

# STATEMENT OF BASIS TO ISSUE A CLASS I (TITLE V) PERMIT TO OPERATE A MAJOR SOURCE OF AIR CONTAMINANTS

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<b>LLCHD Air Quality Section Facility Identification (FID) Number:</b>	<b>00014</b>
<b>Permit Issue Date:</b>	<b>DATE, 2026</b>

**The Lincoln-Lancaster County Health Department (LLCHD) has made the preliminary determination to issue a Title V permit to operate a Class I source to the following:**

Permit Holder Name:	<b>Board of Regents of the University of Nebraska – Lincoln</b>
Address:	<b>3835 Holdrege Street</b>
City, County, State, ZIP:	<b>Lincoln, Nebraska 68583</b>

**The proposed permit allows for operation of the following source:**

Facility Site Name:	<b>University of Nebraska – Lincoln East Campus</b>
Facility Address:	<b>1901 North 37<sup>th</sup> Street</b>
City, County, State, ZIP:	<b>Lincoln, Lancaster County, Nebraska 68583</b>
Facility NAICS:	<b>611301: Colleges, Universities, and Professional Schools</b>

In accordance with requirements set forth under Article 2, Sections 13 and 14 of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards (LLCAPPRS), the LLCHD may not issue a Class I (Title V) operating permit until the public, the U.S. Environmental Protection Agency (US EPA), and affected states have been given the opportunity to comment on the draft permit.

Within the 30-day public comment period, any interested person, agency, group, or affected state may request or petition the Director of the LLCHD for a public hearing. All requests for public hearing must be made in writing, and must state the nature of the issues to be raised and all arguments and factual grounds supporting their position. If a public hearing is granted by the Director, the hearing will be advertised by public notice at least 30 days prior to its occurrence.

The U.S. EPA may elect to either utilize or waive their 45-day review period following completion of the public comment period. Within the 45-day review period, the U.S. EPA may submit comments on the proposed draft.

A final determination on this permit will be made following the opportunity of the public, the US EPA, and affected states to review and comment on the draft permit, and any/all comments received have been addressed. The conclusion of this document will include a recommendation to either approve or deny the renewal of a Class I (Title V) operating permit for this source.

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### **Section 1 – Introduction**

The University of Nebraska-Lincoln East Campus (hereinafter referred to as ‘UNL East’ or ‘the source’) has submitted an application to obtain a Title V (Class I) Operating Permit. This source has been historically classified as a Class II ‘synthetic minor’ source, as it had previously accepted limits on fuel combustion to maintain emissions below Class I operating permit thresholds. However, the owner/operator has indicated that the source can no longer maintain operational reliability while continuing to comply with previously-elected fuel use limits. Submittal of the application meets the requirement for a “timely” submittal.

Article 2, Section 5 of the Lincoln-Lancaster County Health Department Air Pollution Control Program Regulations and Standards (LLCACPERS) requires that significant sources of air pollutants apply for operating permits. Sources that are required to apply for Class I operating permits are those defined as a major source under the criteria set forth in Article 2, Section 2, paragraph (G) of the LLCACPERS based on their potential to emit, and sources subject to certain federal emission standards. UNL East Campus will operate as a major source, as the maximum potential emissions of all criteria air pollutants from this source are in excess of major source thresholds.

This source is considered an ‘area source’ of hazardous air pollutants (HAP), as maximum potential emissions of both individual and combined HAPs are limited to levels that are less than HAP major source thresholds.

## **Section 2 – Permitting History**

### **2.01 – Initial Construction Permit No. 57 – Effective April 1, 1991**

The initial permitting action involved with UNL East was the Department issuing Construction Permit No. 057 to UNL East Campus for the construction of a 94 MMBtu/hr gas and residual oil-fired boiler (designated Boiler #5 by the source). Notable permit conditions related to operation of the boiler included the following:

- The source could not burn any fuel oil other than #6 fuel oil without prior written approval from the Department.
- The sulfur content of the #6 fuel oil was limited to no more than 0.9% by weight (wt%).
- The heating value of the #6 fuel oil was limited to no less than 150,000 British thermal units per gallon (Btu/gal).
- The quantity of #6 fuel oil combusted in the boiler was limited to no more than 387,000 gallons per calendar year.
- The quantity of natural gas combusted in the boiler was limited to no more than 182,000,000 cubic feet (also expressed as 182.0 MMcf) per calendar year.
- UNL East Campus was required to report annual #6 fuel oil and natural gas combustion totals in Boiler #5 no later than 30 days after the end of each calendar year.

### **2.02 – Modified Construction Permit No. 57A – Effective May 3, 1993**

Construction Permit No. 057 was modified to revise some of the conditions that were set forth in the original permit. The modified permit was issued as Construction Permit No. 057A, and replaced No. 057. Notable changes to the permit included the following:

- The maximum sulfur content limit for the #6 fuel oil was increased from 0.9 wt% to 1.7 wt%.
- The minimum heating value limit for the #6 fuel oil was decreased from 150,000 Btu/gal to 148,000 Btu/gal.

### **2.03 – Initial Class II Operating Permit – Effective March 4, 1998**

UNL East was issued an initial synthetic minor operating permit that addressed boilers #3, #4, and #5, as well as two incinerators used for the incineration of Type IV pathological waste. The operating permit incorporated some of the applicable limits from Construction Permit No. 057A, as well as conditions set forth in a waiver granted by the Department in which UNL East Campus was allowed to incinerate a limited amount ethidium bromide gel. Additional restrictions of the type of waste allowed for incineration in the units were also placed in the permit. The operating permit also established protocols for monitoring and limiting visible emissions from the boilers and incinerators.

### **2.04 – Class II Operating Permit Renewal – Effective February 25, 2004**

This operating permit renewal was based largely on the previously-issued operating permit, but notable changes included the following:

- Additional requirements from Construction Permit No. 057A were incorporated into the permit.
- The visible emission monitoring procedure was revised to allow for greater flexibility.
- A diesel generator which had not been previously addressed in the permit was added, as were applicable requirements for that generator.

## **2.05 – Significant Modification of Class II Operating Permit – Effective May 2, 2007**

The operating permit issued February 25, 2004 was modified to harmonize the permit with federal regulations for pathological waste incinerators. Notable changes included the following:

- Replacement of language specifying the types and quantities of waste that could be combusted in the incinerators.
- Removal of language pertaining to the waiver granted by the Department regarding ethidium bromide gel incineration.

The permit modification was considered ‘significant’ due to the nature of the changes made to the permit, which did not qualify as ‘administrative amendments’ nor ‘minor modifications’ pursuant to the applicable requirements in Article 2, Section 15 of the LLCAPCPRS.

## **2.06 – Class II Operating Permit Renewal – Effective February 25, 2009**

This operating permit renewal was based largely on the previously-issued operating permit, which incorporated the modifications performed in May of 2007, but notable changes included the following:

- The cooling towers associated with the UNL East Campus physical plant were added as significant emission units. Associated record-keeping requirements were also added.
- Additional requirements from Construction Permit No. 057A were incorporated into the permit.
- The diesel generator, which had been added during the previous renewal, was removed from the permit, as were applicable requirements for that generator.
- Facility-wide fuel use limits were incorporated to provide ‘practically-enforceable’ permit requirements designed to establish the source as a ‘synthetic minor’ source.
- The visible emissions monitoring procedures were revised to provide for greater clarity as to how the source should identify and address potential violations.

## **2.07 – Significant Modification of Class II Operating Permit – Effective April 22, 2010**

### **Modified Construction Permit No. 057B – Effective April 22, 2010**

The operating permit was modified due to modifications to the construction permit for Boiler #5 that were requested by the source. Notable changes included the following:

- The language pertaining to the annual fuel use limits for natural gas and #6 fuel oil was revised to state that the limits applied to any consecutive 12-month period, instead of to calendar years.
- The language pertaining to the annual reporting of natural gas and #6 fuel oil was revised to state that the report was due no later than March 31 each year (consistent with reporting required under LLCAPCPRS Article 2, Section 6), rather than within 30 days of the end of each calendar year.

