PERMIT TO CONSTRUCT / RECONSTRUCT / MODIFY AN AIR CONTAMINANT SOURCE

Lincoln-Lancaster County Health Department	Patricia D. Lopez, RN, MSN Health Director
Environmental Public Health Division Air Quality Program 3131 O Street Lincoln, Nebraska 68510	Brock Hanisch, MS, MPH, REHS Environmental Public Health Division Manager
Phone: (402) 441-8040 Fax: (402) 441-3890	Gary R. Bergstrom, Jr. Air Quality Program Supervisor
LLCHD Air Quality Program Source Number:	00421
LLCHD Air Quality Program Construction Permit Number:	229
Effective Date of Permit:	XX – XX – 2024 MM – DD – YYYY

A Permit to Construct / Reconstruct / Modify an Air Contaminant Source is Hereby Issued to:

Permit Holder Name:	Agate LLC
Address:	251 Little Falls Drive
City, State, ZIP:	Wilmington, DE 19808

This Construction / Reconstruction / Modification Permit is Issued to the Following Source:

Facility Site Name:	Agate
Facility Location:	SW 1/4 of Section 20, Township 11N, Range 7E
City, County, State, ZIP:	Lincoln, Lancaster County, NE 68514
Facility NAICS:	518210: Data Processing, Hosting, and Related Services

Environmental Public Health Division / Air Quality Program Recommendation:

Permit Writer:	Approve Issuance Deny Issuance	PERMIT WRITER APPROVAL
Air Quality Program Supervisor:	 Approve Issuance Deny Issuance 	SUPERVISOR APPROVAL
Environmental Public Health Division Manager:	 Approve Issuance Deny Issuance 	MANAGER APPROVAL

Health Director / Air Pollution Control Officer Authorization:

ACTION TAKEN:		
 Approve Issuance Deny Issuance 	[XXXXXXXXXXXXXXXXX] Date	[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

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Definitions

Unless otherwise defined, or a different meaning is clearly required by context, the terms used in this permit shall be as defined in Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards (LLCAPCPRS) Article 2, Section 1 (Definitions), or as defined in the 'Statement of Basis' (or 'fact sheet') associated with issuance of this permit.

Abbreviations, Symbols, and Units of Measure

Abbreviations, symbols, and units of measure used in this permit shall be as follows:

ADDIEVIALIC	ons, symbols, and units of measure used i	in this perm	it shall be as follows.
AP-42	Compilation of Air Pollutant Emission	MW	Megawatt
	Factors, Vol. I, Stationary Point & Area	NAAQS	National Ambient Air Quality Standards
	Sources	NESHAP	National Emission Standards for Hazardous
BACT	Best Available Control Technology		Air Pollutants
bhp	Brake horsepower	NO ₂	Nitrogen dioxide
BMP	Best Management Practice	NOx	Nitrogen oxides
Btu	British thermal unit	NSPS	New Source Performance Standard
bu	Bushel	NSR	New Source Review
CAA	Clean Air Act	PAL	Plant-wide applicability limit
CDT/CST	Central Daylight Time/Central Standard Time	Pb	Lead (chemical abbreviation)
CE	Control equipment	PEMS	Predictive Emissions Monitoring System
CEM	Continuous emissions monitor	PM	Particulate matter
CEMS	Continuous emissions monitoring system	PM ₁₀	Particulate matter with and aerodynamic
cf or ft ³	Cubic feet	1 10110	diameter equal to or less than 10 microns
CFR	Code of Federal Regulations	PM _{2.5}	Particulate matter with and aerodynamic
CO	Carbon monoxide	F IVI2.5	diameter equal to or less than 2.5 microns
CO CO₂	Carbon dioxide	nnh	Parts per billion
		ppb	Parts per million
CO₂e C.P.	CO ₂ equivalent	ppm	•
	Construction permit	ppmv	Parts per million by volume
CPMS	Continuous Parametric Monitoring System	ppmvd	Parts per million by volume, dry basis
dscf	Dry standard cubic feet	PSD	Prevention of Significant Deterioration of Air
dscfm	Dry standard cubic feet per minute	DTC	Quality
EMIS	Emergency Management Information System	PTE	Potential to emit
EP	Emission point	RVP	Reid vapor pressure
ESP	Electrostatic precipitator	RATA	Relative Accuracy Test Audit
EU	Emission unit	RMP	Risk Management Plan
FID#	Facility Identification Number	RTO	Regenerative thermal oxidizer
FDCP	Fugitive dust control plan	§	Section
FGR	Flue gas recirculation	scf	Standard cubic feet
FIP	Federal Implementation Plan	SDS	Safety Data Sheet
FR	Federal Register	SIC	Standard Industrial Classification
ft	Feet	SIP	State Implementation Plan
FTIR	Fourier Transform Infrared	SO ₂	Sulfur dioxide
GHGs	Greenhouse gases	SO _X	Sulfur oxides
gpm	gallons per minute	TDS	Total dissolved solids
H₂S	Hydrogen sulfide	то	Thermal oxidizer
HAP	Hazardous air pollutant	TO/HRSG	Thermal oxidizer with heat recovery steam
hp	Horsepower		generator
hr	Hour	tpy	Tons per year
kW	Kilowatt	TRS	Total reduced sulfur
kWh	Kilowatt-hour	TSP	Total suspended particulate matter
lb	Pound	ULNB	Ultra low-NO _x burner
LDAR	Leak detection and repair	ULSD	Ultra low-sulfur diesel (maximum sulfur
LLCAPCPRS	Lincoln-Lancaster County Air Pollution		content of 15 ppm)
	Control Program Regulations and Standards	UST	Underground storage tank
LLCHD	Lincoln-Lancaster County Health Department	US EPA	United States Environmental Protection
LNB	Low-NO _x burner		Agency
MACT	Maximum Achievable Control Technology	UTM	Universal Transverse Mercator
Mgal	One thousand gallons	VHAP	Volatile hazardous air pollutant
MMBtu	One million British thermal units	VMT	Vehicle miles traveled
MMscf	One million standard cubic feet	VOC	Volatile organic compound

Description of Permitting Action

On March 20, 2023, Agate, LLC (hereinafter referred to as 'Agate') submitted an application to construct a facility for data processing, handling, and related services (i.e., data center) on a property located at the northwest corner of the intersection of Highway 77 and Interstate-80 in Lincoln, NE. An addendum to the application was submitted on September 14, 2023 containing finalized engine specifications and emissions data. This is a 'greenfield' construction project, as there are currently no existing facilities or emission units at the proposed facility location.

This permit is being issued using 'minor New Source Review' (minor-NSR) permitting procedures, based on the following:

- This facility does not meet any of the source applicability criteria set forth in 40 CFR Part 52, §52.21(b)(1)(i)(a) which would establish the facility as a 'major stationary source' for the purposes of PSD permitting at a threshold of 100 tons per year (TPY) of any regulated NSR pollutant; and
- The owner/operator has elected to accept federally enforceable limitations on fuel use that will limit emissions of all regulated NSR pollutants to no more than 249.00 tons during any consecutive twelve (12) month period, thus avoiding classification as a 'major stationary source' for PSD permitting pursuant to 40 CFR Part 52, §52.21(b)(1)(i)(b).

Please see the "Statement of Basis" that accompanies the issuance of this permit for further discussion and more information on this construction.

Description of Source

This new air pollution source will consist largely of the following operations:

• Emission units at this facility will consist of diesel¹ emergency engines, a diesel fire pump, diesel fuel storage tanks, and cooling towers.

The diesel emergency engines will serve to provide electrical power in the event of an electric power supply interruption. The engines will also be operated periodically for purposes of maintenance and readiness testing.

Permitted Emission Units

This permit allows for the <u>construction and operation</u> of the following emission unit(s) in accordance with the conditions and requirements established herein:

Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
B1G1	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G2	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G3	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G4	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G5	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G6	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G7	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G8	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G9	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G10	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G11	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel

¹ – Refer to Attachment A of the 'Statement of Basis' for this permit for the definition of 'Diesel' as the term is used in this permit.

Construction Permit No. 229 Minor-NSR Construction Permit

Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
B1G12	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G13	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G14	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G15	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G16	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G17	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G18	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G19	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G20	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G21	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G22	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G23	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G24	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G25	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G26	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G27	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G28	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G29	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G30	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G31	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G32	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G33	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1G34	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B1CG1	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG2	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG3	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG4	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG5	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG6	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1CG7	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1LTG1	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1LTG2	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B1LTG3	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2G1	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G2	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G3	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G4	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G5	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G6	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G7	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel

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Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
B2G8	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G9	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G10	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G11	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G12	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G13	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G14	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G15	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G16	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G17	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G18	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G19	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G20	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G21	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G22	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G23	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G24	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G25	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G26	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G27	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G28	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G29	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G30	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G31	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G32	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G33	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2G34	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engine	Diesel
B2CG1	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG2	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG3	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG4	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG5	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG6	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2CG7	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2LTG1	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2LTG2	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
B2LTG3	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engine	Diesel
FP-1	2-01-001-02	Tier 2 Diesel Fire Pump Emergency Engine	Diesel
GH-1	2-01-001-02	Tier 2 Diesel Guard House Emergency Engine	Diesel
B1CT1	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower

Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
B1CT2	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT3	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT4	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT5	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT6	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT7	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT8	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT9	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT10	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT11	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B1CT12	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT1	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT2	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT3	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT4	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT5	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT6	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT7	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT8	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT9	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT10	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT11	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
B2CT12	3-85-001-01	5,160 gallon-per-minute Cooling Tower	Cooling Tower
TANKS	3-90-900-04	Diesel Storage Tanks*	Fugitive VOC & HAP

* - This emission unit consists of ninety (90) diesel storage tanks up to 5,255 gallon capacity.

Applicable Local and State Regulations for Construction Permit Issuance

This Construction Permit is being issued in accordance with the applicable provisions of Article 2, Sections 14 and 17 of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards (LLCAPCPRS), as well as all other applicable provisions of the LLCAPCPRS.

