 60.4214(b), if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- 21. 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. 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 quidance 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.

- 22. 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.
- 23a. Pursuant to 35 Ill. Adm. Code 214.305(a)(3), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must:

- i. Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in 35 Ill. Adm. Code 214.305(a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil;
- ii. Retain the records for at least 5 years, and provide copies of the records to the Illinois EPA within 30 days after receipt of a request by the Illinois EPA; and
- 24a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Total hours of operation of each unit including startup and shutdown (hours/month and hours/year);
 - ii. Diesel generator set fuel usage (gallons/month, gallons/year);
 - iii. An inspection, maintenance and repair log of the generators listing each activity performed with date; and
 - iv. Monthly and annual emissions of CO, NO_x , PM, SO_2 , and VOM from

diesel-powered emergency Generator Sets (LS-1 and EG #2 - EG #23) with supporting calculations (tons/month and tons/year).

- b. All records and logs required by Condition 24(a) of 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.
- 25a. 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.
- 26. 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.
- 27. Pursuant to 35 Ill. Adm. Code 214.305(a)(3)(C), except as provided in 35 Ill. Adm. Code 214.305(b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

The owner or operator must notify the Illinois EPA within 30 days after

discovery of deviations from any of the requirements in this 35 Ill. Adm. Code 214.305(a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

- 28. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager, of the initial startup of each emission unit and control equipment within thirty (30) calendar days of the initial start-up.
- 29a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.
 - b. One (1) copy of required reports and notifications shall be sent to:
 - i. Via mail or overnight delivery:

Via USPS Illinois EPA, Bureau of Air Compliance Section (MC 40) 2520 West Iles Avenue P.O. Box 19276 Springfield, IL 62794-9276 Via Other Means
Illinois EPA, Bureau of Air
Compliance Section (MC 40)
2520 West Iles Avenue
Springfield, IL 62704

ii. In addition to the paper copy of the test notifications, written test plan and final test report, an electronic copy of the test notifications, written test plan and final test report shall be sent to:

epa.boa.smu@illinois.gov

It should be noted that during the review of this application it was determined that your facility has the potential to emit more than 50 tons per year of a Nitrogen Oxides (NOx) 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) if your actual NOx emissions are below the major threshold level. A FESOP is an operating permit which contains federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source threshold, thereby excluding the source from the CAAPP. Please contact the Permit Section at 217/785-1705 to request the necessary application forms.

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

William D. Manyan

William D. Marr Manager, Permit Section Bureau of Air

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STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY BUREAU OF AIR P. O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
- 2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
- 4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emission of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
- 5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
 - c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.
 - b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
- 7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
 - a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or
 - b. upon finding that any standard or special conditions have been violated, or
 - c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.