

DRAFT/FINAL

AIR PERMITTING ASSESSMENT FOR NEW GENERATION

State Line Power Plant & Riverton Power
Station

BLACK & VEATCH PROJECT NO. 423807
BLACK & VEATCH FILE NO. 30.0000

PREPARED FOR



Liberty Utilities

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1.0 Introduction

Liberty Utilities (LU) has authorized Black & Veatch to develop an Environmental Permitting Feasibility Study (herein referred to as the Study) for the State Line Power Plant near Joplin, Missouri and Riverton Power Station near Riverton, Kansas. This Study investigates the permitting requirements and processes for the installation of new generation at either facility to determine if there are any potential fatal flaws which might hinder the installation. The new generation would consist of a natural gas-fired simple cycle combustion turbine (SCCT) project. The specific SCCT configurations being evaluated at this time include the installation of either one or two 250 megawatt (MW) SCCTs. Given the air construction permit typically carries the longest lead time of all the environmental authorizations, this Study primarily focuses on the applicable requirements for securing the air construction permits from either the Missouri Department of Natural Resources Air Pollution Control Program (MoDNR) for State Line Power Plant and the Kansas Department of Health and Environment (KDHE) for Riverton Power Station. This Study includes a review of state and federal air regulations to determine applicable/potentially applicable regulations with an emphasis given to uncovering fatal flaws.

2.0 Regulatory Review

Air quality permitting in Missouri and Kansas is under the jurisdiction of the MoDNR and KDHE, respectively. The United States Environmental Protection Agency (U.S. EPA or EPA) has given the MoDNR and KDHE authority to implement and enforce the federal Clean Air Act (CAA) provisions via state air regulations under its approved State Implementation Plan (SIP). The following subsections discuss the applicable air quality programs, regulations, and standards associated with the installation of the SCCTs.

2.1 New Source Review

The New Source Review (NSR) air permitting provisions are implemented for new major stationary sources and major modifications at existing major sources under two programs. Which of the two programs is potentially applicable depends on the local air quality attainment status. Air construction permits for new major sources or major modifications located in attainment or unclassifiable areas are called Prevention of Significant Deterioration (PSD) permits, while those proposing to construct such projects located in non-attainment areas must obtain non-attainment NSR (NA NSR) permits. There are considerable differences between the PSD and NA NSR air permitting programs, and the regulations are applied on a pollutant-by-pollutant basis depending on the pollutant-specific attainment status.

Geographical areas (i.e., counties) in Missouri or Kansas are designated for each pollutant as attainment, non-attainment, or unclassifiable based on actual air quality measurements made across the state. Attainment areas are those areas in compliance with the state and national ambient air quality standards (NAAQS), and non-attainment areas are those areas in violation of the NAAQS. Unclassifiable areas have insufficient data to clearly determine the air quality but are assumed to be in attainment for NSR air permitting purposes. Currently, Jasper County, Missouri and Cherokee County, KS are designated as attainment or unclassifiable for all the criteria pollutants. Therefore, of the two NSR permitting paths, PSD air permitting rules apply to all projects in this assessment.

The applicable air construction permitting requirements depend upon the site-specific air quality status, the size and type of facility, and the annual tons per year (tpy) of emission increases resulting from the modifications. The NSR modification permitting regulations are codified at 40 CFR Part 52.21 of the federal regulations.

Since both facilities are in an area currently classified as attainment/unclassifiable for all criteria pollutants, the PSD pre-construction review regulations apply to the facility. The PSD air permitting regulations apply to new major sources or major modifications at existing major sources. A major PSD source is defined as either an air emission source having potential emissions greater than 250 tons per year, or 100 tons per year if it belongs to one of 28 listed source categories. Both facilities are classified as one of the 28 listed source categories (i.e., fossil fuel-fired steam electric plant of more than 250 MBtu/hr heat input) and is subject to the 100 tpy threshold. Based on potential emissions of each of the existing facilities being greater than 100 tpy for at least one criteria pollutant, it is assumed both facilities are currently classified as major PSD sources.