The Prevention of Significant Deterioration of Air Quality (PSD) Permit provisions set forth under the Nebraska Department of Environment and Energy (NDEE) Title 129 (Nebraska Air Quality Regulations) Chapter 4 (also refer to 40 CFR Part 52, §52.21) do not apply to this permitting action, because this facility will not be classified as a 'major stationary source' for the purposes of PSD.

Emission Unit Regulatory Classification

- This permit allows for construction and operation of units that are subject to the following New Source Performance Standards (NSPS) set forth in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60):
 - Subpart A: NSPS General Provisions
 - Subpart IIII: NSPS for Stationary Compression Ignition Internal Combustion Engines (CI ICE)

- This permit allows for construction and operation of units that are subject to the following National Emissions Standards for Hazardous Air Pollutants for Source Categories (Source Category NESHAPs) in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63):
 - Subpart A: Source Category NESHAP General Provisions
 - o Subpart ZZZZ: Source Category NESHAP for Reciprocating Internal Combustion Engines (RICE)

Public Participation

Pursuant to Article 2, Section 14, paragraph (A) of the LLCAPCPRS, construction permits are subject to the public participation requirements set forth in Section 14. The public has been notified by prominent advertisement of this permit for operation of an air contaminant source, and the thirty (30) day period allowed for comments has elapsed, and all comments received have been addressed.

Permitting Authority

The permitting authority for this project is the Air Quality Program in the Environmental Public Health Division of the Lincoln-Lancaster County Health Department (LLCHD). All documents related to applications for permits to construct/reconstruct/modify or operate any emissions unit or source shall be submitted to the LLCHD at the following address.

> Lincoln-Lancaster County Health Department % Air Quality Program 3131 'O' Street Lincoln, NE 68510

Compliance Authorities

 All documents related to compliance activities	 If required or requested by the EPA, the
such as reports, tests, and notifications shall be	owner/operator shall submit reports, tests,
submitted to the following:	and/or notifications to the following:
Lincoln-Lancaster County Health Department	US EPA Region 7
% Air Quality Program	ECAD/AB–Nebraska Air Compliance Coordinator
3131 'O' Street	11201 Renner Blvd.
Lincoln, NE 68510	Lenexa, KS 66219

PERMIT CONDITIONS BEGIN ON FOLLOWING PAGE

Regulations

- I. Applicable and Non-Applicable Regulations & Requirements.
 - (A) The following sections (§) of the LLCAPCPRS are requirements of this permit:

Table 1-A: Applicable Regulations of the LLCAPCPRS

Article 1: Adm	inistration and Enforcement
§1	Intent
§2	Unlawful Acts – Permits Required
§3	Violations – Hearings – Orders
§4	Appeal Procedure
§5	Variance
§6	Fees
§7	Compliance – Actions to Enforce – Penalties for Non-Compliance
§8	Procedure for Abatement
§9	Severability
Article 2: Reg	ulations and Standards
§1	Definitions
§2	Major Sources – Defined
§4	Ambient Air Quality Standards
§6	Emissions Reporting – When Required
§14	Permits – Public Participation
§15	Permit Modifications – Reopening for Cause
§16	Stack Heights – Good Engineering Practice
§17	Construction Permits – When Required
§18	New Source Performance Standards
§20	Particulate Limitations and Standards
§28	Hazardous Air Pollutants — Source Category Emissions Standards
§29	Operating and Construction Permit Emission Fees
§32	Duty to Prevent Escape of Visible Airborne Dust
§33	Time Schedule for Compliance
§34	Emission Source Testing and Monitoring
§35	Compliance – Exceptions Due to Startup, Shutdown, or Malfunction
§36	Control Regulation Circumvention — When Excepted
§37	Compliance – Responsibility of Owner/Operator Pending Review by Director
§38	Emergency Episodes — Occurrence, Control, and Contingency Plans
Appendices	
I	Emergency Emission Reduction Regulations
II	Hazardous Air Pollutants Sorted by Pollutant Name
III	Hazardous Air Pollutants Sorted by CAS Number

(B) The following sections of the LLCAPCPRS are <u>not</u> requirements of this permit:

Table 1-B: LLCAPCPRS Regulations not Incorporated in Permit

Article 2: Regulations and Standards			
§5	Operating Permits – When Required		
§7	Operating Permits – Application		
§8	Operating Permits – Content		
§9	General Permits		
§10	Operating Permits for Temporary Sources		
§11	Emergency Operating Permits – Defense		

Article 2: Regulations and Standards			
§12	Operating Permit Renewal and Expiration		
§13	Class I Operating Permit – EPA Review – Affected States Review		
§19	Prevention of Significant Deterioration of Air Quality		
§21	Compliance Assurance Monitoring		
§22	Incinerator Emission Standards		
§23	National Emission Standards for Hazardous Air Pollutants (NESHAPs)		
§24	Sulfur Compound Emission Standards for Existing Sources		
§25	Nitrogen Oxide Emissions Standards for Existing Sources		
§26	Acid Rain		
§27	Hazardous Air Pollutants – Maximum Achievable Control Technology (MACT)		
§3, §30, §31	Reserved		

(C) The following regulation(s) set forth under Title 129 of the Nebraska Administrative Code (Nebraska Air Quality Regulations) are not requirements of this permit:

Table 1-C: Non-Applicable State Air Quality Regulations			
Regulation Regulation Title			
Chapter 4	Prevention of Significant Deterioration of Air Quality		

(D) The following Federal Regulations are applicable requirements of this permit, including those not currently delegated to the LLCHD or not yet included in the LLCAPCPRS:

Table 1-D: Applicable Federal Regulations

New Source Performance Standards (NSPS)				
Subpart Subject				
General Provisions				
NSPS for Stationary Compression Ignition Internal Combustion Engines (CI ICE)				
40 CFR Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories				
(Source Category NESHAPs)				
Subpart Subject				
General Provisions				
Source Category NESHAP for Reciprocating Internal Combustion Engines (RICE)				

General Conditions

- II. In accordance with paragraph (C) of LLCAPCPRS Article 1, Section 2 (Unlawful Acts Permits Required), it is unlawful to:
 - (A) Construct or operate an air pollution source without first obtaining a permit required under the LLCAPCPRS;
 - (B) Violate any term or condition of this permit or any emission limit set in this permit; or
 - (C) Violate any emission limit or standard established in the LLCAPCPRS.
- III. Violations, hearings, and orders shall be conducted in accordance with LLCAPCPRS Article 1, Section 3 (Violations Hearings Orders).
- IV. Appeals shall be conducted in accordance with LLCAPCPRS Article 1, Section 4 (Appeal Procedure).
- V. In accordance with LLCAPCPRS Article 1, Section 5 (Variance), any person who owns or is in control of any plant, building, structure, process, or equipment may apply to the LLCHD for a variance from rules or regulations. Any person who is applying for or has obtained a variance must comply with all requirements of Article 1, Section 5 of the LLCAPCPRS, as applicable.

- VI. The following provisions of LLCAPCPRS Article 1, Section 6 (Fees) are requirements of this permit:
 - (A) Paragraph (A) Annual Emission Fees: In accordance with paragraph (A)(1) of LLCAPCPRS Article 1, Section 6 (Fees), any person who owns or operates a source as defined in Article 2, Section 1 of the LLCAPCPRS and is required to obtain a Class I or Class II operating permit in accordance with Article 2, Section 5 of the LLCAPCPRS, or is required to obtain a construction permit in accordance with Article 2, Section 17 of the LLCAPCPRS, must pay annual emission fees in accordance with all applicable provisions set forth under Article 1, Section 6, paragraph (A) of the LLCAPCPRS.
 - (B) Paragraph (D) In accordance with paragraph (D)(1) of Section 6, any person or source required to obtain a construction permit under Article 2, Section 17 (with the exception of a construction permit obtained in accordance with Article 2, Section 17, paragraph (O)) shall pay a permit fee for activities included under paragraphs (D)(1)(a-e) of Section 6. The permit fee shall be charged at the rate specified in paragraph (D)(1) of Section 6. Any person required to submit fees pursuant to Section 6 shall submit the fees to the Director by check or other authorized transfer payable to the Lincoln-Lancaster County Health Department. The fees shall be due and payable within thirty (30) days after issuance of the permit.
 - (C) Paragraph (H) All fees provided for herein must be payable to the Lincoln-Lancaster County Health Department. All money collected shall be deposited with the City Treasurer's Office and credited to Fund 145 Title V Clean Air Fund.
- VII. The following provisions of LLCAPCPRS Article 1, Section 7 (Compliance Actions to Enforce Penalties for Non-Compliance) are requirements of this permit:
 - (A) Paragraph (A) The County Attorney or Attorney General may institute enforcement proceedings pursuant to Neb. Rev. Stat., §81-1504(23), Neb. Rev. Stat. §81-1508, Neb. Rev. Stat. §81-1508.01, Neb. Rev. Stat. §81-1508.02, or Nebr. Rev. Stat. §81-1528(2) against any person who fails to comply with the requirements of the LLCAPCPRS. Nothing in the LLCAPCPRS shall preclude the control of air pollution by resolution, ordinance, or rule, regulation, or standard not in actual conflict with the state air pollution control regulations. (Ref: Neb. Rev. Stat. §71-1631(15))
 - (B) Paragraph (B) Any person who fails to comply with the requirements of the LLCAPCPRS or who fails to perform any duty imposed by the LLCAPCPRS shall be subject to a civil penalty of not more than ten thousand dollars (\$10,000) per day per violation pursuant to Neb. Rev. Stat. §81-1508.02.
 - (C) Paragraph (C) Any person who knowingly and willfully fails to comply with the requirements of the LLCAPCPRS or who knowingly and willfully fails to perform any duty imposed by the LLCAPCPRS shall be subject to criminal prosecution under Neb. Rev. Stat. §81-1508.01.
 - (D) Paragraph (D) Enforcement proceedings may include injunctive relief in court to restrain any violation that creates an imminent and substantial endangerment to the public health or to the environment pursuant to Neb. Rev. Stat. §81-1508.
- VIII. In accordance with LLCAPCPRS Article 1, Section 8 (Procedure for Abatement), if the Director has determined a violation of the Air Pollution Control Program after any hearing required hereunder or if the Director has probable cause to believe a violation has occurred, the Director shall refer the matter to the County Attorney.