## **2.08 – Class II Operating Permit Renewal – Effective February 25, 2014**

This operating permit renewal was based largely on the previously-issued operating permit, but notable changes included the following:

- Due to the implementation of 40 CFR Part 63, Subpart ZZZZ and CCCCCC, emission units that had previously been omitted as ‘insignificant activities’ (emergency generator engines and gasoline distribution equipment, respectively) were incorporated as emission units. Also incorporated were natural gas space heaters, as their emissions, while low, contribute to facility-wide NOx and CO emissions.
- The visible emission monitoring procedure was revised to better address how the source should proceed when potential violations are identified.

## **2.09 – Minor Modification of Class II Operating Permit – Effective February 12, 2016**

The operating permit for UNL East Campus was revised via minor modification to accommodate the removal of several emission units that had been removed or decommissioned in place, as well as the addition of several new emission units. The proposed changes to the permit are summarized as follows:

- Removal of EU 5-1 (290 lbs/hr Consumat C-120P Pathological Material Incinerator)
- Removal of EU 8-3 (Transportation Services Gasoline Dispensing UST E-85)
- Removal of EU 7-8 (755 HP/500 kW Emergency Generator (Quilt Study))
- Removal of EU 7-14 (50 HP/30kW Emergency Generator (VDC))
- Removal of EU 7-15 (50 HP/36kW Emergency Generator (Food Industry))
- Addition of EU 7-17 (EEG Unit #17 - East Campus Rec Center (190 hp / 125 kW))
- Addition of EU 7-18 (EEG Unit #18 - Food Industry Complex (320 hp / 125 kW))
- Addition of EU 7-19 (EEG Unit #19 - Quilt Study Center (1220 hp / 760 kW))
- Addition of EU 7-20 (EEG Unit #20 - Vet Diagnostic Center (176 hp / 100 kW))
- Addition of EU 7-21 (EEG Unit #21 - NE Vet Diagnostic Center (620 hp / 350 kW))
- Addition of EU 10-1/10-2 (Consutech C-75P Incinerator (175 lbs/hr) – NVDC)
- Addition of EU 11-1/11-2 (Consutech C-225P Incinerator (600 lbs/hr) – NVDC)

The modified permit incorporated the provisions of the updated Construction Permit No. 171B (emergency electrical generators), as well as the provisions of Construction Permit No. 176 (Consutech C-75P and C-225P incinerators).

Any provisions related to emission units that were removed from the permit were either removed, or revised to specify that they no longer applied to the removed units. Additional provisions for new emission units were incorporated into the permit.

## **2.10 – Administrative Amendment of Class II Operating Permit – April 12, 2016**

An administrative amendment was performed to correct applicable requirements of 40 CFR Part 63, Subpart JJJJJ for Boilers #3, #4, and #5. The correction added §63.11223 paragraph (c) as an applicable requirement, as the boilers are all equipped with oxygen trim systems.

## **2.11 – Modified Construction Permit No. 057C – Effective November 16, 2018**

At the request of UNL personnel, Construction Permit #057C was modified to revise the fuel use limits, specifically increasing the natural gas use limit from 182 MMcf/yr to 325 MMcf/yr, and decreasing the fuel oil limit from 387,000 gals/yr to 150,000 gals/yr. This change resulted in a significant decrease in potential sulfur dioxide (SO<sub>2</sub>) emissions (approximately 30 tons), while other regulated pollutants increased by a total of about 7 tons for all pollutants combined. The largest increase was associated with carbon monoxide (CO), which increased by approximately 5.5 tons. The increase in CO emissions was less than the construction permit 'significant modification' threshold of 40 tons, and total potential to emit CO after the modification was limited to about 14 tons. This modification allowed for greater utilization of the boiler, as fuel oil usage for this boiler had decreased significantly due to changing operational preferences on behalf of the source.

## **2.12 – Construction Permit No. 171 and Subsequent Revisions**

This construction permit was originally issued on May 1, 2015 to allow for the installation of two (2) new emergency generators, and also to replace and supersede previously-issued 'construction permit exemptions' for previously-installed emergency generators on UNL East Campus. Details of the original permit and subsequent revisions are provided as follows:

- #171 – May 1, 2015: Authorized installation of EU 7-18 and 7-19, also replaced previously-issued exemptions covering EU 7-1 through 7-7, EU 7-9 through 7-13, and EU 7-17.

- #171A – July 24, 2015: Authorized installation of EU 7-20.
- #171B – December 23, 2015: Authorized installation of EU 7-21.
- #171C – January 3, 2017: Authorized installation of EU 7-22 and 7-23.
- #171D – April 9, 2018: Authorized installation of EU 7-24.
- #171E – March 1, 2019: Authorized installation of EU 7-25.
- #171F – June 20, 2019: Authorized installation of EU 7-26.
- #171G – April 9, 2020: Remove decommissioned EU 7-1 from permit.
- #171H – August 13, 2021: Authorized installation of EU 7-27.

## **2.13 – Construction Permit No. 217**

This construction permit was issued on August 12, 2021 for the replacement of an existing 75.0 million British thermal units per hour (MMBtu/hr) steam boiler (Boiler #3) with two 37.5 MMBtu/hr steam boilers (Boilers #6 & #7). Potential emissions netting analysis indicated that this boiler replacement project did not trigger the minor-NSR construction permitting thresholds because the net increase did not meet or exceed the thresholds for any regulated new source review (NSR) pollutant. However, a construction permit was issued for this project to establish federally-enforceable fuel combustion limitations for the two new boilers, limiting their potential to emit.

## **2.14 – Proposed Issuance of a Class I (Title V) Operating Permit**

This document serves as the factual and legal basis for the proposed issuance of an initial Class I (Title V) operating permit for UNL East Campus. The sections that follow provide more information on the source, the nature of emissions from the source, evaluation of the potential to emit, and a discussion of conditions set forth in the draft permit.

## **Section 3 – Source Characterization**

### **3.01 – Source Description**

UNL East is a public university composed of a collection of colleges and departments offering undergraduate and graduate degrees in numerous fields of study. Emission sources are primarily composed of units providing district heating, cooling, and emergency electrical power for the numerous buildings that comprise this source, as well as two natural gas incineration units. UNL East has been operating as a Class II 'synthetic minor' source for criteria pollutants and an 'area' source for hazardous air pollutants (HAPs) since the Department issued an initial operating permit on March 4, 1998. Emission calculations contained within the approved application indicate this source will now be classified as a major source for criteria pollutants and an area source of HAPs, as this source has the potential to emit the following:

- Particulate Matter less than 10 microns in diameter (PM<sub>10</sub>), Oxides of Nitrogen (NO<sub>x</sub>), Sulfur Dioxide (SO<sub>x</sub>), Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) in excess of the major source threshold of 100 tons per year; and
- All individual HAPs less than 10 tons per year, and total HAPs less than 25 tons per year.

### **3.02 – Significant Sources of Air Pollution**

For the purpose of the proposed operating permit, the following emission units constitute the 'Permitted Source':

Emission Unit	SCC Code	Emission Point Description	Emission Segment Description
2-1	1-03-004-01	Boiler #4 – 100 MMBtu/hr	No. 6 Fuel Oil Combustion