As described in the NSR program, in order for a proposed project at an existing major source to be classified as a major modification, the project must result in both a significant emissions increase of a regulated NSR pollutant and a significant net emission increase of that pollutant from the major stationary source. As such, once the scope of the project has been identified, the source must first determine whether the project will result in a significant emissions increase. This first step is commonly referred to as "Step 1" of the NSR test and requires an evaluation of the potential change in emissions resulting from all emission units involved in the project. If the project will cause a significant emissions

increase, then a source-wide emissions “netting” analysis is required to determine if major NSR applies. “Source-wide netting” or “contemporaneous netting” refers to the process of considering certain previous and prospective emissions changes at an existing major source apart from any proposed new emissions sources to determine if a net emission increase of a pollutant will result from a proposed project. This second step is commonly referred to as “Step 2” of the NSR test. If a net emissions increase will result, major NSR applies to each pollutant’s emissions for which the net increase is significant.

Step 1 of the NSR test is calculated by determining the emissions changes from the emissions units that are affected by the project. As such, the Step 1 calculation for this proposed project would consider the installation of the proposed SCCTs and any associated ancillary equipment. For new sources, the Step 1 increases (i.e., Potential Emissions Increases - PEI), are equal to the Potential to Emit (PTE). The PEI is then compared with the PSD significant emission rate (SER) to determine NSR/PSD air permit applicability on a pollutant-by-pollutant basis. Only those pollutants where the Step 1 analysis indicates a significant increase are carried forward to Step 2 of the overall applicability analysis.

Based on preliminary emission profiles for the proposed SCCTs, the installation of even a single SCCT operating at 20 percent capacity would exceed the SER for the emissions of NO_x, therefore, a Step 2 analysis would be necessary to determine if the proposed project would be subject to major NSR/PSD review. Should the Step 2 analysis exceed the major source thresholds, the proposed project would be subject to PSD review, which includes a best available control technology (BACT) assessment, ambient air quality impact analysis, and an additional PSD impact analysis (summarized in Figure 1). A discussion about applicability to major PSD review associated with each individual facility is provided below.

