Illinois Environmental Protection Agency
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JB Pritzker, Governor **James Jennings**, Director

Environmental Justice/Title VI Review
Stream Data Centers
I.D. No.: 031440AWO
Application No.: 25120023

1. Introduction

This document describes the various Environmental Justice (EJ) and Title VI[1]-related considerations undertaken by the Illinois EPA's Bureau of Air in evaluating the above-referenced construction permit application. Because the proposed project will be located in an EJ area of concern, the Illinois EPA's policies for enhanced public outreach and evaluating potential impacts to overburdened communities were addressed in the permit review process. In addition, a Title VI-related settlement agreement (i.e., Informal Resolution Agreement or IRA) entered between the Illinois EPA and the USEPA in February 2024[2] was applied to this review process and resulted in a written analysis of the applicant's history of prior adjudications and past compliance, as discussed later.

2. Permitting Project:

Stream Data Centers (SDC) proposes to construct an electronic data center located at 2000 Landmeier Road, Elk Grove Village, Illinois. Elk Grove Village is a community comprised of an estimated 32,000 people and is located directly next to O'Hare International Airport. The area is home to a concentration of manufacturing, freight, logistics, and other economic activities, including several data centers.

Data center operations are generally classified under Standard Industrial Classification (SIC) Code 7376 as Computer Processing and Data Preparation and Processing Services. Recent media reports indicate that increasing demands for internet-driven services, cloud storage and artificial intelligence (AI) technology are driving the development and expansion of data centers across the industry. These developments are generally viewed as essential to promoting the Nation's modern infrastructure needs.

SDC proposes to construct 126 Ultra Low Sulfur Diesel (USLD)-powered emergency generators (Kohler model rated at 2,500 kilowatt (kW)) at the new data center. These emergency generators will meet the USEPA's Tier 2 emission standards for non-road engines over 37kW (50 horsepower); the regulations classify engines as Tier 1 through Tier 4, with each tier reflecting more stringent standards over time. The emergency generators are used to support the data center when electrical generating power from the grid

[1] Title VI refers generally to the requirements of Title VI of the federal Civil Rights Act of 1964, which is one of eleven titles to the law and is entitled "Nondiscrimination in Federally Funded Programs." See, 42 U.S.C. §§2000d to §§2000d-7.

[2] The negotiated terms of this IRA involved a Title VI disparate impacts complaint filed with USEPA in 2020 stemming from the issuance of a construction permit to General III for the relocation of a scrap metal recycling facility to Chicago's Southeast Side. The *General III* IRA memorializes the Illinois EPA's commitment to consider additional factors in its review of certain construction permit applications, as well as to enhance its public participation policies, for the purpose of improving transparency and assuring meaningful public access to its programs and activities. Additional information concerning the settlement agreement can be found on the Illinois EPA's webpage (i.e., use the Environmental Justice tab from the General Information drop-down menu).

is not available due to outages. Based on air quality modeling performed for the project, SDC must accept certain operating limitations on its proposed project.

For this construction permit, SDC is limiting the daily operating schedule of the emergency generators to the hours of 7:00 a.m. to 7:00 p.m. and restricting the annual operation of each generator for regularly scheduled maintenance and testing events to a maximum of 10 hrs/yr and a combined annual operating limit of 1,260 hrs/yr for all generators. See, Special Condition 14(a)(i) and (ii). In addition, SDC is also limiting its emissions to restrict its potential-to-emit estimates of criteria pollutants to less than major source thresholds. More specifically, the issued construction permit establishes limits in pounds per hour (lbs/hr) and tons per year (tons/yr) for the uncontrolled emergency generators. These established limits apply to carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), fine particulate matter ($PM_{2.5}$), inhalable particulate matter (PM_{10}), sulfur dioxides (SO_2), and volatile organic materials (VOM). For emissions of NOx, which are a pollutant of concern because they are generated in the highest amounts during the run-time of the emergency generators, the company is accepting limits of 3.99 tons/mo and 39.90 tons/year. See, Special Condition 14(b).

3. Emissions Profile of Area and Proposed Project:

As noted, the Elk Grove Village area is the home of numerous manufacturing and/or industrial activities, including other electronic data centers. The area within an approximately one-mile radius of the proposed site includes a high school and elementary school, an animal hospital, a cemetery, the Busse Forest Nature Preserve, and seven parks.