Emission Unit	SCC Code	Emission Point Description	Emission Segment Description
2-2	1-03-006-02		Natural Gas Combustion
3-1	1-03-004-02	Boiler #5 – 94 MMBtu/hr	No. 6 Fuel Oil Combustion
3-2	1-03-005-02		No. 2 Fuel Oil Combustion
3-3	1-03-006-02		Natural Gas Combustion
5-1	1-03-005-02	Boiler #6 – 37.5 MMBtu/hr	Distillate Oil <sup>1</sup> /Biodiesel
5-2	1-03-006-02		Natural Gas Combustion
6-1	1-03-005-02	Boiler #7 – 37.5 MMBtu/hr	Distillate Oil <sup>1</sup> /Biodiesel
6-2	1-03-006-02		Natural Gas Combustion
4-1	3-85-001-01	6,250 gal/min Cooling Tower (CT-1 TES)	Mech. Draft – Drift Loss
4-2	3-85-001-01	13,000 gal/min Cooling Tower (CT-2 South)	Mech. Draft – Drift Loss
4-3	3-85-001-01	11,000 gal/min Cooling Tower (CT-3 North)	Mech. Draft – Drift Loss
7-2	2-02-004-02	EEG Unit #2 - Schmid Law College (68 hp / 35 kW)	Diesel Fuel Combustion
7-3	2-02-004-02	EEG Unit #3 - Greenhouses (188 hp / 125 kW)	Diesel Fuel Combustion
7-4	2-02-002-53	EEG Unit #4 - College of Dentistry (176 hp / 109 kW)	Natural Gas Combustion
7-5	2-02-004-02	EEG Unit #5 - Miller Hall (207 hp / 125 kW)	Diesel Fuel Combustion
7-6	2-02-004-01	EEG Unit #6 - Hardin Hall (Nat. Res. Bldg) (600 hp / 896 kW)	Diesel Fuel Combustion
7-7	2-02-004-02	EEG Unit #7 - BL-3 Modular Lab (352 hp / 230 kW)	Diesel Fuel Combustion
7-9	2-02-004-01	EEG Unit #9 - Virology (Morrison) (1200 hp / 600 kW)	Diesel Fuel Combustion
7-10	2-02-002-53	EEG Unit #10 - Barkley Mem. Center (90 hp / 60 kW)	Natural Gas Combustion
7-11	2-02-002-53	EEG Unit #11 - Kiem Hall (225 hp / 150 kW)	Natural Gas Combustion
7-12	2-02-004-01	EEG Unit #12 - Animal Science (755 hp / 500 kW)	Diesel Fuel Combustion
7-13	2-02-004-01	EEG Unit #13 - Life Sciences Annex (1194 hp / 750 kW)	Diesel Fuel Combustion
7-16	2-02-004-02	EEG Unit #16 - Plant Science (227 hp / 155 kW)	Diesel Fuel Combustion
7-17	2-02-002-53	EEG Unit #17 - East Campus Rec Center (190 hp / 125 kW)	Natural Gas Combustion
7-18	2-02-001-02	EEG Unit #18 - Food Industry Complex (320 hp / 125 kW)	Diesel Fuel Combustion
7-19	2-02-004-01	EEG Unit #19 - Quilt Study Center (1220 hp / 760 kW)	Diesel Fuel Combustion
7-20	2-02-002-53	EEG Unit #20 - Vet Diagnostic Center (176 hp / 100 kW)	Natural Gas Combustion
7-21	2-02-002-53	EEG Unit #21 - NE Vet Diagnostic Center (620 hp / 350 kW)	Natural Gas Combustion
7-22	2-02-004-01	EEG Unit #22 – EC Utility Plant (2,200 hp / 1,500 kW)	Diesel Fuel Combustion
7-23	2-02-002-53	EEG Unit #23 – Massengale Res. Hall (164 hp / 100 kW)	Natural Gas Combustion

<sup>1</sup> Distillate oil includes No. 1 and No. 2 fuel oil.

Emission Unit	SCC Code	Emission Point Description	Emission Segment Description
7-24	2-02-004-01	EEG Unit #24 – Thermal Energy Storage (TES) Tank (755 hp / 500 kW)	Diesel Fuel Combustion
7-25	2-02-002-53	EEG Unit #25 – Booster Pump Station (240 hp / 150 kW)	Natural Gas Combustion
7-26	2-02-002-53	EEG Unit #26 – East Campus Union (250 hp / 150 kW)	Natural Gas Combustion
7-27	2-02-002-53	EEG Unit #27 – Dinsdale Learning Commons (200 hp / 130 kW)	Natural Gas Combustion
8-1	4-04-004-03	Transportation Services Gasoline Dispensing UST #4	Working Loss
8-2	4-04-004-03	Transportation Services Gasoline Dispensing UST #5	Working Loss
10-1	3-15-021-02	Consutech C-75P Incinerator (175 lbs/hr) - NVDC	<u>&gt;90%</u> Pathological Waste
10-2	1-03-006-02	Consutech C-75P Incinerator (175 lbs/hr) - NVDC	Natural Gas Combustion
11-1	3-15-021-02	Consutech C-225P Incinerator (600 lbs/hr) - NVDC	<u>&gt;90%</u> Pathological Waste
11-2	1-03-006-02	Consutech C-225P Incinerator (600 lbs/hr) - NVDC	Natural Gas Combustion

### 3.03 – Insignificant Activities

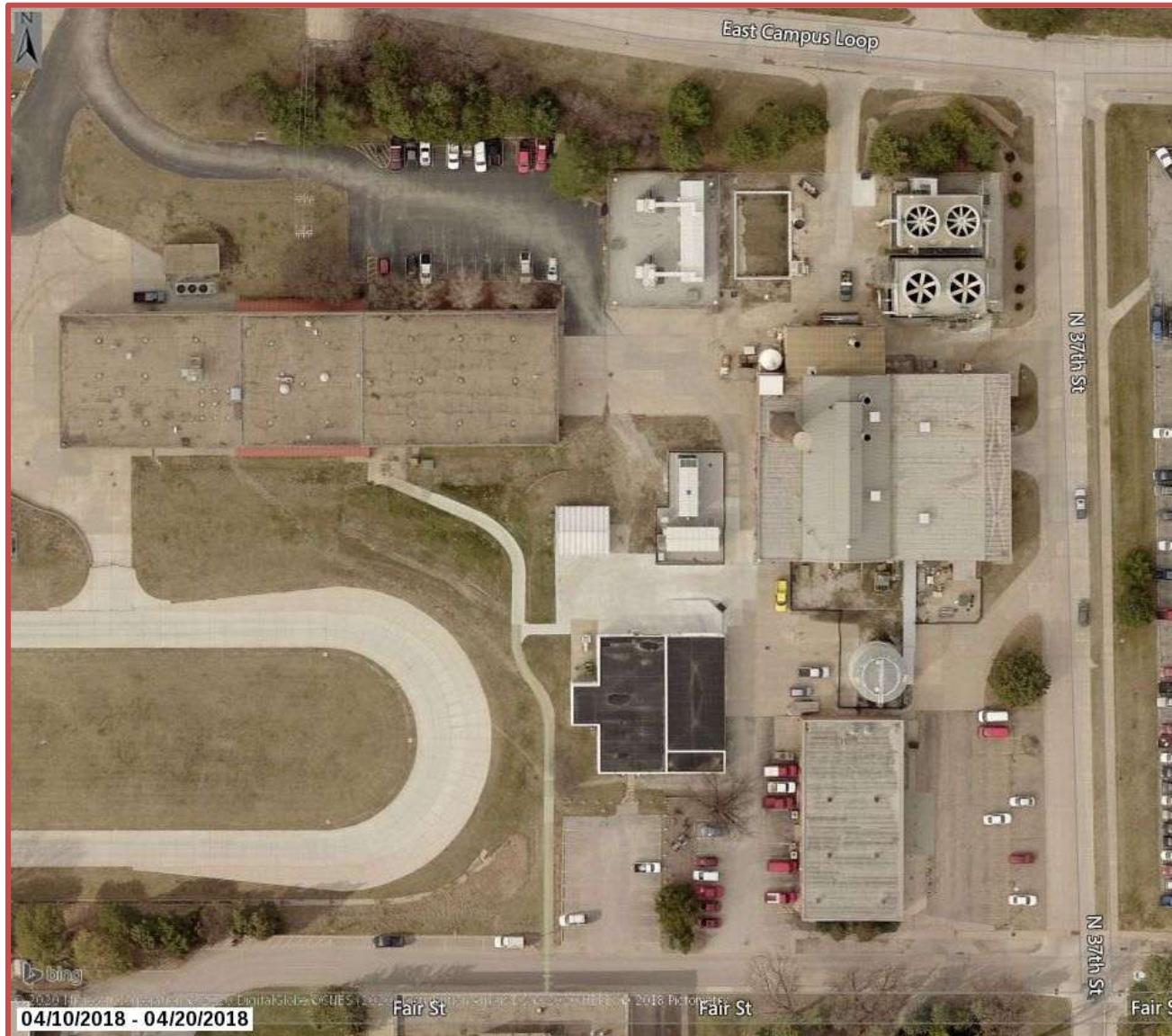
The LLCHD utilizes the same 'Insignificant Activities' list as the Nebraska Department of Environmental Quality. Under that list, stationary external combustion units 10.0 MMBtu/hr or less combusting natural gas, fuel storage and distribution equipment at Class I sources with aggregate annual throughput of less than 1 million gallons for the entire site, and cooling towers with a circulating capacity of less than 2,000 gallons per minute are considered insignificant.