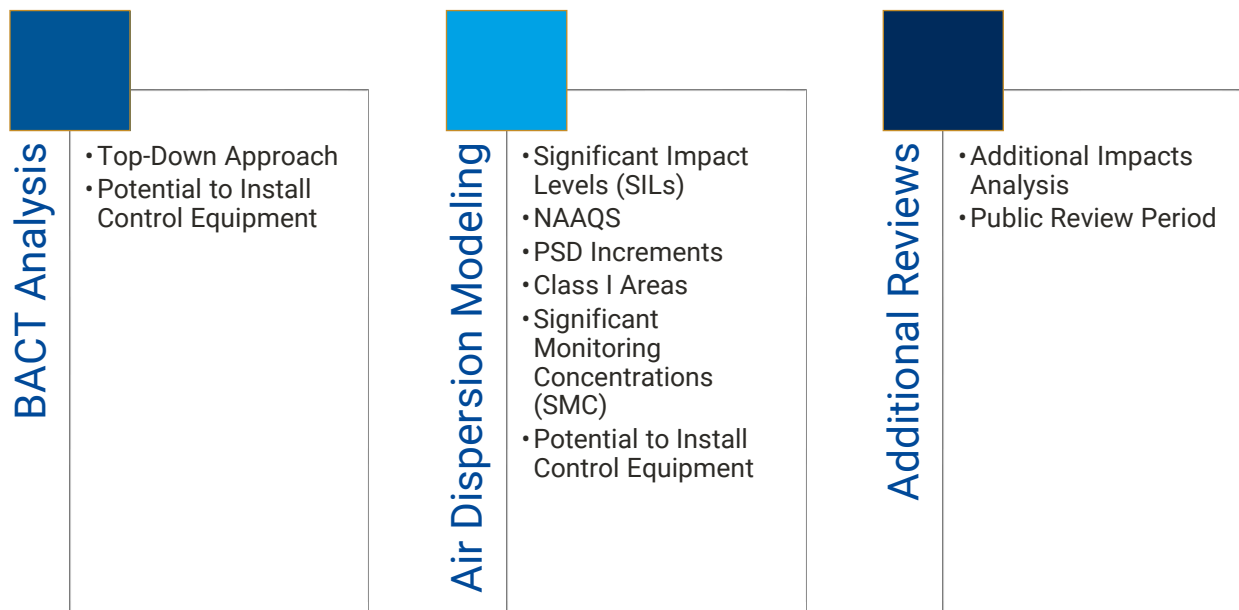


Figure 1 Summary of PSD Review Requirements

2.1.1 State Line Power Station

Based on the information provided in the current operating permit, the State Line Power Station is classified as an existing major PSD source. It is anticipated that no physical or operational modifications to existing emission units will be required as part of the proposed project. Consequently, the net emissions increase determined in the Step 2 analysis would be equivalent to the emissions increase identified in the Step 1 analysis. As previously noted, the proposed project is expected to exceed the PSD SER threshold for NO_x, thereby triggering the requirement for a major PSD review under applicable federal regulations.

Regarding the BACT determination, for a SCCT unit, the installation of a selective catalytic reduction (SCR) system would be necessary to achieve compliance with NO_x emission limits. Furthermore, if emissions of carbon monoxide (CO) or volatile organic compounds (VOC) exceed their respective SER thresholds, the implementation of an oxidation catalyst would be required to ensure compliance with BACT requirements.

2.1.2 Riverton Power Plant

Based on the information provided in the current operating permit, the Riverton Power Plant is classified as an existing major PSD source. It is anticipated that no physical or operational changes to existing emission units will be required as part of the proposed project. However, it should be noted that a separate minor modification was conducted at the facility that may fall within the contemporaneous period. In accordance with PSD regulations, emissions from the minor modification project must be aggregated with the current project's emissions in the Step 2 analysis to ensure that smaller projects are not improperly segmented to avoid PSD applicability. As a result, the net emissions increase for Step 2 may need to reflect the combined impact of both the prior minor modification and the current proposed project.

The contemporaneous period is defined as the date five years before construction commences and the date the emissions increase from the change occurs. With an anticipated date of construction in 2028 for the proposed project, the contemporaneous period would begin in 2023, hence including the minor modification to install the two new SCCT, which started construction in 2025.

One important distinction when evaluating emission increases from a project occurring in the contemporaneous period is that the emissions increase is calculated from the differences between the baseline actual emissions and the PTE, not the projected actual emissions. Therefore, in this case, it is likely that NO_x emissions will exceed PSD SER threshold and trigger major PSD review.

Contrarily, the BACT assessment for Riverton Power Plant will only apply to the emission units modified as part of the current proposed project, in this case, the newly proposed SCCT. Per U.S. EPA guidance, BACT is not retroactively applied to emission units from prior modifications unless those units are also being physically or operationally modified as part of the current project. As mentioned for the State Line Power Plant scenario, BACT for NO_x emissions on a SCCT unit is the installation of a SCR system. The guidance is less clear on whether the contemporaneous emissions need to be included in the Significant Impact Levels (SILs) assessment but will need to be included in any NAAQS assessment. The air dispersion modeling protocol will outline which emission units will be included in the SIL and NAAQS analyses and KDHE will need to approve this protocol as part of the air permit application process.

Regardless of whether certain pollutants fall below the SER threshold in Step 1, KDHE may require aggregation with the previous minor modification to prevent segmentation of a larger project into separate smaller actions. If KDHE determines that both projects constitute a single project, then BACT

and air dispersion modeling would need to be performed for all emission units associated with both the current and prior modifications. However, it remains EPA's position that projects which are not "substantially related" may be permitted separately. In making this determination, EPA considers factors such as timing, funding, consumer demand, company statements, and other economic realities. A determination letter outlining Liberty's position on these parameters should be submitted to KDHE, which may seek concurrence from U.S. EPA regarding any segmentation decisions for the Riverton Power Plant.