- IX. In accordance with LLCAPCPRS Article 1, Section 9 (Severability), if any clause, paragraph, or section of the LLCAPCPRS shall be held invalid, it shall be conclusively presumed that the City and County would have enacted the remainder of the LLCAPCPRS not directly related to such clause, paragraph, or section.
- X. The owner/operator shall achieve and maintain compliance with the requirements set forth in LLCAPCPRS Article 2, Section 4 (Ambient Air Quality Standards). If applicable, the following conditions apply to the verification of NAAQS modeling analysis:
 - (A) The stack dimensions of the emission points identified in the air dispersion modeling analysis shall be constructed such that the reliability of the air dispersion modeling analysis associated with the permit application is maintained. A site survey or similar documentation containing the as-built stack dimensions, shall be maintained on-site and kept for the life of the source. If the as-built stack dimensions do not meet the criteria used in air dispersion modeling analysis, the permittee shall notify the LLCHD prior to start-up of any emission unit associated with a stack not meeting the above criteria and, if requested by the LLCHD, submit a revised air dispersion modeling analysis to the LLCHD to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Article 2, Section 4 of the LLCAPCPRS.
 - (B) The source shall sufficiently restrict public access to the source at the ambient air boundary relied upon in the air dispersion modeling analysis for the NAAQS compliance demonstration. A site survey, or similar documentation containing the locations of the boundary vertices, shall be maintained on-site and kept for the life of the source. If the boundary dimensions do not comply with the boundary information in the air dispersion model (plus or minus 25 meters), the permittee shall notify the LLCHD prior to start-up of any emission unit and, if requested, submit a revised air dispersion modeling analysis to the LLCHD to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Article 2, Section 4 of the LLCAPCPRS.
- XI. The following provisions of LLCAPCPRS Article 2, Section 6 (Emissions Reporting When Required) are requirements of this permit:
 - (A) Paragraph (A) The owner/operator must complete and submit to the Department an annual emissions inventory on forms furnished by or acceptable to the Department by March 31 of each year. The inventory must include all emissions associated with the Permitted Emission Units. The inventory form must be certified in accordance with LLCAPCPRS Article 2, Section 7, paragraph (H).
 - (B) Paragraph (B) The annual emissions inventory must include the information set forth under paragraphs (B)(1-3) of Section 6.
 - (C) Paragraph (C) Actual emissions shall be calculated using the methods and procedures set forth under paragraphs (C)(1-9) of Section 6.
 - (D) Paragraph (D) Except as otherwise provided in (C) above, any other test methods and procedures for use in determining actual emissions must be approved by the LLCHD.
 - (E) The LLCHD may require the submittal of supplemental information to verify or otherwise assure the quality of emissions reported.
- XII. The following provisions of LLCAPCPRS Article 2, Section 15 (Permit Modifications Reopening for Cause) are requirements of this permit:
 - (A) Paragraph (A) The owner/operator may request the LLCHD to make an administrative permit amendment in writing by specifying the section of the permit that is to be changed and the

reason for the change. The source may implement the changes addressed in the request immediately upon submittal of the request, subject to the Department's final action on the request. Administrative permit amendments include any permit revision that meet the criteria established in paragraphs (A)(1)(a-d) of Section 15.

- (B) Paragraph (C)(2) The owner/operator may request a minor permit modification consistent with the procedures set forth under paragraph (C)(2) of Section 15, provided that the modification meets the criteria established in paragraphs (C)(2)(a-e) of Section 15.
- (C) Paragraph (E) Any modification not meeting the administrative permit amendment criteria in paragraph (A) of Section 15, and/or the minor permit modification criteria in paragraph (C)(2) of Section 15 shall be processed in accordance with the provisions for a significant permit modification established in paragraphs (E)(1-3) and (E)(5) of Section 15.
- (D) Paragraph (F)(2) A permit may be revoked during its term for cause, including, but not limited to:
 - (1) The existence at the facility of unresolved noncompliance with applicable requirements or a term or condition of the permit, and refusal of the owner/operator to agree to an enforceable schedule of compliance to resolve the noncompliance;
 - (2) The owner/operator has falsely certified or submitted false, incomplete, or misleading information to the Department or EPA;
 - (3) The LLCHD determines that the permitted facility or activity endangers human health or the environment and that the danger cannot be removed by a modification of the permit; or
 - (4) The owner/operator has failed to pay a penalty owed pursuant to court order, stipulation and agreement, or order issued by the Administrator.
- (E) Paragraph (G) The owner/operator may make changes to a permitted facility without a permit revision if the change is not a modification under LLCAPCPRS Article 2, Sections 18, 23, 27, or 28, the change does not require a construction permit under LLCAPCPRS Article 2, Sections 17 or 19, the change is allowed under the applicable provisions of paragraphs (G)(1) or (G)(2) of Section 15, and provided that such changes are in accordance with paragraphs (G)(2)(a-b) of Section 15.
- (F) Paragraph (H) No permit revisions shall be required under any State-approved programs providing for economic incentives, marketable permits, emissions trading or other similar programs or processed for changes that are provided for in the permit.
- XIII. In accordance with paragraph (A) of LLCAPCPRS Article 2, Section 16 (Stack Heights Good Engineering Practice), the degree of emissions limitation required of any source for control of any air pollutant shall not be affected by so much of any source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in paragraph (B) of Section 16.
- XIV. The following provisions of LLCAPCPRS Article 2, Section 17 (Construction Permits When Required) are requirements of this permit:
 - (A) Paragraph (A) No person shall cause the construction, reconstruction, or modification of any of the items specified in Article 2, Section 17 of the LLCAPCPRS without first having obtained a construction permit from the Department in the manner prescribed by the LLCAPCPRS.
 - (B) Paragraph (K) Approval, by issuance of a permit for any construction, reconstruction, or modification, does not relieve the owner/operator from his or her responsibility to comply with the applicable portions of the Implementation Plan control strategy. The permittee must comply with all conditions of the construction permit. Any permit noncompliance shall

constitute a violation of the LLCAPCPRS and the Act and is grounds for enforcement action or permit revocation.

- (C) Paragraph (L) If construction, reconstruction, or modification of the source is not commenced within eighteen (18) months, the construction permit shall lapse except upon showing by the permittee that the complexity of the construction, reconstruction, or modification requires additional time.
- (D) Paragraph (N) The owner/operator may request modification of a construction permit pursuant to the applicable provisions set forth in paragraph (N) of Section 17.
- (E) Paragraph (R) For each permit issued pursuant to the provisions of Section 17, the owner/ operator must place a copy of the permit and of the letter of transmittal on file at the location of the source no later than fourteen (14) calendar days after the date of the letter of transmittal or upon the actual start-up of the constructed/reconstructed/modified source, whichever occurs first. A copy of the permit must also be placed on file at the owner's or operator's main or corporate office no later than thirty (30) calendar days after the date of the letter of transmittal.
- XV. The owner/operator must comply with all regulations set forth in LLCAPCPRS Article 2, Section 18 (New Source Performance Standards) determined to be applicable to the source.
- XVI. The following provisions of LLCAPCPRS Article 2, Section 20 (Particulate Limitations and Standards) are requirements of this permit:
 - (A) Paragraph (A) The owner/operator must limit the emissions of PM from any processing machine, equipment, device or other articles, or any combination thereof, except indirect heating equipment and incinerators, to no greater than the amounts set forth in Table 20-2 of Section 20 during any one (1) hour.
 - (B) Paragraph (B) The owner/operator must limit the emissions of PM caused by the combustion of fuel in accordance with the limits set forth in Table 20-1 of Section 20, as they apply based on heat input rating.
 - (C) Paragraph (E) The owner/operator must not cause or allow emissions from any emission point that are of opacity equal to or greater than twenty percent (20%), as evaluated by Method 9 in Appendix A of 40 CFR 60, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B, except as provided for in paragraph (D) of this condition.
 - (D) Paragraph (F) Emission sources subject to monitoring requirements of Article 2, Section 34, paragraph (E) of LLCAPCPRS are allowed to have one six-minute period per hour of not more than twenty-seven percent (27%) opacity. For the purpose of this permit, this exception applies to any unit equipped with a continuous opacity monitoring system (COMS) installed, calibrated, and operated in accordance with the procedures specified in 40 CFR Part 60 Appendix B.
- XVII. The owner/operator must comply with regulations set forth in LLCAPCPRS Article 2, Section 23 (National Emission Standards for Hazardous Air Pollutants), if any are determined to be applicable to the source.
- XVIII. The owner/operator must comply with all regulations set forth in LLCAPCPRS Article 2, Section 28 (Hazardous Air Pollutants – Source Category Emissions Standards) determined to be applicable to the source.