For the purpose of this operating permit, the following activities are considered insignificant sources of emissions:

Insignificant Activity	Description
Natural Gas Space Heaters	Numerous natural gas-fired space heaters, each less than 10.0 MMBtu/hr, and less than 10.0 MMBtu/hr combined
No. 6 Fuel Oil Storage	Tank #85 – Built in 2001 – 85,000-gallon capacity above-ground storage – located adjacent to the Utility Plant
Diesel Fuel Storage	Tank #5000 – Built in 2003 – 5,000-gallon capacity above-ground storage – located at the Tractor Testing Laboratory
Diesel Fuel Storage	Tank #500 – Built in 2012 – 500-gallon capacity above-ground storage – located at Landscaping Services
40 CFR Part 60, Subparts K, Ka, and Kb do not apply to the No 6 or diesel oil storage tanks as the vapor pressure of No 2 and No 6 fuel oil does not reach applicability thresholds. As a result, these tanks are classified as insignificant activities.	

### 3.04 – Source Aerial View

The following image is an aerial view of the UNL East Campus physical plant. Additional emission units, such as the pathological material incinerators and most of the emergency generators, are not pictured here.



## Section 4 – Emission Characterization

### **4.01 – Emission Calculation Factors and Methods**

The procedures for performing emission calculations are provided in the Class I permit application. These procedures will be used to provide the emissions information required for the annual emissions inventory. UNL East will be required to utilize such factors and methods to provide the emissions information required for the annual emissions inventory. UNL East used manufacturer data and emission factors from the US Environmental Protection Agency's (US EPA) Compilation of Air Pollutant Emission Factors (AP-42) to calculate emissions for emission units as included.

### **4.02 – Maximum Potential Emission Calculations and Totals**

#### **4.02.01 – Maximum Potential to Emit (MPTE) – Criteria Pollutants**

These figures represent the MPTE, including federally enforceable requirements to limit emissions set forth in CP26-### and CP26-171I. The following emissions are derived from the approved application for this facility. EU 7-16 was installed prior to construction permit requirements, and is not subject to any federally enforceable limits on maximum fuel use or operating hours.

Emission Unit	Maximum Annual Process Rate	PM <sub>10</sub> (lbs/yr)	PM <sub>2.5</sub> (lbs/yr)	NO <sub>x</sub> (lbs/yr)	SO <sub>x</sub> (lbs/yr)	VOC (lbs/yr)	CO (lbs/yr)	CO <sub>2</sub> e (lbs/yr)	LEAD (lbs/yr)	Total HAP (lbs/yr)
2-1	5,852 Mgal	199,980	199,980	199,980	199,980	199,980	199,980	1.5E+08	9,980	3,539
2-2	854.98 MMcf							1.0E+08		1,616
3-1	5,501 Mgal							1.4E+08		3,326
3-2	5,945 Mgal							1.3E+08		244.19
3-3	794.06 MMcf							9.5E+07		1,501
5-1	2,371.84 Mgal							5.4E+07		97.43
5-2	322.37 MMcf							3.9E+07		609.28
6-1	2,371.84 Mgal							5.4E+07		97.43
6-2	322.37 MMcf							3.9E+07		609.28
4-1	$6.57 \times 10^9$ gals	547.94	547.94	-	-	-	-	-	-	-
4-2	$6.83 \times 10^9$ gals	2,279.4	2,279.4	-	-	-	-	-	-	-
4-3	$5.78 \times 10^9$ gals	1,928.7	1,928.7	-	-	-	-	-	-	-
7-2	2.00 Mgal	85.00	85.00	1,208.00	79.40	98.60	260.00	45,200.00	1.10	-
7-3	4.55 Mgal	193.38	193.38	2,748.20	180.64	224.32	591.50	102,830.00	2.50	-
7-4	0.62 MMcf	12.32	12.32	1,440.76	0.37	18.79	2,361.07	73,465.95	-	20.54
7-6	32.50 Mgal	255.13	255.13	14,235.00	224.25	373.75	3,770.00	735,401.88	7.80	0.01
7-7	9.05 Mgal	384.63	384.63	5,466.20	359.29	446.17	1,176.50	204,530.00	4.98	-
7-9	20.90 Mgal	164.07	164.07	9,154.20	144.21	240.35	2,424.40	472,919.98	5.02	-

Emission Unit	Maximum Annual Process Rate	PM <sub>10</sub> (lbs/yr)	PM <sub>2.5</sub> (lbs/yr)	NO <sub>x</sub> (lbs/yr)	SO <sub>x</sub> (lbs/yr)	VOC (lbs/yr)	CO (lbs/yr)	CO <sub>2e</sub> (lbs/yr)	LEAD (lbs/yr)	Total HAP (lbs/yr)
7-10	0.39 MMcf	7.81	7.81	913.43	0.24	11.91	1,496.89	46,576.64	-	13.02
7-11	0.85 MMcf	16.83	16.83	1,968.09	0.51	25.66	3,225.24	100,355.25	-	28.06
7-12	17.20 Mgal	135.02	135.02	7,533.60	118.68	197.80	1,995.20	389,197.30	4.13	-
7-13	29.00 Mgal	227.65	227.65	12,702.00	200.10	333.50	3,364.00	656,204.75	6.96	0.01
7-16	87.6 Mgal	3,723.00	3,723.00	52,910.40	3,477.72	4,318.68	11,388.00	2.0E+06	48.18	0.05
7-17	0.78 MMcf	15.50	15.50	1,813.07	0.47	23.64	2,971.20	92,450.80	-	25.85
7-18	5.00 Mgal	212.50	212.50	3,020.00	198.50	246.50	650.00	113,000.00	2.75	-
7-19	25.50 Mgal	200.18	200.18	11,169.00	175.95	293.25	2,958.00	577,007.63	6.12	0.01
7-20	0.55 MMcf	10.79	10.79	1,261.89	0.33	16.45	2,067.95	64,345.43	-	17.99
7-21	2.16 MMcf	42.85	42.85	5,010.53	1.30	65.33	8,211.08	255,492.66	-	71.43
7-22	52.0 Mgal	408.20	408.20	22,776.00	358.80	598.00	6,032.00	1.2E+06	12.48	0.01
7-23	0.66 MMcf	13.05	13.05	1,525.50	0.40	19.89	2,499.94	77,787.13	0.00	21.75
7-24	17.2 Mgal	135.02	135.02	7,533.60	118.68	197.80	1,995.20	389,197.30	4.13	-
7-25	0.95 MMcf	9.71	9.71	3,963.92	0.57	114.64	541.15	112,456.91	-	70.13
7-26	0.83 MMcf	8.46	8.46	3,456.21	0.50	99.96	471.84	98,052.98	-	61.15
7-27	0.90 MMcf	17.82	17.82	2,083.86	0.54	27.17	3,414.96	106,258.50	-	29.71
8-1	9,636 gals	-	-	-	-	2,400.0	-	-	-	-
8-2	9,636 gals	-	-	-	-	2,400.0	-	-	-	-
10-1	1.53E+06 pounds	979.74	979.74	-	-	-	-	-	0.76	1,756.86
10-2	13.14 MMcf	99.86	99.86	1,314.00	7.88	72.27	1,103.76	1.6E+06	0.01	24.80
11-1	5.26E+06 pounds	3,359.10	3,359.10	-	-	-	-	-	2.61	6,023.53
11-2	47.30 MMcf	359.51	359.51	4,730.40	28.38	260.17	3,973.54	5.7E+06	0.02	89.27
<b>Total Emissions (lbs/yr)</b>		215,813.201	215,813.201	379,917.860	205,657.697	213,104.598	268,923.421	8.14E+08	10,089.550	19,893.470
<b>Total Emissions (tons/yr)</b>		107.91	107.91	189.96	102.83	106.55	134.46	406,788.00	5.045	9.947

#### 4.02.02 – Hazardous Air Pollutant (HAP) MPTE

These figures represent the MPTE under federally enforceable requirements to limit emissions. The HAPs from this facility are those typically associated with natural gas and fuel oil combustion (primarily formaldehyde), as well as Hydrogen chloride, primarily emitted from the pathological material incinerators. As reflected in Section 4.02.01, total combined HAPs for this facility are just under 10 tons, meaning emissions of the greatest individual HAP are still well below the HAP major source threshold of 10 tons/year, and total HAP emissions are well below the HAP major source threshold of 25 tons/year.