2.2 New Source Performance Standards

Section 111 of the CAA authorized the U.S. EPA to develop technology-based standards which apply to specific categories of stationary sources. These standards are referred to as New Source Performance Standards (NSPS) and are found in 40 CFR Part 60. The applicable NSPS for combustion turbines are listed below. These standards apply uniformly to either facility, with no site-specific nuances or exceptions anticipated.

2.2.1 40 CFR 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

On February 18, 2005, the U.S. EPA published 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (NSPS Subpart KKKK). This subpart applies to combustion turbines with a heat input greater than or equal to 10 MMBtu/hr that commenced construction after February 18, 2005. The proposed combustion turbine(s) will be subject to NSPS Subpart KKKK.

Per NSPS Subpart KKKK, because the new combustion turbine(s) will be subject to NSPS Subpart KKKK, the unit(s) will not be subject to NSPS Subpart GG. NSPS Subpart KKKK includes standards for mandatory compliance of NO_x and Sulfur Dioxide (SO₂) which are summarized in Table 2-1.

Table 2-1 Nitrogen Oxides and Sulfur Dioxide Emission Limits for New Stationary Combustion Turbines

Pollutant	Turbine Type	Emission Limit
NO _x	New turbines firing natural gas with > 850 MMBtu/hr of heat input	15 ppm at 15 % O ₂ or
		54 ng/J of useful output (0.43 lb/MWh)
	New turbines firing fuels other than natural gas with > 850 MMBtu/hr of heat input	42 ppm at 15 % O ₂ or
		160 ng/J of useful output (1.3 lb/MWh)
	Turbines > 30 MW (peak load) operating at less than 75 percent load or operating at temperatures less than 0 °F	96 ppm at 15 % O ₂ or
		590 ng/J of useful output (4.7 lb/MWh)
SO ₂	Any subject combustion turbine	110 ng/J of gross output (0.90 lb/MWh) or
		26 ng/J of heat input (0.060 lb/MMBtu)
Source: 40 CFR Part 60, Subpart KKKK		

On November 22, 2024, the U.S. EPA proposed changes to NSPS Subpart KKKK, affecting those combustion turbines constructed, reconstructed, or modified after such date that will be listed in Federal Register version of the proposed rule. This proposed rule would establish NO_x emission limits based on the rated size of the combustion turbine, capacity factor, and the type of fuel burned. Should this

proposed rule become final, as proposed, the proposed new combustion turbine would be subject to the requirements outlined in the proposed rule. However, as currently proposed, the new proposed combustion turbines maybe required to install a SCR to control NO_x emissions. Continued attention to this proposed rule is recommended to determine what, if any, changes are made to the requirements proposed within this rule.

2.2.2 40 CFR 60 Subpart TTTTa – Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units

On April 25, 2024, the U.S. EPA promulgated the final greenhouse gas (GHG) standards for power plants under the CAA (originally introduced May 11, 2023) which established national GHG emission standards for stationary combustion turbines which commenced construction or reconstruction after May 23, 2023. The rule regulates CO₂ emissions from new and reconstructed stationary combustion turbines which has a base loading rating greater than 250 MMBtu/hr and serves a generator(s) capable of selling greater than 25 MW of electricity to a utility power distribution system.

Based on a high-level review these combustion turbines would be subject to the following emission limits summarized in Table 2-2. The emission limits are categorized based on their operation profile as follows:

- **Base load:** supplies more than 40 percent of its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis.
- **Intermediate load:** supplies more than 20 percent but less than or equal to 40 percent of its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis.
- **Low load:** supplies 20 percent or less of its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis.

“Net electric sales” means the gross electric sales to the utility power distribution system minus purchased power and several other items. Potential electrical output means the base load rating design efficiency at the maximum electric production rate multiplied by the base load rating (expressed as MMBtu/h) of the EGU, multiplied by 106 Btu/MMBtu, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 h/yr. Final determination on which emission limit is applicable will be dependent on how the proposed unit(s) will be operated.