- XIX. The following provisions of LLCAPCPRS Article 2, Section 32 (Duty to Prevent Escape of Visible Airborne Dust) are requirements of this permit:
 - (A) Paragraph (A) The source must not cause or permit fugitive particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the premise where it originates.
 - (B) Paragraph (B) The source must not cause or permit a road, driveway, or open area to be used without applying all such reasonable measures to prevent particulate matter from becoming airborne so that it remains visible beyond the premises where it originates. Such reasonable measures include but are not limited to:
 - (1) Paving or frequent cleaning of roads, driveways, and parking lots;
 - (2) Application of water or chemical dust suppressants; and
 - (3) Planting and maintenance of vegetative ground cover.
- XX. The following provisions of LLCAPCPRS Article 2, Section 33 (Time Schedule for Compliance) are requirements of this permit:
 - (A) Paragraph (A) Except as otherwise noted in specific emission control regulations, compliance with the LLCAPCPRS shall be according to the schedule provided under paragraphs (A)(1)-(3) of Section 33.
 - (B) Paragraph (B) Compliance schedules requiring more than twelve (12) months to conform with applicable rules and regulations to meet National Primary and Secondary Ambient Air Quality Standards will be accomplished in progressive steps. A report will be made in writing to the LLCHD within five (5) days after each step is completed.
 - (C) Paragraph (C) Failure to meet time schedules approved in accordance with paragraphs (A)(1-2) of Section 33 shall constitute a violation of the LLCAPCPRS unless a request to amend the time schedule is received at least thirty (30) days before the end of any specified period approved for a particular activity. Such a request to amend the schedule shall contain the same type of information as required for the initial request for variance as described in paragraph (A)(3) of Section 33.
- XXI. The following provisions of LLCAPCPRS Article 2, Section 34 (Emission Source Testing and Monitoring) are requirements of this permit:
 - (A) Paragraph (A) The Department may require any person responsible for the operation of an emission source to make or have tests made to determine the rate of contaminant emissions from the source whenever it has reason to believe, on the basis of estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer, that existing emissions exceed the limitations required in the LLCAPCPRS. Such tests may also be required pursuant to verifying that any newly installed control device meets performance specifications. Should the Department determine that the test did not represent normal operating conditions or emissions, additional tests may be required. Such a requirement shall be considered as an order and subject to all administrative and legal requirements specified.
 - (B) Paragraph (B) Required tests must be conducted in accordance with the test methods and procedures established in paragraphs (B)(1-6) of Section 34. Such tests shall be conducted by reputable, qualified individuals. A written copy of the test results, certified for completeness and accuracy and signed by the person conducting the test, shall be provided to the Department within sixty (60) days of completion of the test unless a different period is specified in the underlying requirements of an applicable federal rule.

- (C) Paragraph (C) The owner or operator of a source must provide notice to the Department at least thirty (30) days prior to testing to afford the Department an opportunity to have an observer present. The Department may, in writing, approve a notice of less than thirty (30) days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement shall apply.
- (D) Paragraph (D) The Department may conduct tests of emissions of contaminants from any stationary source.
 - (1) Upon written request from the Department, the person responsible for the source to be tested shall cooperate with the Department in providing all necessary test ports in stacks or ducts and such other safe and proper facilities, exclusive of instruments and sensing devices, as may be reasonably required to conduct the test with due regard being given to expenditures and possible disruption of normal operations of the source.
 - (2) A report concerning the findings of such tests shall be furnished to the person responsible for the source upon request.
- (E) Paragraph (F) The LLCHD may require the owner or operator of any other emission source which is subject to the provisions of these regulations to install, use and maintain such stationary monitoring equipment as is required to demonstrate continuing compliance with any applicable emissions limitations, and to maintain records and make reports regarding such measured emissions to the Department in a manner and on a schedule to be determined by the LLCHD.
- (F) Paragraph (G) When a new or modified stationary source becomes operational, the owner or operator will submit a written report of performance tests (if required) to the LLCHD within sixty (60) days after reaching maximum capacity but not later than one hundred eighty (180) days after the startup of operations². Failure to meet established performance standards will result in withdrawal of the provisional approval granted to operate the new or modified stationary source. Final approval and issuance of an operating permit will be withheld for operation of the affected facility until such time as the owner or operator has corrected the deficiencies determined by the performance tests. Upon satisfactory accomplishment of a valid series of performance tests, approval for operation of the new or modified stationary source will be granted through issuance of an operation germit in accordance with Article 2, Section 5.
- (G) Paragraph (H) Notwithstanding any other provisions of LLCAPCPRS, the following methods may be used to determine compliance with applicable requirements:
 - (1) A monitoring method approved for the source and incorporated in an operating permit pursuant to LLCAPCPRS Article 2, Section 8;
 - (2) Any compliance test method specified in the State Implementation Plan (SIP);
 - (3) Any test or monitoring method approved for the source in a permit issued pursuant to LLCAPCPRS Article 2, Sections 17, 19, or 27;
 - (4) Any test or monitoring method provided for in the LLCAPCPRS; or
 - (5) Any other test, monitoring, or information gathering method that produces information comparable to that produced by any method described in paragraphs (1) through (4) of this condition.
- (H) Paragraph (I) Where allowed by the Department, the owner or operator of any PEMS used to meet a pollutant monitoring requirement must comply with all applicable provisions set forth in paragraphs (I)(1-6) of Section 34. Owners/operators of PEMS must apply for approval of a

² – Compliance with the requirement to conduct performance testing no later than 180 days after the 'startup of operations' shall be demonstrated by complying with the requirements established in Condition XXVIII(E) of this permit.

PEMS system in accordance with paragraph (J) of Section 34, and must also comply with all applicable provisions set forth in paragraphs (K)-(O) of Section 34.

- XXII. The following provisions of LLCAPCPRS Article 2, Section 35 (Compliance Exceptions Due to Startup, Shutdown, or Malfunction) are requirements of this permit:
 - (A) Paragraph (A) Upon receipt of a notice of excess emissions issued by the Department, the owner/operator may provide information showing that the excess emissions were the result of a malfunction, start-up, or shutdown.
 - (B) Paragraph (B) The information provided by the source operator under paragraph (A) of this condition must include, at a minimum, the information specified in paragraphs (B)(1-9) of Section 35.
 - (C) Paragraph (C) The owner/operator must submit the information specified in paragraph (B) of this condition no later than fifteen (15) days after receipt of the notice of excess emissions.
 - (D) Paragraph (D) The owner/operator must notify the LLCHD, in writing, whenever a planned start-up or shut down may result in excess emissions. This notice must be mailed no later than ten (10) days prior to such action and must include, but not be limited to, the information specified in paragraphs (D)(1-10) of Section 35.
 - (E) Paragraph (E) The owner/operator must notify the LLCHD, in writing, whenever emissions due to malfunctions, unplanned shutdowns or ensuing start-ups are, or may be in excess of applicable emission control regulations for one hour or more. Such notification must be mailed within forty-eight (48) hours of the beginning of each period of excess emissions and must include, but not be limited to, the information required in paragraph (D) of Section 35.
 - (F) Paragraph (H) Nothing in Section 35 shall be construed to limit the authority of the Director to take appropriate action to enforce the provisions of the LLCAPCPRS.
- XXIII. The following provisions of LLCAPCPRS Article 2, Section 36 (Control Regulation Circumvention When Excepted) are requirements of this permit:
 - (A) Paragraph (A) No person shall cause or permit the installation or use of any machine, equipment, device, or other article, or alter any process in any manner which conceals or dilutes the emissions of contaminants without resulting in a reduction of the total amounts of contaminants emitted.
 - (B) Paragraph (B) Exception to paragraph (A) above may be granted by the LLCHD, upon request, provided that such action is intended to convert the physical or chemical nature of the contaminant emission and that failure to reduce total contaminant emissions results solely from the introduction of contaminants which are not deemed to be detrimental to the public interest.
- XXIV. In accordance with LLCAPCPRS Article 2, Section 37 (Compliance Responsibility of Owner/Operator Pending Review by Director), application for review of plans or advice furnished by the LLCHD will not relieve the owner or operator of a new or modified stationary source of legal compliance with any provision of the LLCAPCPRS or prevent the Director from enforcing or implementing any provision of the LLCAPCPRS.
- XXV. In accordance with LLCAPCPRS Article 2, Section 38 (Emergency Episodes Occurrence, Control, and Contingency Plans), if and when the Director declares an air pollution emergency episode as defined in Section 38, the source must perform all applicable Air Pollution Emergency Actions as required by LLCAPCPRS Appendix I, paragraphs 1.3 (a)(1) and 1.3 (b)(1)-(2) until the Director declares the air pollution episode terminated.

- XXVI. <u>Requirements Established Pursuant to Department Authority.</u> Pursuant to the authorities granted in Section 8.06.030 of the Lincoln Municipal Code (LMC 8.06.030 – Air Pollution, Director Powers and Duties), Section 4 of the Lancaster County Air Pollution Control Resolution (R-13-0073), and Neb. Rev. Stat. §81-1504, the following conditions are requirements of this permit:
 - (A) <u>Permits.</u> This permit is not transferable to another location, unless otherwise specified in this permit. The LLCHD shall have the authority to issue, continue in effect, revoke, modify, or deny permits, under such conditions as the LLCHD may prescribe and consistent with the Clean Air Act and the LLCAPCPRS.
 - (B) <u>Testing and Sampling.</u> The owner/operator shall allow the LLCHD, US EPA, or an authorized representative to conduct tests and take samples of air contaminants, fuel, process materials, or any other substance which affects or may affect discharges or emissions of air contaminants from any source. The owner/operator shall submit air contaminant emission information in connection with such inspections, tests, and studies.
 - (C) <u>Orders, Abatement, and Pollution Control.</u> The LLCHD, US EPA, or an authorized representative shall have the authority to issue, modify, or revoke orders prohibiting or abating discharges of air pollutants, or requiring the construction of control systems or any parts thereof or the modification, extension, or adoption of other remedial measures to prevent, control, or abate air pollution.
 - (D) <u>Inspection.</u> The owner/operator shall allow the LLCHD, US EPA, or an authorized representative to enter and inspect or cause to be inspected, during reasonable hours, any building, facility, or place (except a building designed for and used exclusively for a private residence) as the LLCHD deems necessary to determine compliance with the provisions of the LLCAPCPRS.
 - (E) <u>Record Keeping and Retention.</u> The owner/operator shall allow the LLCHD, US EPA, or an authorized representative access to existing and available records relating to emissions or discharges, which cause or contribute to air pollution or the monitoring of such emissions or discharges. These records shall be readily accessible and made available for inspection upon request by the LLCHD, US EPA, or an authorized representative. For the purposes of this permit, the owner/operator shall retain records of all required monitoring data, reports, and support information required by this permit for a period of at least sixty (60) months from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All records of required monitoring information shall include the following:
 - (1) The date and place as defined in the permit, and time of sampling or measurements;
 - (2) The date(s) analyses were performed;
 - (3) The company or entity that performed the analyses;
 - (4) The analytical techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.