#### 4.02.03 – MPTE – Permit Threshold Evaluation

The following table summarizes the source's maximum potential to emit, and compares it to applicable Class I and Class II operating permit thresholds:

Criteria Pollutant	Emissions (tpy)	Class II Permitting Threshold	Meet or Exceed?	Class I Permitting Threshold	Meet or Exceed?
PM <sub>10</sub>	107.91	≥ 15 tpy	Yes	≥ 100 tpy	Yes
PM <sub>2.5</sub>	107.91	N/A	N/A	N/A	N/A
NO <sub>x</sub>	189.96	≥ 40 tpy	Yes	≥ 100 tpy	Yes
SO <sub>x</sub>	102.83	≥ 40 tpy	Yes	≥ 100 tpy	Yes
VOC	106.55	≥ 40 tpy	Yes	≥ 100 tpy	Yes
CO	134.46	≥ 50 tpy	Yes	≥ 100 tpy	Yes
Lead	5.045	≥ 0.6 tpy	Yes	≥ 5 tpy	Yes
CO <sub>2</sub> e	406,788	N/A	N/A	N/A	N/A
Hazardous Air Pollutant	Emissions (tpy)	Class II Permitting Threshold	Meet or Exceed?	Class I Permitting Threshold	Meet or Exceed?
Greatest Single HAP	3.89	≥ 2.5 tpy	Yes	≥ 10.0 tpy	No
Total Combined HAPs	9.947	≥ 10.0 tpy	No	≥ 25.0 tpy	No

#### 4.03 – Limited and Controlled Potential to Emit (LCPTE)

The 'Potential to Emit' for this facility incorporates limits on emissions and/or operation that are set forth as federally-enforceable conditions of previously-issued construction permits. The owner/operator has not elected to institute further limitations on emissions/operation than what is set forth in those construction permits. Therefore, there is no need to evaluate the LCPTE, as the LCPTE is the same as the MPTE.

#### 4.04 – Permit Threshold Evaluation

As reflected in the tables in Section 4.02, emissions from this source are of sufficient quantities as to qualify for a Class I operating permit. This source will be classified as a 'major source' of air pollution for Class I (Title V) operating permit purposes.

The source will no longer be classified as a 'major source' of air pollution for 'Prevention of Significant Deterioration of Air Quality' (PSD) purposes. In accordance with 40 CFR Part 52, §52.21(b)(1)(i)(a), a source is a 'major source' for PSD purposes if it emits (or has the potential to emit) a regulated pollutant in quantities greater than 100 tons/year AND if it falls into a listed category (refer to §52.21(b)(1)(i)(a)). For sources that do not fall into one of the listed categories, the PSD major source threshold is 250 tons/year pursuant to 40 CFR Part 52, §52.21(b)(1)(i)(b). The UNL East Campus boiler plant falls under one of the listed source categories found in 40 CFR Part 52, §52.21(b)(1)(i)(a), specifically 'fossil-fuel boilers (or combinations thereof) totaling more

than 250 million British thermal units per hour heat input'. However, CP26-### limits emissions of all regulated air pollutants to less than 100 tons/year, thereby establishing the boiler plant as a 'nested' source within the larger UNL East Campus facility. As potential emissions are limited by a federally-enforceable requirement to less than PSD major source thresholds, the UNL East Campus boiler plant is a minor source for PSD purposes. The remainder of the UNL East Campus facility, which does not fall under one of the listed source categories, does not have the potential to emit regulated air pollutants in excess of 250 tons/year. As such, the entire UNL East Campus will be classified as a minor source for the purpose of the PSD program.

## **Section 5 – Applicable and Non-Applicable Regulations & Requirements**

### **5.01 – Applicable Regulations under the LLCAPCPRS**

(A) The following sections (§) of the LLCAPCPRS are applicable requirements of this permit:

**Table 1-A: Applicable Regulations of the LLCAPCPRS**

<b>Article 1: Administration and Enforcement</b>	
§1	Intent
§2	Unlawful Acts – Permits Required
§3	Violations – Hearings – Orders
§4	Appeal Procedure
§5	Variance
§6	Annual Fees
§7	Compliance – Actions to Enforce – Penalties for Non-Compliance
§8	Procedure for Abatement
§9	Severability
<b>Article 2: Regulations and Standards</b>	
§1	Definitions
§2	Major Sources – Defined
§4	Ambient Air Quality Standards
§5	Operating Permits – When Required
§6	Emissions Reporting – When Required
§7	Operating Permits – Application
§8	Operating Permits – Content
§12	Operating Permit Renewal and Expiration
§13	Class I Operating Permit – EPA Review – Affected States Review
§14	Permits – Public Participation
§15	Operating Permit Modifications – Reopening for Cause
§16	Stack Heights – Good Engineering Practice (GEP)
§17	Construction Permits – When Required
§18	New Source Performance Standards (NSPS)
§20	Particulate Limitations and Standards
§22	Incinerator Emission Standards
§23	National Emission Standards for Hazardous Air Pollutants (NESHAPs)
§27	Hazardous Air Pollutants – Maximum Achievable Control Technology (MACT)
§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
<b>Appendices</b>	
I	Emergency Emission Reduction Regulations
II	Hazardous Air Pollutants Sorted by Pollutant Name
III	Hazardous Air Pollutants Sorted by CAS Number

## 5.02 – Applicable Federal Regulations

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

**Table 1-B: Applicable Federal Regulations**

<b>40 CFR Part 60: New Source Performance Standards (NSPS)</b>	
<i>Subpart</i>	<i>Subpart Subject</i>
A	General Provisions
Dc	Small Industrial-Commercial-Institutional Steam Generating Units
IIII	Stationary Compression Ignition Internal Combustion Engines
JJJJ	Stationary Spark Ignition Internal Combustion Engines
<b>40 CFR Part 61: National Emission Standards for Hazardous Air Pollutants (NESHAPs)</b>	
<i>Subpart</i>	<i>Subpart Subject</i>
A	General Provisions
M	Asbestos
<b>40 CFR Part 63: Source Category NESHAPs</b>	
<i>Subpart</i>	<i>Subpart Subject</i>
A	General Provisions
ZZZZ	Stationary Reciprocating Internal Combustion Engines
CCCCCC	Gasoline Dispensing Facilities (Area Sources)
JJJJJJ	Industrial, Commercial, and Institutional Boilers at Area Sources
<b>40 CFR Part 82: Protection of the Stratospheric Ozone</b>	
<b>40 CFR Part 98: Mandatory Greenhouse Gas Reporting</b>	

## 5. 03 – Non-Applicable Local Regulations

(C) The following sections of the LLCAPCPRS are not requirements of this permit:

**Table 1-C: LLCAPCPRS Regulations not Incorporated in Permit**

<b>Article 2: Regulations and Standards</b>	
§9	General Permits
§10	Operating Permits for Temporary Sources
§19	Prevention of Significant Deterioration (PSD) of Air Quality
§21	Compliance Assurance Monitoring (CAM)
§24	Sulfur Compound Emission Standards for Existing Sources
§25	Nitrogen Oxides Emission Standards for Existing Sources
§26	Acid Rain
§3, §11, §30, §31	Reserved

## 5.04 – Non-Applicable Federal Regulations

(D) The following Federal Regulations are not requirements of this permit:

**Table 1-D: Non-Applicable Federal Regulations**

<b>Regulation</b>	<b>Non-Applicable Subparts, Section(s), or Appendix</b>
40 CFR Part 60	All subparts, except Subpart B and those listed as applicable in Table 1-B
40 CFR Part 61	All subparts, except those listed as applicable in Table 1-B

40 CFR Part 63	All subparts, except Subparts B–E and those listed as applicable in Table 1-B
40 CFR Part 64	Entire rule is non-applicable at the time of permit issuance
40 CFR Part 68	Entire rule is non-applicable at the time of permit issuance
40 CFR Part 98	Entire rule is non-applicable at the time of permit issuance

## 5.05 – Non-Applicable State Regulations

(E) The 'Prevention of Significant Deterioration of Air Quality' regulation(s) set forth under Title 129 of the Nebraska Administrative Code (Nebraska Air Quality Regulations) do not apply to this source.