Table 2-2 Carbon Dioxide Emission Limits for New Stationary Combustion Turbines That Commenced Construction after May 23, 2023

Turbine Type	Emission Limit
Base load	For 12-operating month averages beginning before January 2032, 360 to 560 kg CO ₂ /MWh (800 to 1,250 lb CO ₂ /MWh) of gross energy output; or 370 to 570 kg CO ₂ /MWh (820 to 1,280 lb CO ₂ /MWh) of net energy output as determined by the procedures in §60.5525a.
	For 12-operating month averages beginning after December 2031, 43 to 67 kg CO ₂ /MWh (100 to 150 lb CO ₂ /MWh) of gross energy output; or 42 to 64 kg CO ₂ /MWh (97 to 139 lb CO ₂ /MWh) of net energy output as determined by the procedures in §60.5525a.

Intermediate load	530 to 710 kg CO ₂ /MWh (1,170 to 1,560 lb CO ₂ /MWh) of gross energy output; or 540 to 700 kg CO ₂ /MWh (1,190 to 1,590 lb CO ₂ /MWh) of net energy output as determined by the procedures in §60.5525a.
Low load	Between 50 to 69 kg CO ₂ /GJ (120 to 160 lb CO ₂ /MMBtu) of heat input as determined by the procedures in §60.5525a.
Source: 40 CFR Part 60, Subpart TTTTa	

On June 17, 2025, the U.S. EPA issued a proposed rule that would repeal all GHG emission standards for fossil fuel-fired power plants. Within this proposed rule, U.S. EPA also proposed an alternative plan to repeal a narrower set of requirements that includes carbon capture and sequestration/storage (CCS)-based standards for new base load stationary combustion turbines. Continued attention to this proposed rule is recommended to determine what, if any, changes are made to the requirements proposed within this rule and how it may affect this proposed project.

2.3 National Emission Standards for Hazardous Air Pollutants

Section 112 of the CAA addresses emissions of hazardous air pollutants (HAP). The 1990 CAA Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources of HAP emissions. For major sources, Section 112 requires that U.S. EPA establish emission standards that require the maximum degree of reduction in HAP emissions. These emission standards are commonly referred to as maximum achievable control technology (MACT) standards. For area sources, U.S. EPA may elect to promulgate standards or requirements which provide for the use of generally available control technology (GACT) or management practices by such sources to reduce emissions of HAPs. These MACT/GACT standards are found in 40 CFR Part 63.

A major source of HAPs is a site that emits or has the PTE any single HAP at a rate of 10 tons or more per year or any combination of HAPs at a rate of 25 tons or more per year. An area source of HAPs is a source that is not a major source of HAPs. Specific applicability of MACT/GACT standards to the proposed combustion turbine(s) is reviewed in the next section.

State Line Power Plant, as currently configured, has a site-wide formaldehyde PTE of 8.94 tons of per year and is categorized as a minor source of HAPs¹. Upon installation of a new SCCT, the site-wide formaldehyde PTE is likely to increase by more than 2 tons per year, meaning that the facility is expected to become a major source of HAPs due to formaldehyde PTE greater than 10 tons per year.

Riverton Power Station, as currently configured, is categorized as a minor source of HAPs. It is unclear whether installation of a new SCCT would increase the facility-wide HAPs PTE above major source of HAPs thresholds. It is recommended that LU conduct further evaluation to determine the expected HAPs emissions at Riverton Power Station.

¹ Formaldehyde PTE is from Table 6 of a document titled: "New Source Review Permit Amendment – Permit Number: 022021-007A Project Number: 2022-06-006; Installation Number: 097-0104", dated March 28, 2023

2.3.1 40 CFR 63 Subpart YYYY – National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

On March 5, 2004, the U.S. EPA published 40 CFR Part 63 Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines (NESHAP Subpart YYYY, or CT MACT). This subpart only applies to combustion turbines located at major sources of HAP emissions.