Specific Conditions

- XXVII. <u>Source-Wide Requirements</u>. The requirements set forth under this condition are established pursuant to elections made by the owner/operator in the approved application, as well as authorities specified in Condition XXVI of this permit.
 - (A) Operating Requirements, Throughput Limits, and/or Work Practice Standards.
 - (1) This permit authorizes the construction and operation of the Permitted Emission Units in a manner that is consistent with the approved application dated March 20, 2023 and application addendum dated September 14, 2023, and in accordance with the manufacturer's specifications. Prior to any modification(s) to any Permitted Emission Units, and/or prior to any change(s) in the method of operation of any of the Permitted Emission Units, the owner/operator shall determine what impact, if any, the proposed modification(s) or change(s) have on the potential to emit for the affected emission unit(s), as well as the combined potential to emit for all Permitted Emission Units associated with the source.
 - (2) The owner/operator shall operate Permitted Emission Units in accordance with the manufacturer's specifications, or equivalent instructions that have been approved by the Department. At all times, including periods of startup, shutdown, and malfunction, the owner/operator shall, to the extent practicable, maintain and operate Permitted Emission Units 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 Department, which may include but is not limited to:
 - (a) Monitoring results;
 - (b) Opacity observations;
 - (c) Review of manufacturer specifications;
 - (d) Review of operating and maintenance procedures; and
 - (e) Inspection of the source.
 - (3) The owner/operator is subject to all elections specified in the approved application, and any emissions controls used shall be at a minimum those elected in Section 6 of the approved application. The owner/operator may contact the Department to request or submit modifications to the approved application.
 - (B) Emission Limits and Emission Control Requirements.
 - (1) All permitted emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained.
 - (2) All emissions from emission units using required controls shall be captured and routed through associated emission conveyances to the required control equipment, except for uncaptured emissions described in the permit application and any additional information submitted prior to permit issuance.
 - (3) All equipment must be maintained to minimize the amount of uncontrolled pollutants that are released to the atmosphere. Proper equipment maintenance activities may include repair or replacement, and include, but are not limited to activities in response to the following:
 - (a) Cracks, holes or gaps;
 - (b) Broken, cracked, or otherwise damaged seals or gaskets; and
 - (c) Broken, missing or open hatches, access covers, caps, or other closure devices.

- (C) Monitoring and Record Keeping Requirements.
 - (1) Within fifteen (15) days of the end of each month, the owner/operator shall calculate the combined emissions of NO_x from all Permitted Emission Units for the previous month.
 - (2) Within fifteen (15) days of the end of each month, the owner/operator shall calculate the rolling twelve (12) month combined total of NO_X emissions from Permitted Emission Units by summing each calculated NO_X emission total for the month with the respective NO_X emission totals for the preceding eleven (11) months.
 - (3) The owner/operator shall maintain records sufficient to demonstrate the chemical composition, physical properties, HAP or VOC content, and/or sulfur content of all material(s) and/or fuel(s) used in the Permitted Emission Units (i.e., Safety Data Sheets, Technical Data Sheets, fuel supplier certifications, or other suitable records).
 - (4) The owner/operator shall demonstrate compliance with paragraph (A)(2) of this condition by maintaining records of operation and maintenance of the Permitted Emission Units, to include the following:
 - (a) Records documenting when routine maintenance and preventive actions were performed, with a description of the maintenance and/or preventive action performed.
 - (b) Records documenting equipment failures, malfunctions, or excess visible emissions. Records shall include the time of each occurrence, corrective action(s) taken, and when corrections were made.
- (D) Notification and Reporting Requirements.
 - (1) In accordance with the requirements set forth under Condition XI of this permit, the owner/operator shall report all emissions associated with the Permitted Emission Units on an annual basis. As an alternative to reporting emissions, the owner/operator may elect to report fuel use and other applicable throughput data pertaining to the Permitted Emission Units, and the LLCHD will use reported data and emission factors contained in the approved application to calculate emissions.
 - (2) When the owner/operator makes physical or operational changes to an emission unit or associated control equipment that may cause an increase in emissions that renders any original performance testing unrepresentative of current operating conditions or emissions, the owner/operator shall submit a notification of the change. Such notification shall be received by the LLCHD within fifteen (15) days after such change. The LLCHD may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the control equipment.
 - (a) This notification requirement applies to emission units and/or control equipment that meet the following requirements, except as provided in paragraph (D)(2)(b) of this condition.
 - (i) Emissions from the emission unit and/or control equipment is subject to an emission limit;
 - (ii) A valid performance test has been conducted for the pollutant to which the emission limit applies; and
 - (iii) Changes that may cause emissions to increase or invalidate prior testing include, but are not limited to, increasing the capacity of an emission unit, changing the operational parameters of any control equipment outside of the range allowed for under this permit that makes the control equipment less

efficient, changing the type of scrubber packing, or increasing the inlet pollutant loading of any control equipment.

- (b) This notification requirement does not apply when compliance with the emission limitation is demonstrated through the use of a CEMS, PEMS or COMS.
- (c) The notification shall include the date of the changes, a description of the changes made, and an evaluation of the expected impact on emissions from the emission units and/or control equipment.
- (d) For emission units that have had a performance test conducted after January 1, 2012, the owner/operator shall make a one-time notification to the LLCHD within fifteen (15) days of when there is a ten percent (10%) increase in daily production/throughput rate, over the tested rate recorded during the most recent valid performance test unless otherwise specified in this permit. If there are subsequent increases of ten percent (10%) over the rate most recently notified to the LLCHD, the source shall make a one-time notification to the LLCHD of each such subsequent increase. This will not apply to emissions that already have emission rates that are normalized to production and/or throughput rates. For the purposes of this condition, the following definitions apply:
 - (i) "Rate" shall mean the production or throughput of an emission unit in the same units of production or throughput as the "tested rate" as defined below; and
 - (ii) "Tested rate" shall mean the production or throughput rate of an emission unit as recorded in the most recent valid performance test and reported to the LLCHD in the source's written copy of the test results, or test report, documenting the maximum capacity of the unit(s). The tested rate shall be extrapolated to daily emissions. Examples include, but are not limited to, 'tons per hour' to 'tons per day' or 'gallons per hour' to 'gallons per day'.

(E) Other Requirements.

- (1) Any modification of the construction permit application documents must have prior approval from the Department. The source shall provide all necessary information to validate the modification, including but not limited to additional engineering, modeling, and ambient air quality studies.
- (2) The conditions set forth in this permit shall remain applicable requirements until such time that all permitted emission units are removed from the source, or until the owner/operator requests that the permit be nullified, and all permitted emission units are rendered inoperable.
- (3) The owner/operator shall not make any modifications to any of the Permitted Emission Units and/or associated equipment that may increase emissions or change dispersion characteristics without receiving written approval from the Department.
- (4) Any control or monitoring equipment that may be necessary for compliance with the LLCAPCPRS or any similar requirements of the Federal EPA shall be installed within the time period or by the date specified in the applicable rule or regulation.

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XXVIII. <u>Requirements for Diesel Emergency Engines.</u> This permit authorizes the owner/operator to construct and operate the diesel emergency engines identified in Table 28 below. These engines must not exceed the per-unit capacities listed in Table 28, must burn only the permitted fuel type(s) identified, and must be constructed and operated in accordance with the following requirements:

Emission Unit (EU) #	Emission Unit Description	Emission Unit Capacity (per unit)	Permitted Fuel Type
- B1G1 through B1G34 - B2G1 through B2G34	Type 1 – Tier 2 Diesel Emergency Engine (68 units)	- 4,043 bhp - 28.30 MMBtu/hr	ULSD
- B1CG1 through B1CG7 - B1LTG1 through B1LTG3 - B2CG1 through B2CG7 - B2LTG1 through B2LTG3	Type 2 – Tier 2 Diesel Emergency Engine (20 units)	- 2,584 bhp - 18.09 MMBtu/hr	ULSD
FP-1	Tier 2 Diesel Fire Pump Emergency Engine (1 unit)	- 515.6 bhp - 3.61 MMBtu/hr	ULSD
GH-1	Tier 2 Diesel Guard House Emergency Engine (1 unit)	- 736.5 bhp - 5.16 MMBtu/hr	ULSD

Table 28: Permitted Diesel Emergency Engine Emission Units

- (A) Operating Requirements, Throughput Limits, and/or Work Practice Standards.
 - (1) The owner/operator shall limit operation of the emission units in Table 28 of this permit as follows:
 - (a) Combined diesel fuel use for all permitted diesel engines shall be limited to no more than 1,863,000 gallons during any period of twelve (12) consecutive months. Combined diesel fuel use for all permitted diesel engines must not exceed this limit at any point during the first eleven (11) months of operation.
 - (b) Each individual diesel engine identified in Table 28 above shall be limited to no more than 500 operating hours during any period of twelve (12) consecutive months. At no time during the first eleven (11) months after commencement of operation (as defined pursuant to paragraph (E)(1)(b) of this condition) shall the total operating hours for any individual diesel engine exceed 500 hours.
 - (c) Each unit shall be operated for no more than one hundred (100) hours per calendar year for non-emergency situations as specified in 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ.
 - (d) Each emission unit identified in Table 28 shall be equipped with a non-resettable hour meter to record the operating hours.
 - (e) Non-emergency operation of the emission units identified in Table 28 shall be limited to occur only between the hours of 7:00 AM to 7:00 PM CDT/CST.
 - (f) Except as provided in paragraph (A)(2) of this condition, no more than eight (8) of the emission units identified in Table 28 shall be operated at one time for non-emergency operations.
 - (2) For purposes of large-scale electrical infrastructure maintenance of equipment owned by the source, the emission units identified in Table 28 shall be operated according to the following:
 - (a) No more than eighteen (18) of the emission units shall be operated at one time (i.e., simultaneously).