## Section 6 – Discussion of Proposed Permit Conditions, Monitoring, Reporting, Notification and Record

### Keeping Requirements

The following conditions of the proposed permit contain monitoring, reporting, and record keeping requirements, a brief description of the condition is provided:

### 6. 01 – General Conditions

Conditions II through XXXI are general conditions that are applicable to all Class I sources. There will not be an in-depth discussion of these requirements, except to note the following General Conditions specifically related to monitoring, reporting, notification, and record-keeping:

- VI – Annual Fees
- XII – Annual Emission Reporting
- XIII(A) – Timely Applications
- XIII(B) – Certification of Truth, Accuracy, and Completeness
- XIV(C)-(D) – Record Keeping Elements and Retention Times
- XIV(E) – Semi-Annual Monitoring and Deviation Reporting
- XIV(N) – Permit Copy Maintenance and Retention
- XIV(R) – Annual Certification of Compliance
- XVI(F) – Notification of Source Modifications
- XXV (G) – 'Credible Evidence Rule'
- XXVI – Startup, Shutdown, and Malfunction (SSM) Provisions

### 6.02 – Specific Conditions

The following are specific conditions of the proposed Class I operating permit:

**NOTE:** Many of the 'Specific Conditions' of this permit have been incorporated as applicable requirements from Construction Permits CP26-###, #176, and CP26-171I. The legal and factual bases for these requirements have been established in the 'Statements of Basis' for those permits, and/or for previous versions of those permits.

Because the legal and factual bases for the conditions in those permits have already been established through previous permitting actions, this document will not contain further explanation or repetition of the legal and factual bases of conditions established pursuant to those permits. If you wish to obtain more information on those previously-issued permits, contact the LLCHD Air Quality Section at (402) 441-8040.

XXXII. – Authority for Specific Conditions. The provisions of the regulations cited under this condition establish that the Specific Conditions of this permit are deemed necessary by the Director to protect public health and/or the environment. All terms and conditions of this permit are enforced by the Administrator and the citizens under the Act, except for those terms and conditions that are specifically designated as

not being federally enforceable. This condition also establishes the fact that the permit requirements are in accordance with Construction Permits CP26-###, #176, and CP26-171I.

XXXIII. – Source-Wide Requirements. These specific conditions apply generally to the permitted source. The conditions established therein are established pursuant to elections made by the owner/operator in the approved application, or pursuant to applicability criteria set forth in the LLCAPPRS and/or applicable Federal Regulations.

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

The requirements set forth under this condition serve to:

- ensure that the units are operated in such a manner that their contributions to air pollution are minimized, and to incorporate any elections made in the approved application by reference;
- reference Specific Conditions of the permit that cover specific types of emission units;
- incorporate by reference any applicable operating requirements, processing limits, or work practice standards established pursuant to applicable federal regulations.

(B) Emission Limits and/or Emission Control Requirements.

The requirements set forth under this condition serve to:

- reference emission limits or emission control requirements, including those established in federal regulations, set forth for specific types of emission units in the Specific Conditions of the permit.

(C) Monitoring Requirements.

The requirements set forth under this condition serve to:

- establish the test methods and procedures to be used to conduct visible emissions surveys and observations, as required by Specific Conditions of the permit; and
- reference monitoring requirements, including those established in federal regulations, set forth for specific types of emission units in the Specific Conditions of the permit.

(D) Record Keeping Requirements.

The requirements set forth under this condition serve to:

- establish the required data for record keeping related to the gasoline dispensing tanks at the source;
- establish the required data elements for record keeping related to visible emissions surveys and observations;
- establish record keeping necessary to substantiate emission calculations for cooling tower emission units;
- establish record keeping requirements to show that emission units are maintained and operated to minimize contributions to air pollution;
- establish the requirement to keep necessary records to demonstrate compliance with federally enforceable controls; and
- reference record keeping requirements, including those established in federal regulations, set forth for specific types of emission units in the Specific Conditions of the permit.

(E) Reporting Requirements.

The requirements set forth under this condition serve to:

- specify the required data elements for annual emission reporting, and also that the owner/operator must submit emissions-related data as deemed necessary by the Director;
- reference reporting requirements, including those established in federal regulations, set forth for specific types of emission units in the Specific Conditions of the permit; and
- incorporate reporting requirements set forth in applicable construction permits, and to provide that the owner/operator may satisfy reporting required by a construction permit and the operating permit with a single report, when applicable.

(F) Requirements of the National Emissions Standards for Hazardous Air Pollutants for Source Categories (Source Category NESHAPs) set forth in Title 40, Part 63 of the Code of Federal Regulations (40 CFR Part 63).

The requirements set forth under this condition serve to:

- incorporate applicable requirements under 40 CFR Part 63 Subpart A as pursuant to 40 CFR Part 63 Subpart CCCCCC; and
- establish 40 CFR Part 63 Subpart CCCCCC as an applicable requirement for the gasoline distribution facility associated with UNL East Campus, which have been determined based on the following criteria:
  - The facility is considered an 'existing source', as it was constructed prior to November 9, 2006.
  - The monthly throughput for this facility averages less than 10,000 gallons/month; and
  - UNL East Campus classified as an 'area source' of hazardous air pollutants.

(G) Other Requirements.

The requirements set forth under this condition serve to:

- ensure that the owner/operator notifies the Department of any changes to the emission units that could have an impact on air pollutant emissions;
- establish the length of time in which the conditions set forth in this permit will remain applicable;
- provide the owner/operator with notice of the potential applicability of select federal regulations that may impact the emission units and planned changes; and
- ensure that the owner/operator achieves compliance with compliance with rules and regulations in a timely manner.

XXXIV. – Requirements for UNL East Campus Boiler Plant. These conditions apply to the emission units set forth in Table 34-A1 of the proposed permit. The conditions that apply to the affected emission units are established pursuant to Construction Permit CP26-###, elections made by the owner/operator in the approved application, or pursuant to applicability criteria set forth in the LLCAPPRS and/or applicable Federal Regulations.

(A) Affected Emission Units.

This condition establishes the emission units that are subject to the requirements set forth under Condition XXXIV.

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

The requirements set forth under this condition serve to:

- establish the operating requirements to be followed during operation of Boilers #4, #5, #6, and #7;
- establish the sulfur content limit of fuel oil combusted for Boilers #4, #5, #6, and #7;

(C) Emission Limits and/or Emission Control Requirements.

The requirements set forth under this condition serve to:

- incorporate the emission limits set forth in CP26-###;
- establish unit-specific particulate matter (PM) emission limits pursuant to LLCAPPRS Article 2, Sections 20;
- establish the 20% opacity standard from LLCAPPRS Article 2, Section 20, paragraph (E) as a requirement for the boilers; and
- reference the applicable emission limits and emission control requirements pursuant to federal regulations.

(D) Monitoring Requirements.

The requirements set forth under this condition serve to:

- establish the operating conditions under which the owner/operator is required to perform visible emissions surveys, as well as the frequency of such surveys;
- establish the monitoring requirements necessary to demonstrate compliance with the emission limits set forth in paragraph (C)(1) of this condition;
- establish a monitoring requirement by which the owner/operator will demonstrate compliance with the unit-specific PM emission limits (i.e. a one-time emission calculation using EPA emission factors); and
- reference applicable monitoring requirements set forth in applicable federal regulations.