As stated previously, it is expected that upon construction of a new SCCT, State Line Power Plant will likely become a major source of HAPs and would therefore become subject to the CT MACT and the following requirements would apply:

- Concentration of formaldehyde limited to 91 parts per billion (ppb)
- Duration of turbine startup must be confined as defined in §63.6175; for simple cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 1 hour, whichever is less.
- If an oxidation catalyst is utilized to achieve compliance with the formaldehyde emission limit, the catalyst temperature must be monitored and maintained within the range recommended by the catalyst manufacturer.
- Conducting initial and annual performance tests
- Adhering to several recordkeeping and reporting requirements, including submitting an initial notification and semi-annual reporting

The applicability of this subpart to Riverton Power Station will need to be determined upon final design of this project. If it is determined that Riverton Power Station will become a major source of HAPs, similar requirements to those listed above would apply. If it is determined that either location, upon the addition of the new unit(s), remains an area source of HAPs, this subpart would not apply.

For sites where classification to major would be applicable, any existing unit at either site would not be subject to an emission standard under the CT MACT as long as it was not reconstructed after January 14, 2023. Under the rule, an existing combustion turbine means you commenced construction or reconstruction of the combustion turbine on or before January 14, 2003. Table 2-3 provides a summary of the existing combustion turbines at both sites. Based on this information, the State Line Power Plant is likely not to be affected by switching to a major source of HAPs, unless reconstruction occurred for Turbine 2-1/2-2. For the Riverton Power Station, the remaining existing units at the site (i.e., Units 10/11 are proposed to be removed) would be subject to the formaldehyde emission limit should the site become classified as a major source of HAPs.

Table 2-3 Liberty Utility Existing Combustion Turbines Summary

Facility	Turbine	Date	Impact
State Line Power Plant	EP03 – Turbine #1	Installed 1994	Emission limit not applicable
	EP05 – Turbine #2-1	Upgraded 2021	Need to determine if reconstruction occurred, if so, then subject to the emission limit
	EP06 – Turbine #2-2	Upgraded 2021	Need to determine if reconstruction occurred, if so, then subject to the emission limit
Riverton Power Station	EU-010 – Unit #10	March 1989	Emission limit not applicable
	EU-011 – Unit #11	March 1989	Emission limit not applicable
	EU-012 – Unit #12	July 2013	Emission limit would be applicable
	EU-013 – Unit #13	2025/2026	Emission limit would be applicable
	EU-014 – Unit #14	2025/2026	Emission limit would be applicable

2.3.2 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

On June 15, 2004, the U.S. EPA established national emission limitations and operating limitations for HAPs emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This rule codified at 40 CFR 63 Subpart ZZZZ, is commonly referred to as the RICE MACT.

Both facilities are currently classified as area sources of HAPs and the existing emergency engines are classified as “existing” based on the construction date of each of the engines. Should either site become a major source of HAPs, while the classification of either “existing” or “new” under the definition of each may change, the requirements under the rule would not be any more stringent than those currently. Concurrence of our interpretation of these requirements for the existing engines is recommended from the applicable state agency.

2.4 National Ambient Air Quality Standards

Section 109 of the CAA authorizes the U.S. EPA to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. These standards are designed to protect sensitive populations and are categorized as either primary (health-based) or secondary (welfare-based). NAAQS apply to six principal pollutants, known as “criteria pollutants,” and serve as the foundation for air quality planning and regulatory actions at the state and federal levels. Compliance with NAAQS is determined through ambient air monitoring and modeling, and attainment status directly influences permitting requirements and emission control obligations for new and existing sources.

2.4.1 Particulate Matter

On February 7, 2024, U.S. EPA announced a final rule revising the primary PM_{2.5} NAAQS. The existing primary standard of an annual average of 12 µg/m³, averaged over 3 years has been lowered to an annual

average of $9 \mu\text{g}/\text{m}^3$, averaged over 3 years. This change has the potential to introduce difficulties in executing PSD projects due to the existing ambient concentration.

Air quality modeling requirements (such as those required for PSD permitting) will be impacted by the new standard. Because NO_x and SO_2 are considered $\text{PM}_{2.5}$ precursors, triggering major PSD permitting for $\text{PM}_{2.5}$ can be done by exceeding the applicable threshold for either $\text{PM}_{2.5}$, NO_x , or SO_2 .