- (b) Non-emergency operations shall be limited to occur on no more than twenty (20) calendar days within the following constraints:
 - (i) Only during the months of March through November.
 - (ii) Only between the hours of 6:00 AM to 9:00 PM CDT/CST.
- (3) Each emission unit identified in Table 28 shall be located at least one hundred fifty (150) feet from the fence line.
- (4) The owner/operator shall operate the Permitted Emission Units in compliance with all applicable operating requirements and work practice standard requirements (if any) established pursuant to the Federal Regulation(s) incorporated in paragraphs (F) and (G) of this condition.
- (B) Emission Limits and Emission Control Requirements.
 - The owner/operator shall limit emissions as required in Table 28-B1 below. These limits are established pursuant to the requirements set forth in Article 2, Section 20, paragraph (B) of the LLCAPCPRS, and also to ensure compliance with the standards set forth in Article 2, Section 4, paragraphs (A) and (C) of the LLCAPCPRS.

Emission Unit (EU) #	Pollutant	Permitted Limit	Averaging Period	Initial Performance Testing Required?
Type 1 – Tier 2 Diesel Emergency Engine	PM ^[1]	13.33 lb/hr (each engine)	N/A	No
(68 units) - B1G1 through B1G34	PM _{2.5} ^[2]	0.64 lb/hr (each engine)	Three 1-hour test runs or test method average	Yes
- B2G1 through B2G34	NO _x	52.91 lb/hr (each engine)	Three 1-hour test runs or test method average	Yes
Type 2 – Tier 2 Diesel Emergency Engine	PM ^[1]	9.46 lb/hr (each engine)	N/A	No
(20 units) - B1CG1 through B1CG7	PM _{2.5} ^[2]	0.41 lb/hr (each engine)	Three 1-hour test runs or test method average	Yes
 B1LTG1 through B1LTG3 B2CG1 through B2CG7 B2LTG1 through B2LTG3 	NOx	35.09 lb/hr (each engine)	Three 1-hour test runs or test method average	Yes
FP-1	PM ^[1]	2.17 lb/hr (each engine)	N/A	No
GH-1	PM ^[1]	3.10 lb/hr (each engine)	N/A	No

Table 28-B1: Pollutant Emission Rate Limits, Averaging Period, and Initial Performance Testing Requirements

^[1] – Heat input rate-based emission limits established pursuant to LLCAPCPRS Article 2, Section 20, paragraph (B).

^[2] – Includes filterable and condensable.

(2) The owner/operator shall operate the Permitted Emission Units in compliance with all applicable emission limits and emission control requirements (if any) established pursuant to the Federal Regulation(s) incorporated in paragraphs (F) and (G) of this condition.

- (C) Monitoring and Record Keeping Requirements.
 - (1) The owner/operator shall maintain a copy of the manufacturer's specifications and operating and maintenance procedures, or equivalent instructions that have been approved by the Department, for each required emission control device.
 - (2) The owner/operator shall maintain unit-specific records for all emission units identified in Table 28. Each unit's record shall be kept up-to-date and be readily available for LLCHD representatives upon request. Records for each unit shall contain the following information:
 - (a) Emission unit identification number, description, and building location (building number and zone number);
 - (b) Engine manufacturer name and model name/number;
 - (c) Generator kilowatt (kW) rating and generator engine horsepower (hp) rating;
 - (d) The date on which the unit reaches 'facility ready status', and a record of the number of engine operating hours taken from the non-resettable hour meter when the unit reaches facility ready status;
 - (e) For any engines that undergo performance testing or NO_X emissions screening, records of the number of engine operating hours taken from the non-resettable hour meter at the commencement of a performance test or NO_X emissions screening, and also at the completion of a performance test or NO_X emissions screening;
 - (f) Date of initial performance testing and performance testing results (if applicable); and
 - (g) If required, date and results of NO_x screening(s) or approved equivalent screening method.
 - (3) Each emission unit identified in Table 28 shall be monitored through engine-generator controllers. Each controller shall calculate the fuel consumption for each unit based on load, speed, and run-time.
 - (4) For the purpose of demonstrating ongoing compliance with paragraphs (A)(1) through (A)(1)(f) of this condition, the owner/operator shall maintain the following records for each emission unit identified in Table 28:
 - (a) Quantity of diesel fuel consumed during each calendar month and during each period of twelve (12) consecutive calendar months.
 - (b) For all operating purposes:
 - (i) Monthly hours of operation; and
 - (ii) Total hours of operation during each period of twelve (12) consecutive months.
 - (c) For emergency operation:
 - (i) Startup and shutdown times for each occurrence of emergency operation; and
 - (ii) The reason for operation during each occurrence of emergency operation.
 - (d) For all non-emergency operation:
 - (i) Total hours of non-emergency operation each calendar year; and
 - (ii) Startup and shutdown times for each occurrence of non-emergency operation.
 - (e) For non-emergency operation related to large-scale electrical infrastructure maintenance of equipment owned by the source:
 - (i) The calendar days during which operation occurred; and

- (ii) Startup and shutdown times for each occurrence of large-scale electrical infrastructure maintenance.
- (5) The owner/operator shall demonstrate that all diesel fuel combusted in the emission units identified in Table 28 meets the specification for 'ultra low-sulfur diesel' (i.e., contains no more than 15 ppm sulfur) by maintaining records of fuel sulfur content, obtained through the fuel supplier or through testing the sulfur content of the fuel(s) used.
- (6) The owner/operator shall maintain records demonstrating compliance with the PM emission limits established pursuant to Article 2, Section 20, paragraph (B) of the LLCAPCPRS. For the purposes of this permit, compliance with these limits shall be determined by use of technically valid engineering calculations including, but not limited to, the emissions factors for fuel combustion equipment presented in the U.S. EPA's *'WebFIRE'* emission factor database, the 5th edition of AP-42, or other source(s) of emission rate data approved by the LLCHD.
- (7) The owner/operator shall perform all required monitoring and record keeping applicable to the emission units identified in Table 28 established pursuant to the Federal Regulation(s) incorporated in paragraphs (F) and (G) of this condition. Required records shall be maintained in the form(s) required, and for the duration(s) established pursuant to the applicable Federal Regulation(s).
- (D) Notification and Reporting Requirements.
 - (1) The owner/operator shall provide the following notifications to the LLCHD:
 - (a) The date construction, reconstruction, or modification commenced as the term 'commence' is defined in Article 2, Section 1 of the LLCAPCPRS. Notification shall be received by the LLCHD no later than thirty (30) days after such date and include a summary description of the event associated with the commencement of construction. The source may use either of the following to determine that construction commenced:
 - (i) Initiating physical on-site construction activities of a permanent nature that meet the definition of "begin actual construction"; or
 - (ii) Entering into binding agreements or contractual obligations. If this option is used, the notice shall also include a brief summary of each binding agreement or contractual obligation entered into, the date of the agreement or contract, and why the agreement or contract cannot be cancelled or modified without substantial loss to the source.
 - (b) Notification of the date on which the source or modification first becomes operational shall be received by the LLCHD within fifteen (15) days after such date.
 - (2) The owner/operator shall submit a written notice of any performance test in accordance with Condition XXI(C) of this permit. Each notice shall include, at a minimum, the test protocol and the information required under paragraph (E)(2)(b) of this condition.
 - (3) The owner/operator shall submit a report for each performance test pursuant to Condition XXI(B) of this permit. Each test report shall include, at a minimum, the following:
 - (a) A description of the following, as applicable:
 - (i) The operating parameters for the emissions unit(s) during testing. Examples include but are not limited to: production rates, process throughputs, firing rates of combustion equipment, or fuel usage.

- (ii) The operating parameters for each emission control unit (if any) operating during testing. Examples include but are not limited to: baghouse fan speeds, scrubber liquid flow rates, or pressure drop across a control device.
- (b) Copies of all data sheets from each test run.
- (c) A description and explanation of any erroneous data or unusual circumstance(s), and the cause for any such situation.
- (d) A final conclusion section describing the outcome of the testing.
- (4) The owner/operator shall submit a written notice at least fifteen (15) days prior to conducting any NO_x emissions screening to afford the LLCHD an opportunity to have an observer(s) present and shall include the following:
 - (a) A list of all emission units that have reached *facility ready status* since the protocol submittal date; or
 - (b) For any subsequent NO_X emissions screenings, a list of all emission units that have reached *facility ready status* since the last NO_X emissions screening notification was submitted to the LLCHD.
- (5) If any NO_x emissions screening required pursuant to paragraph (E)(2) of this condition fails to indicate compliance with the applicable emission limitations identified in Table 28-B1, the source shall notify the LLCHD within fifteen (15) days. This notification shall include all emission units that failed to indicate compliance and the results of the failed screening(s).
- (6) If the owner/operator makes physical or operational changes to an emissions unit or associated emission control unit that may cause an increase in emissions, or that renders the original testing as no longer representative of current operating conditions or emissions, the owner/operator shall submit a notification of the change(s). Such notification shall be received by the LLCHD within fifteen (15) days after such change. For the purposes of this condition 'operational changes' include increases in the rate of throughput or production. The Department may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the emission control equipment. Notification shall be submitted for any such change where any of the following criteria apply, except that notification is not required for changes where compliance is demonstrated using a CEMS, PEMS, or COMS.
 - (a) Emissions from the emission unit(s) and/or emission control unit(s) is subject to an emission limit;
 - (b) A valid performance test has been conducted for the pollutant(s) to which the emission limit applies; or
 - (c) Changes that may cause emissions to increase or invalidate prior testing, which may include but are not limited to: increasing the capacity of an emission unit, changing the operational parameters of any control equipment outside of the range allowed for under this permit that makes the control equipment less efficient, changing the type of scrubber packing, or increasing the inlet pollutant loading of any control equipment.
- (7) Upon request by the Department, the owner/operator shall provide any and all operation, throughput, and/or emissions information for any period of twelve (12) consecutive months.

- (8) The owner/operator shall submit all required notifications and reports applicable to the emission units identified in Table 28 (if any) established pursuant to the Federal Regulation(s) incorporated in paragraphs (F) and (G) of this condition.
- (E) <u>Emissions Screening and Performance Testing Requirements.</u> Pursuant to the requirements and authorities established in Article 2, Section 34 of the LLCAPCPRS, the owner/operator shall comply with the following NO_x emissions screening and performance testing requirements.
 - (1) <u>Emission Unit(s) to be Tested and Related Definitions.</u>
 - (a) For the purposes of NO_x emissions screening and performance test requirements, the diesel emergency engines associated with this source shall be categorized into two categories prescribed in Table 28-E1 (below). These categories do not include EU FP-1 (Tier 2 Diesel Fire Pump Emergency Engine) or EU GH-1 (Tier 2 Diesel Guard House Emergency Engine).