(E) Record Keeping Requirements.

The requirements set forth under this condition serve to:

- establish the record keeping requirements to show that the fuel oil used in the boilers meets the standards established in the proposed permit;
- establish documentation of required visible emission surveys;
- establish record keeping requirements to show that the PM emission calculations required in the proposed permit are performed as specified; and
- reference applicable record keeping requirements set forth in applicable federal regulations.

(F) Notification and Reporting Requirements.

The requirements set forth under this condition serve to:

- ensure prompt reporting of any exceedances of established fuel use limits; and

- reference applicable reporting requirements set forth in applicable federal regulations.

(G) 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).  
The requirements set forth under this condition serve to:

- incorporate applicable requirements under 40 CFR Part 60 Subpart A pursuant to 40 CFR Part 60 Subpart Dc and to establish 40 CFR Part 60 Subpart Dc as an applicable requirement for Boilers #4, #5, #6, and #7.

(H) Requirements of the National Emissions Standards for Hazardous Air Pollutants for Source Categories (Source Category NESHAPs) set forth in Title 40, Part 63 of the Code of Federal Regulations (40 CFR Part 63).  
The requirements set forth under this condition serve to:

- establish the conditions in which 40 CFR Part 63 Subpart JJJJJ will become an applicable requirement for Boilers #4, #5, #6, and #7.

XXXV. – Requirements for UNL East Campus Emergency Engines. These conditions apply to the emission units set forth in Table 35-A1 of the proposed permit. The conditions that apply to the affected emission units are established pursuant to CP26-171I elections made by the owner/operator in the approved application, or pursuant to applicability criteria set forth in the LLCAPCPRS and/or applicable Federal Regulations.

(A) Affected Emission Units.  
This condition establishes the emission units that are subject to the requirements set forth under Condition XXXV.

(B) Operating Requirements, Throughput Limits, and/or Work Practice Standards.  
The requirements set forth under this condition serve to:

- establish operating limits and fuel standards set forth pursuant to CP26-171I, as well as the approved application; and
- incorporate fuel standards established pursuant to CP26-171I, as well as 40 CFR Part 60, Subpart III.

(C) Emission Limits and/or Emission Control Requirements.  
The requirements set forth under this condition serve to:

- establish unit-specific particulate matter (PM) emission limits pursuant to LLCAPCPRS Article 2, Sections 20; and
- establish the 20% opacity standard from LLCAPCPRS Article 2, Section 20, paragraph (E) as a requirement for the engines.

(D) Monitoring Requirements.  
The requirements set forth under this condition serve to:

- establish a monitoring requirement by which the owner/operator will demonstrate compliance with the unit-specific PM emission limits (i.e. a one-time emission calculation using EPA emission factors); and
- reference applicable monitoring requirements set forth in applicable federal regulations.

(E) Record Keeping Requirements.  
The requirements set forth under this condition serve to:

- establish record keeping requirements to demonstrate compliance with the operating limits established paragraph (B)(1) of this condition; and

- reference applicable record keeping requirements set forth in applicable federal regulations.

(F) Reporting Requirements.

The requirements set forth under this condition serve to:

- reference applicable reporting requirements set forth in applicable federal regulations.

(G) 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).

The requirements set forth under this condition serve to:

- incorporate applicable requirements under 40 CFR Part 60 Subpart A as pursuant to 40 CFR Part 60 Subparts IIII and JJJJ; and
- establish 40 CFR Part 60 Subparts IIII and JJJJ as applicable requirements for the engines, based on the type of engine (spark- or compression-ignition) and other applicability criteria as stated in Conditions XXXV(G)(1)-(2).

(H) Requirements of the National Emissions Standards for Hazardous Air Pollutants for Source Categories (Source Category NESHAPs) set forth in Title 40, Part 63 of the Code of Federal Regulations (40 CFR Part 63).

The requirements set forth under this condition serve to:

- establish 40 CFR Part 63 Subpart ZZZZ as an applicable rule for certain emergency engines, based on applicability criteria of Subpart ZZZZ.

XXXVI. – Requirements for UNL East Campus Pathological Material Incinerators. These conditions apply to the emission units set forth in Table 36-A1 of the proposed permit. The conditions that apply to the affected emission units are established pursuant to Construction Permit #176, elections made by the owner/operator in the approved application, or pursuant to applicability criteria set forth in the LLCAPPRS.

(A) Affected Emission Units.

This condition establishes the emission units that are subject to the requirements set forth under Condition XXXVI.

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

The requirements set forth under this condition serve to:

- incorporate operating limits set forth pursuant to Construction Permit #176, as well as the approved application.

(C) Emission Limits and/or Emission Control Requirements.

The requirements set forth under this condition serve to:

- establish unit-specific particulate matter (PM) emission limits pursuant to LLCAPPRS Article 2, Section 20;
- incorporate emission limits and emission control requirements set forth pursuant to Construction Permit #176; and
- establish the 20% opacity standard from LLCAPPRS Article 2, Section 20, paragraph (E) as a requirement for the engines.

(D) Monitoring Requirements.

The requirements set forth under this condition serve to:

- establish the operating conditions under which the owner/operator is required to perform visible emissions surveys, as well as the frequency of such surveys;
- establish a monitoring requirement by which the owner/operator will demonstrate compliance with the unit-specific PM emission limits (i.e. a one-time emission calculation using EPA emission factors).

(E) Record Keeping Requirements.

The requirements set forth under this condition serve to:

- establish record keeping requirements to demonstrate compliance with the visible emission surveys conducted in accordance with paragraph (D)(1) of this condition;
- establish record keeping requirements to demonstrate compliance with the emission limits and opacity limit established in paragraph (C)(3)
- establish record keeping requirements incorporated from Construction Permit #176; and
- establish record keeping requirements for the incinerator's secondary combustion chamber temperature, which have been established to ensure ongoing compliance with the temperature requirement set forth under paragraph (C)(2) of this condition.

(F) Reporting Requirements.

The requirements set forth under this condition serve to:

- reference applicable reporting requirements set forth in Construction Permit #176.

## 6.03 – Attachments

**Attachment A: Permit Shield** – The table contained in this attachment establishes equipment at this facility that are shielded from applicability of certain federal regulations, and briefly explains the reasons why the cited regulations are not applicable to the associated equipment.

**Attachment B: Federal Regulation Applicability Matrix for Emission Units** – This attachment provides information on emission units that are subject, or not subject, to Federal Regulations, and provides some of the emission unit specific information upon which the applicability determination is made.

**Attachment C: Construction Permit No. 176** – This attachment incorporates the specific conditions of Construction Permit No. 176. As is mentioned in the attachment, the 'General Conditions' of the construction permit were not incorporated into the attachment, because many are reflected in the 'General Conditions' of the operating permit.

**Attachment D: Construction Permit CP26-171I** – This attachment incorporates the specific conditions of CP26-171I.

**Attachment E: Construction Permit CP26-###** – This attachment incorporates the specific conditions of Construction Permit CP26-###. As is mentioned in the attachment, the 'General Conditions' of the construction permit were not incorporated into the attachment, because many are reflected in the 'General Conditions' of the operating permit.

**Attachment E: Visible Emissions Monitoring Procedure** – This attachment incorporates the procedures to be followed when conducting a visible emission survey for the emission points identified in this attachment.

## **Section 7 – Summary of Permit Conditions Enforceable by Agency**

- (1) LLCHD (Local) – All conditions indicated in this permit.
- (2) EPA (Federal) – All conditions indicated in this permit.

## **Section 8 – Compliance Assurance Monitoring (CAM)**

It has been determined that 40 CFR Part 64 does not apply to this facility. CAM requirements apply to pollutant-specific emissions units at major sources that are required to obtain a Part 70 (Title V) permit if the unit(s) satisfy all of the criteria set forth in 40 CFR Part 64 §64.2 paragraphs (a)(1-3). Notably, none of the emission units associated with this source utilize a control device to demonstrate compliance with a pollutant-specific limit, with the exception of the pathological material incinerators. All other units, besides the incinerators, fail to meet the CAM applicability criteria in §64.2 paragraph (a)(2). The incinerators fail to meet the CAM applicability criteria in §64.2 paragraph (a)(3), as the ‘potential pre-control device emissions’ are well below the amount required to be classified as a major source. Because none of the emission units at this source meet all of the applicability criteria set forth in 40 CFR Part 64 §64.2 paragraphs (a)(1-3), none of the emission units at this source are subject to the CAM requirements.