An additional obstacle from the lowered $\text{PM}_{2.5}$ NAAQS standard is the requirement to, when conducting air quality modeling, include background concentrations from ambient monitoring (design values). The monitoring site with valid annual design values nearest to both project sites is the Joplin, MO (El Dorado Springs) monitor and has a 2024 design value of $6.0 \mu\text{g}/\text{m}^3$. Other NAAQS sites near the existing plants have 2024 design values at or near the new standard (e.g., Quapaw Tribe of Indians, OK has a design value of $9.7 \mu\text{g}/\text{m}^3$; Tulsa has a design value of $8.6 \mu\text{g}/\text{m}^3$). This information highlights two potential implications:

1. With the new NAAQS set at $9 \mu\text{g}/\text{m}^3$, the requirement to include background concentrations leaves less “margin” for additional emissions from proposed sources in air quality modeling demonstrations.
2. Because the recent design values for areas near Joplin, MO are approaching the new $\text{PM}_{2.5}$ NAAQS, there is a possibility of becoming a non-attainment area for $\text{PM}_{2.5}$ in the future, which means permitting would include the additional challenges presented by NA NSR permitting (as discussed previously). It should be noted, MoDNR submitted their proposed classifications for areas within Missouri for this revised NAAQS back in early 2025. Based on MoDNR’s analysis, all areas within Missouri should be classified as attainment or unclassifiable with this revised standard except for an area surrounding the city of St. Louis. Likewise, KDHE submitted their proposed classifications and indicated that all areas within the state of Kansas should be classified as attainment, except for Wyandotte County (Kansas City area) which should be classified unclassifiable due to the bias from the FEM T620 monitors. Final approval from U.S. EPA (by February 6, 2026) will need to be completed to formalize this classification.

In evaluating compliance with the NAAQS, it is important to consider not only direct emissions of $\text{PM}_{2.5}$, but also its precursor pollutants, namely NO_x and sulfur dioxide (SO_2). This is particularly relevant when assessing the proximity of significant emission sources, as nearby large emitters can influence cumulative air quality impacts. If air quality modeling conducted as part of a PSD permit application indicates the need for cumulative source analysis, the presence of substantial nearby emission sources may present a challenge. Specifically, these sources can reduce the available air quality increment, thereby limiting the permissible emissions from the proposed project.

According to the U.S. EPA’s 2020 National Emissions Inventory, there are potentially large NO_x -emitting sources located near each project site. Figure 2-2 identifies the locations of major emitters of direct $\text{PM}_{2.5}$, NO_x , and SO_2 . While proximity to such sources can complicate the permitting process, it does not constitute a fatal flaw. There are viable mitigation strategies, such as design modifications, alternative modeling approaches, and other technical adjustments, which can facilitate continued progress toward permit approval.