Category	Emission Unit (EU) #	Number of Units in Category
Type 1	- B1G1 through B1G34	68
Type 1	- B2G1 through B2G34	08
	- B1CG1 through B1CG7	
Type 2	- B1LTG1 through B1LTG3	20
	- B2CG1 through B2CG7	20
	- B2LTG1 through B2LTG3	

Table 28-E1: Diesel Emergency Engine Categories

- (b) For the purposes of performance test requirements and NO_X emissions screening requirements, the terms 'commencement of operation', 'facility ready status', and 'testing zone(s)' shall be as defined in Attachment A of the Statement of Basis (STOBA) associated with issuance of this permit.
- (2) <u>NO_X Emissions Screening Requirements.</u>
 - (a) The owner/operator shall conduct NO_X emissions screening for the emission units identified in Table 28-E1 in accordance with the following:
 - (i) Screening shall be performed using a NO_x analyzer, or an equivalent NO_x analysis method as approved by the Department;
 - (ii) The owner/operator shall conduct NO_x emissions screening on at least fifty percent (50%) of the engines in each engine type category (Type 1 or Type 2) included in each *testing zone*, rounded up to the nearest whole integer for each *testing zone*³. The deadline for conducting such NO_x emissions screening shall be whichever of the following occurs first:
 - 1. Twenty-four (24) engine operating hours after reaching *facility ready status*; or
 - 2. One hundred twenty (120) days after *commencement of operation*.
 - (b) The owner/operator shall submit a NO_X emissions screening protocol to the LLCHD for approval at least thirty (30) days prior to any required NO_X emissions screening(s). In the event the owner/operator requests to amend the screening protocol, the owner/operator shall submit the amended screening protocol to the LLCHD for

 $^{^{3}}$ – As an example, if there are seventeen (17) Type 1 engines and five (5) Type 2 engines in each testing zone, the owner/operator must conduct NO_x emissions screening on nine (9) Type 1 engines (17 × 0.5 = 8.5 rounds up to 9) and must screen three (3) Type 2 engines (5 × 0.5 = 2.5 rounds up to 3) in each *testing zone*.

approval no less than ten (10) days prior to the scheduled date of the emissions screening. Each screening protocol shall include, at a minimum, the following:

- (i) Facility name, address, and FID number;
- (ii) Company name, address, and contact person's name;
- (iii) List of emission units included in the screening;
- (iv) Screening schedule, including starting date and time, and number of days on which screening will occur;
- (v) The engine operation conditions during performance of the NO_x emissions screening run(s) (i.e., engine load level range, fuel combusted);
- (vi) List of all applicable regulatory requirements pursuant to which screening is being conducted (e.g., permit condition, MACT, NSPS, etc.);
- (vii) Pollutant(s) to be sampled, and all associated emission limits and demonstration requirements; and
- (viii) Screening or analysis method(s) to be used, and documentation of any proposed variation from the approved protocol, including the reason for the variation.
- (c) Testing and calculation methodologies shall follow the approved NO_X emissions screening protocol unless a revised NO_X screening protocol is submitted to and approved by the Department prior to scheduling the required NO_X screenings.
- (d) NO_X emissions screenings shall be conducted in accordance with the following requirements:
 - (i) Installation, calibration, and operation of the analyzer shall be conducted in accordance with the manufacturer's specifications. The manufacturer's operations and maintenance manual, or its equivalent, detailing proper operation, calibration, and maintenance of the analyzer shall be kept on site and be readily available to Department representatives.
 - (ii) NO_x emission screening shall be conducted for a minimum of three (3) tenminute runs unless another run-time is deemed appropriate by the LLCHD.
 - (iii) NO_X screenings shall be conducted during engine operating conditions as specified in the protocol required pursuant to paragraph (E)(2)(b) of this condition.
- (e) In the event that NO_X emissions screening results from any engine indicate NO_X emissions rate(s) greater than the applicable NO_X emissions limits established in Table 28-B1 of this permit, the owner/operator shall:
 - Notify the department of any NO_X screening results that indicate NO_X emissions rates greater than NO_X emission limits within fifteen (15) days of the date of the screening;
 - (ii) Conduct NO_X emissions screening on 100% of the engines of the same engine type in same *testing zone* as the engine(s) for which any NO_X screening results indicate NO_X emissions rates greater than NO_X emission limits;
 - (iii) Conduct any corrective action(s) necessary to reduce NO_X emissions as soon as practicable; and
 - (iv) Conduct a follow-up performance test on each engine for which the NO_X emissions screening indicated emissions rate(s) greater than the applicable NO_X emissions limits established in Table 28-B1. Performance testing shall be conducted in accordance with paragraph (E)(3) of this condition. Follow-up performance tests must be conducted before whichever of the following

occurs first to verify that the NO_X emissions rate does not exceed the applicable limit established in in Table 28-B1 of this permit.

- 1. Forty-eight (48) engine operating hours after completion of the NO_x emissions screening; or
- 2. 120 days after the date of the NO_X emissions screening.
- (3) <u>Performance Test Requirements.</u> The owner/operator shall conduct performance tests for the emission units identified in Table 28-E1 in accordance with the applicable requirements set forth in Condition XXI of this permit, as well as the following:
 - (a) The owner/operator shall conduct initial performance testing on at least ten percent (10%) of the engines in each engine type category (Type 1 or Type 2) included in each *testing zone*, rounded up to the nearest whole integer for each *testing zone*⁴. Engines for which performance testing is required pursuant to paragraph (E)(2)(e)(iv) of this condition may be counted toward the required number of engines to be tested in each *testing zone*. The deadline for conducting such performance testing shall be whichever of the following occurs first:
 - (i) The deadline for testing established pursuant to paragraph (E)(2)(e)(iv) of this condition;
 - (ii) Seventy-two (72) engine operating hours after each engine to be tested has reached *facility ready status*; or
 - (iii) 180 days after *commencement of operation* of each *testing zone*.
 - (b) For each performance test, the owner/operator shall test for emissions of PM_{2.5} and NO_x.
 - (c) The owner/operator shall submit a NO_x performance testing protocol to the LLCHD for approval at least thirty (30) days prior to any required performance test(s), or by any deadline established in an applicable Subpart of the CFR. In the event the owner/operator requests to amend the testing protocol, the owner/operator shall submit the amended testing protocol to the LLCHD for approval no less than ten (10) days prior to the scheduled date of the performance test. Each testing protocol shall include, at a minimum, the following:
 - (i) Facility name, address, and FID number;
 - (ii) Company name, address, and contact person's name;
 - (iii) List of emission units included in the testing;
 - (iv) Test schedule, including starting date and time, and number of days on which testing will occur;
 - (v) List of all applicable regulatory requirements pursuant to which testing is being conducted (e.g., permit condition, MACT, NSPS, etc.);
 - (vi) Pollutant(s) to be sampled, and all associated emission limits and demonstration requirements; and
 - (vii) Test method(s) to be used, and documentation of any proposed variation from the approved protocol, including the reason for the variation.
 - (d) Performance tests shall be performed under those representative (normal) conditions that:

⁴ – As an example, if there are seventeen (17) Type 1 engines and five (5) Type 2 engines in each testing zone, the owner/operator must test two (2) Type 1 engines ($17 \times 0.1 = 1.7$ rounds up to 2) and must test one (1) Type 2 engine ($5 \times 0.1 = 0.5$ rounds up to 1) in each *testing zone*.

- (i) Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and
- (ii) Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.
- (e) Performance tests shall be conducted for a minimum of three (3) one-hour runs unless another run-time is specified by the applicable Subpart of the CFR or as deemed appropriate by the LLCHD.
- (f) The source shall monitor and record the operating parameters for process and control equipment during the performance testing required in the permit.
- (g) In the event that performance test results from any engine indicate NO_X emissions in excess of the applicable NO_X emissions limit established in Table 28-B1 of this permit, the owner/operator shall:
 - (i) Conduct any corrective action(s) necessary to reduce NO_X emissions as soon as practicable;
 - (ii) Conduct a follow-up performance test before whichever of the following occurs first to verify that corrective action(s) have reduced NO_X emissions to less than the applicable limit established in in Table 28-B1 of this permit:
 - 1. Forty-eight (48) engine operating hours after completion of the failed performance test; or
 - 2. 120 days after the date of the failed performance test.
- (F) <u>Requirements of the New Source Performance Standard (NSPS) set forth in Title 40, Part 60 of the Code of Federal Regulations (40 CFR Part 60).</u>
 - (1) The owner/operator shall operate the emission units identified in Table 28 in accordance with the applicable requirements set forth in 40 CFR Part 60, Subpart IIII (NSPS for Stationary Compression Ignition Internal Combustion Engines). The owner/operator shall be responsible for identifying and maintaining compliance with all applicable provisions of Subpart IIII.
 - (2) The owner/operator must comply with all applicable requirements of 40 CFR Part 60, Subpart A (General Provisions), as they relate to applicable requirements for the emission units identified in Table 28 pursuant to 40 CFR Part 60, Subpart IIII. The owner/operator shall be responsible for identifying and maintaining compliance with all applicable provisions of Subpart A.
- (G) <u>Requirements of the National Emission Standards for Hazardous Air Pollutants for Source</u> <u>Categories (Source Category NESHAPs) set forth in Title 40, Part 63 of the Code of Federal</u> <u>Regulations (40 CFR Part 63).</u>
 - (1) The owner/operator shall operate the emission units identified in Table 28 in accordance with the applicable requirements set forth in 40 CFR Part 63, Subpart ZZZZ (Source Category NESHAP for Stationary Reciprocating Internal Combustion Engines). The owner/operator shall be responsible for identifying and maintaining compliance with all applicable provisions of Subpart ZZZ.
 - (2) The owner/operator must comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions), as they relate to applicable requirements for the emission units identified in Table 28 pursuant to 40 CFR Part 63, Subpart ZZZZ. The owner/operator shall be responsible for identifying and maintaining compliance with all applicable provisions of Subpart A.