## **Section 9 – Pollution Prevention Opportunities**

The Department encourages UNL East to continually examine its operations for pollution prevention opportunities. The Department’s Technical Assistance Program can provide resources to aid the facility in exploring available pollution prevention options.

A guidance document outlining possible pollution prevention opportunities can be found on LLCHD’s Air Quality webpage at the link below or by scanning the QR code.



<https://www.lincoln.ne.gov/files/sharedassets/public/v/1/health-dept/environmental/air-quality-forms-amp-apps/pollutionpreventionopportunities.pdf>

## **Section 10 – Environmental Justice Considerations**

The Department utilized the Environmental Justice Screening Tool (EJSCREEN) to determine if there are environmental justice concerns in the area surrounding this facility. The U.S. EPA’s *‘Technical Guidance for Assessing Environmental Justice in Regulatory Analysis’* (June 2016) states that, “When using EJSCREEN, the 80<sup>th</sup> percentile is a suggested starting point for the purpose of identifying geographic areas in the United States that may warrant further consideration, analysis, or outreach. That is, if any of the EJ indexes for the areas under consideration are at or above the 80<sup>th</sup> percentile nationally, then further review may be appropriate.”

For urban areas, the Department analyzes a 1-mile radius around the center of the regulated facility. The EJSCREEN analysis performed by LLCHD personnel for this permitting action indicated that, in the 1-mile radius surrounding the approximate center of the facility, there is an affected population of approximately 13,100 people. For the affected population, the following 'Environmental Justice Indexes' and 'Supplemental Environmental Justice Indexes' equaled or exceeded the 80<sup>th</sup> percentile nationally.

- Lead Paint Indicator
- RMP Proximity
- Hazardous Waste Proximity
- Underground Storage Tanks
- Wastewater Discharge

The following 'Pollution and Sources Indicators' equaled or exceeded the 80<sup>th</sup> percentile nationally.

- Hazardous Waste Proximity
- Underground Storage Tanks
- Wastewater Discharge

In addition, the Socioeconomic Indicator for 'Low Income Population' also exceeded the 80<sup>th</sup> percentile nationally for the area included in the EJSCREEN analysis.

As a result, the Department encourages the owner/operator to continually evaluate how to effectively provide meaningful engagement to the public on the following, as needed:

- Potential releases of toxic pollutants (hazardous air pollutants), including specific pollutants emitted and potential quantity of each pollutant emitted in excess of each pollutant's respective 'Reporting Level' established in Appendices II and III of the LLCAPCPRS.
- Information regarding any on-site storage of hazardous waste (if any).
- Information regarding any underground storage tanks maintained on-site (if any).
- Information regarding the company's efforts to control and/or reduce emissions of regulated air pollutants, which may include any emission controls utilized and/or any limitations on emissions or throughputs employed.
- Guidance on how to obtain copies of operating and construction permits, as well as any associated public document, for public review and comment.

The Department does not have any specific recommendations pertaining to meaningful public engagement on matters relating to Lead Paint and Wastewater Discharge, as those are matters beyond the purview of air quality operating/construction permits, and also beyond the control of company/facility representatives.

## **Section 11 – Air Quality Section Recommendation**

The Department proposes approval of a Class I Operating Permit renewal for this facility. Enforceable permit conditions have been provided in the draft permit. A final determination on the permit will be made following the opportunity of the U.S. EPA and affected states to comment on the draft permit, and any comments received have been addressed.

## **Section 12 – Public Participation, Affected States Review, and EPA Review**

The following notice is scheduled for publication in the **December 22, 2025** edition of the Lincoln Journal Star, which is a newspaper of general circulation in Lancaster County, Nebraska. This notice will also be made available on the LLCHD Air Quality Section website at the following URL:

<http://www.lincoln.ne.gov/city/health/environ/pollu/pubnot.htm>

A copy of this notice will be sent to the affected states, as well as the EPA's Region 7 permits coordinator. Copies of the proposed permits, applications, and this statement of basis document will be provided upon request.

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## NOTICE OF INTENT TO ISSUE PERMITS

### Lincoln-Lancaster County Health Department (LLCHD)

A. In accordance with Article 2, Sections 13 and 14 of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards (LLCAPCPRS), the LLCHD gives notice of the preliminary determination to approve the following permitting action(s) for the source identified in item 'B' (below). The 30-day public comment period commences **December 23, 2025 and ends on January 22, 2026**.

1. Proposed issuance of a Class I (Title V) Operating Permit
2. Proposed issuance of a minor-NSR Construction Permit

B. Issuance of the proposed permits allows for continued operation of the subject emission source within Federal, State and Local requirements. Provided below are the name, address, and the North America Industry Classification System (NAICS) code(s) describing the nature of business at the subject emission source:

1. Source Name: University of Nebraska-Lincoln (UNL) East Campus
2. Source Address: 1901 N 37<sup>th</sup> Street, Lincoln, NE 68583
3. NAICS Codes: 611301 (Colleges, Universities, and Professional Schools)

C. Potential emissions exceed the Class I permit thresholds set forth under Article 2, Section 5 of the LLCAPCPRS, and as such, this source qualifies for a Class I operating permit as a 'major source'.

D. The proposed Class I operating permit will allow for emissions of the following regulated air pollutants in the associated quantities. All quantities are in units of tons per year, or tpy.

Particulate matter <10 micrometers in diameter (PM <sub>10</sub> )	107.91 tpy
Particulate matter <2.5 micrometers in diameter (PM <sub>2.5</sub> )	107.91 tpy
Oxides of Nitrogen (NO <sub>x</sub> )	189.96 tpy
Oxides of Sulfur (SO <sub>2</sub> , SO <sub>3</sub> , and combinations thereof)	102.83 tpy
Volatile Organic Compounds (VOC)	106.55 tpy
Carbon Monoxide	134.46 tpy
Lead	5.05 tpy
Greatest Individual Hazardous Air Pollutant	3.89 tpy
Total Combined Hazardous Air Pollutants	9.95 tpy
Carbon Dioxide Equivalents	406,788.00 tpy

E. Lancaster County is an 'attainment/unclassifiable' area for all pollutants subject to the National Ambient Air Quality Standards (NAAQS), meaning air quality in Lancaster County meets or is cleaner than the national standards. This permitting action is not expected to change that status.

F. The proposed permit is available for inspection during business hours at the office of the LLCHD at 3131 O Street, Lincoln, NE 68510. A copy of this public notice document may also be obtained online at: <http://lincoln.ne.gov>, keyword search "air". Telephone inquiries regarding this public notice may be directed to the Air Quality Section at 402-441-8040. If alternate formats of materials are needed, please notify the Department by calling 402-441-8040 or 402-441-6284 for TDD users.

G. Within the 30-day public comment period, any interested person, agency, or group may submit comments on the proposed permit(s), or request or petition the Director of the LLCHD for a public

hearing in accordance with item 'H' below. Comments on the proposed permit(s) may be mailed to the attention of the Air Quality Section Supervisor at the address provided in item 'F' above, or submitted via e-mail to [health@lincoln.ne.gov](mailto:health@lincoln.ne.gov) using the subject line 'Comment on Air Quality Permit'. Individuals commenting via e-mail are asked to provide their home address and phone number for follow-up correspondence.

- H. Requests for public hearing must be made in writing, and must state the nature of the issues to be raised and all arguments and factual grounds supporting their position. If a public hearing is granted by the Director, the hearing will be advertised by public notice at least 30 days prior to its occurrence.
- I. The LLCHD does not discriminate on the basis of race, color, national origin, disability, age, or sex in administration of its programs or activities, and LLCHD does not intimidate or retaliate against any individual or group because of their participation in or opposition to actions protected or prohibited by 40 CFR Part 7, or for the purpose of interfering with any right or privilege guaranteed by 40 CFR Part 7.