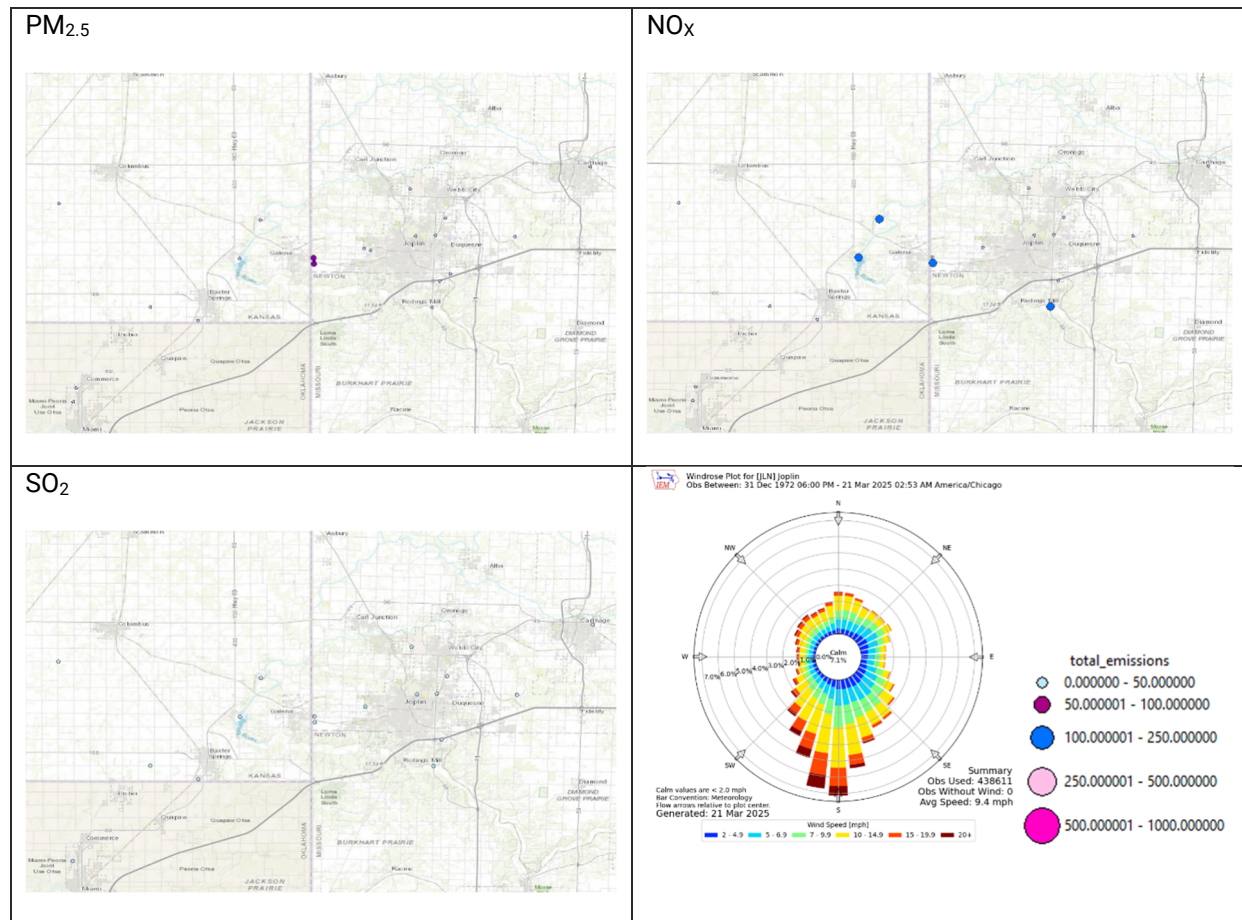


Figure 2-2 Location of Nearby Emission Sources

2.4.2 Ozone

U.S. EPA issued their design value reports for the period ending in 2024. The nearest monitor from either project site is the Joplin, MO area and according to this data, it should be able to maintain its status as being in attainment with the 2015 ozone standard. U.S. EPA began their review of the primary and secondary ozone NAAQS in August 2023, initiating the process to incorporate the most current scientific information into the standards. The review will culminate in a final decision regarding the standards, which is currently projected to occur by 2030.

In the previous review of the ozone NAAQS, the Clean Air Scientific Advisory Committee (CASAC) recommended a lower standard than the then-current level of 70 ppb. A majority of CASAC members recommended that the primary ozone NAAQS be lowered to a range between 55 ppb and 60 ppb. However, U.S. EPA ultimately decided to retain the current standard. Should this review result in the lowering of the standard, based on current conditions, the Joplin area may be classified as non-attainment for the ozone NAAQS. However, this implementation process will not occur until several years from now and would not have any effect on the permitting action of the proposed project. For existing major emission sources, the state agency could require the installation of reasonably available control technology (RACT). For a combustion turbine system, reduction of either NO_x or VOC is attained through the operation of a SCR system and an oxidation catalyst, respectively. However, the requirements to

install RACT for this proposed project would not be fully known until the agency determines such units are contributing to the exceedance.