XXIX. <u>Requirements for Cooling Towers.</u> This permit authorizes the owner/operator to construct and operate the cooling towers identified in Table 29 below. These cooling towers must not exceed the per-unit capacities listed in Table 29 and must be constructed and operated in accordance with the following requirements:

Table 29: Permitted Cooling Tower

E	mi	ssi	on	Un	its

Emission Unit (EU) #	Emission Unit Description	Number of Cooling Tower Units	Emission Unit Capacity (per unit)
B1CT1 through B1CT12	Building 1 Cooling Towers 1-12	12	5,160 gpm
B2CT1 through B2CT12	Building 2 Cooling Towers 1-12	12	5,160 gpm

(A) Operating Requirements, Throughput Limits, and/or Work Practice Standards.

- (1) In accordance with emissions data provided in the approved application, the owner/operator shall operate the cooling towers in accordance with the following:
 - (a) Concentration of total dissolved solids (TDS) in the cooling water shall not exceed 5,000 ppm; and
 - (b) Drift loss from each cooling tower shall not exceed 0.0005%, to be verified by the unit manufacturer's guarantee.
- (B) Monitoring and Record Keeping Requirements.
 - (1) A representative TDS sample shall be collected and tested from each cooling tower a minimum of once during each calendar month. The test method used to determine TDS concentration shall be in accordance with an EPA approved method.
 - (2) The owner/operator shall maintain records of the following:
 - (a) Each cooling tower manufacturer's drift loss design specifications;
 - (b) The TDS concentration in cooling tower water for each sampling event; and
 - (c) The test method used to determine TDS concentration.
- XXX. <u>Requirements for Diesel Storage Tanks.</u> This permit authorizes the owner/operator to construct and operate the diesel storage tanks identified in Table 30 below. These tanks must not exceed the perunit capacities listed in Table 30 and must be constructed and operated in accordance with the following requirements:

Table 30: Permitted Diesel Storage

Tank Emission Units

Emission Unit (EU) #	Emission Unit Description	Number of Tanks	Max Emission Unit Capacity (per unit)
TANKS	Diesel Storage Tanks	90	5,160 gallons

(A) Operating Requirements, Throughput Limits, and/or Work Practice Standards.

(1) In accordance with emissions data provided in the approved application, the owner/operator shall store only diesel in the diesel storage tanks.

(2) In accordance with elections provided in the approved application, the owner/operator shall limit the throughput of diesel through the diesel storage tanks to no more than 1,863,000 gallons during any period of twelve (12) consecutive months.

- (B) Monitoring and Record Keeping Requirements.
 - (1) The owner/operator shall demonstrate compliance with paragraphs (A)(1) and (A)(2) of this condition as prescribed in Conditions XXVIII(C)(4)(a) and XXVIII(C)(5) of this permit.

END OF PERMIT CONDITIONS

Attachment A

New Source Performance Standard (NSPS) Citation Tables

<u>Disclaimer</u>: The information provided in this attachment represents relevant and applicable standards and requirements as those standards and requirements exist on the date of issuance of this permit. This attachment is for informative purposes. The owner/operator is responsible for maintaining on-going compliance with all applicable requirements under the LLCAPCPRS, as well as any applicable requirements established in the Code of Federal Regulations. Any modifications to requirements set forth in the LLCAPCPRS or the Code of Federal Regulations that revise any standard contained herein shall take precedence over the standards referenced in this attachment, and it is the duty of the owner/operator to achieve and maintain compliance with any revised standards.

<u>Units subject to 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition</u> Internal Combustion Engines (CI ICE)

Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
- B1G1 through B1G34 - B2G1 through B2G34	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engines	Diesel
 B1CG1 through B1CG7 B1LTG1 through B1LTG3 B2CG1 through B2CG7 B2LTG1 through B2LTG3 	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engines	Diesel
FP-1	2-01-001-02	Tier 2 Diesel Fire Pump Emergency Engine	Diesel
GH-1	2-01-001-02	Tier 2 Diesel Guard House Emergency Engine	Diesel

The following requirements of 40 CFR 60, Subpart IIII apply to:

- All Type 1 Tier 2 Diesel Emergency Engines (68 units)
- All Type 2 Tier 2 Diesel Emergency Engines (20 units)
- EU GH-1 (Tier 2 Diesel Guard House Emergency Engine) (1 unit)

Section (§)	Section Description	Applicable Paragraph(s)		
§60.4200	Applicability of Subpart	(a), (a)(2); (c)		
§60.4205	Emission Standards for Owners/Operators of Emergency Stationary CI ICE	(b); (e)		
§60.4206	Duration of Emission Standards for Owners/Operators of Stationary CI ICE	Entire Section		
§60.4207	Fuel Requirements for Owners/Operators of Stationary CI ICE	(b)		
§60.4208	Deadline for Importing/Installing Stationary CI ICE Produced in Previous Model Years	(a); (i)		
§60.4209	Monitoring Requirements for Owners/Operators of Stationary CI ICE	(a)		
§60.4211	Compliance Requirements for Owners/Operators of Stationary CI ICE	(a) ^[G] ; (c); (f) ^[G] ; (g) ^[C] ; (h) ^[C]		
§60.4214	Notification, Reporting, and Record Keeping Requirements for Owners/Operators of Stationary CI ICE	(b); (c) ^[C] ; (d) ^[C] ; (e) ^[C]		
§60.4218	Applicable General Provisions of 40 CFR 60 and Confidential Information Provisions	Entire Section		
§60.4219	Definitions	Entire Section		
^[G] – Where shown, this symbol indicates that the referenced paragraph, as well as all <u>applicable</u> sub-paragraphs set forth under that paragraph are incorporated as requirements.				

^[C] – Where shown, this symbol indicates that the referenced paragraph applies only conditionally based upon acts, elections, or modifications by the owner/operator, or other site-specific factors.

The following requirements of 40 CFR 60, Subpart IIII apply to:

• EU FP-1 (Tier 2 Diesel Fire Pump Emergency Engine)

Section (§)	Section Description	Applicable Paragraph(s)
§60.4200	Applicability of Subpart	(a), (a)(2); (c)
§60.4205	Emission Standards for Owners/Operators of Emergency Stationary CI ICE	(c); (e)
§60.4206	Duration of Emission Standards for Owners/Operators of Emergency Stationary CI ICE	Entire Section
§60.4207	Fuel Requirements for Owners/Operators of Emergency Stationary CI ICE	(b)
§60.4208	Deadline for Importing/Installing Stationary CI ICE Produced in Previous Model Years	(i)
§60.4209	Monitoring Requirements for Owners/Operators of Stationary CI ICE	(a)
§60.4211	Compliance Requirements for Owners/Operators of Stationary CI ICE	(a) ^[G] ; (c); (f) ^[G] ; (g) ^[C] ; (h) ^[C]
§60.4214	Notification, Reporting, and Record Keeping Requirements for Owners/Operators of Stationary CI ICE	(b); (c) ^[C] ; (d) ^[C] ; (e) ^[C]
§60.4218	Applicable General Provisions of 40 CFR 60 and Confidential Information Provisions	Entire Section
§60.4219	Definitions	Entire Section

^[G] – Where shown, this symbol indicates that the referenced paragraph, as well as all <u>applicable</u> sub-paragraphs set forth under that paragraph are incorporated as requirements.

^[C] – Where shown, this symbol indicates that the referenced paragraph applies only conditionally based upon acts, elections, or modifications by the owner/operator, or other site-specific factors.

Attachment B

National Emission Standards for Hazardous Air Pollutants for Source Categories (Source Category NESHAPs) Citation Tables

<u>Disclaimer</u>: The information provided in this attachment represents relevant and applicable standards and requirements as those standards and requirements exist on the date of issuance of this permit. This attachment is for informative purposes. The owner/operator is responsible for maintaining on-going compliance with all applicable requirements under the LLCAPCPRS, as well as any applicable requirements established in the Code of Federal Regulations. Any modifications to requirements set forth in the LLCAPCPRS or the Code of Federal Regulations that revise any standard contained herein shall take precedence over the standards referenced in this attachment, and it is the duty of the owner/operator to achieve and maintain compliance with any revised standards.

<u>Units subject to 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants</u> for Stationary Reciprocating Internal Combustion Engines (RICE)

Emission Unit (EU)	SCC Code	Emission Point Description	Emission Segment Description
- B1G1 through B1G34 - B2G1 through B2G34	2-01-001-02	Type 1 – Tier 2 Diesel Emergency Engines	Diesel
 B1CG1 through B1CG7 B1LTG1 through B1LTG3 B2CG1 through B2CG7 B2LTG1 through B2LTG3 	2-01-001-02	Type 2 – Tier 2 Diesel Emergency Engines	Diesel
FP-1	2-01-001-02	Tier 2 Diesel Fire Pump Emergency Engine	Diesel
GH-1	2-01-001-02	Tier 2 Diesel Guard House Emergency Engine	Diesel

The following requirements of 40 CFR 60, Subpart ZZZZ apply to all units subject to Subpart ZZZZ:

Section (§)	Section Description	Applicable Paragraph(s)		
§63.6580	Purpose of Subpart	Entire Section		
§63.6585	Applicability of Subpart	(a); (c); (d)		
§63.6590	Affected Sources	(a), (a)(2)(iii); (c), (c)(1)		
§63.6670	Implementation and Enforcement	Entire Section		
§63.6675	Definitions	Entire Section		
^[G] – Where shown, this symbol indicates that the referenced paragraph, as well as all <u>applicable</u> sub-paragraphs set				

forth under that paragraph are incorporated as requirements.

^[C] – Where shown, this symbol indicates that the referenced paragraph applies only conditionally based upon acts, elections, or modifications by the owner/operator, or other site-specific factors.