The Elk Grove Village location for this construction permit is in Cook County, which is designated as "serious" non-attainment area for the 8-hour ozone (2015) standard and attainment for all other criteria pollutants. The construction permit prepared by the Illinois EPA in this proceeding will contain federally enforceable permit limits that will ensure that the proposed facility will be constructed and operated as a permitted minor source.

This construction project would result in the following proposed increases in the facility's permitted annual emissions of criteria pollutants:

Pollutants	**Proposed Emissions Increase (Tons per Year)**
NOx	39.90
Carbon Monoxide (CO)	19.50
Particulate Matter (PM)	2.70
Volatile Organic Material (VOM)	13.40
Sulfur Dioxide (SO_2)	0.05

It should be noted that the environmental impacts associated with this project do not reflect continuous operation of the engines from the project but, rather, only during planned maintenance and testing and at times when the facility experiences a power outage.

4. EJ Screen Results:

At the time of this permit review, EJ Screen results previously obtained through the U.S. Environmental Protection Agency's EJ Screen webpages are no longer available. Other federal agency screening guides, including the Environmental Justice Index administered by the Centers for Disease Control (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) and the Climate and Environmental Justice Screening Tool administered by the White House Council for Environmental Quality (CEQ), are also unavailable.

The Illinois EPA continues to implement its EJ Policy through the use of EJ Start, which relies on census data for identifying potential areas of EJ concern based on low income and minority populations. In this case, the Illinois EPA conducted enhanced public outreach because the mapping tool identified the area surrounding the proposed site as a potential area of EJ concern. See, EJ Outreach below.

5. EJ Outreach and Public Participation Process:

The Illinois EPA conducted enhanced outreach through the EJ notification process. The EJ notification letter was sent to 90 separate groups, individuals, and elected officials on January 22, 2026. No inquiries were received in response to the EJ notification letter.

6. Air Quality Modeling Analysis:

At the Illinois EPA's request, the project underwent a comprehensive air quality modeling analysis to predict the air quality impacts from the project. An initial modeling report and electronic modeling files were submitted by Ramboll to the Illinois EPA on December 30, 2025. Ramboll submitted a revised modeling report and modeling files on June 12, 2026, which consisted of updated emission rates for the emergency generators.

Ramboll performed a source Significant Impact Analysis to determine if more detailed modeling would be required for NO_2, SO_2, $PM_{2.5}$, PM_{10} or CO. The source impact analysis evaluated modeled concentrations resulting from emission increases, as limited by the construction permit, at various facility operating loads. The modeled concentrations were then compared against the applicable significant impact levels (SILs) for each pollutant and averaging period. The significant impact analysis identified modeled concentrations of NO_2 exceeding the applicable SILs for the 1-hour and annual averaging periods, as well as modeled concentrations of PM_{10} and $PM_{2.5}$ exceeding the applicable SILs for the 24-hour averaging period. The Modeling Unit's audit confirmed the results of the source impact analysis. The Modeling Unit also evaluated the potential secondary formation of ozone (O_3) from NO_x and VOM emissions and secondary $PM_{2.5}$ from NO_x and SO_2 emissions using the USEPA's MERPs methodology. The analysis indicated that the project's estimated O_3 impacts were below the applicable SIL, while the combined primary and secondary $PM_{2.5}$ concentrations exceeded the applicable SIL under certain operating scenarios. Accordingly, additional cumulative modeling was performed to demonstrate that emissions from the facility would not cause or contribute to an exceedance of the applicable NAAQS.

A cumulative modeling analysis was performed that combined modeled project impacts with representative background concentrations from local air monitoring stations from nearby inventory sources not captured in the monitoring data. The Northbrook and Schiller Park monitoring stations were selected based on their proximity to the proposed facility and the availability of NO_2, PM_{10}, and $PM_{2.5}$

monitoring data. The analysis incorporated design values from 2022 through 2024 and demonstrated that the combined modeled and background concentrations for the 1-hour and annual NO_2 averaging periods and the 24-hour PM_{10} averaging period remained below the applicable NAAQS. As an additional conservative evaluation, a MAXDCOUNT analysis was performed for the 24-hour $PM_{2.5}$ results to further assess source contributions. For the 24-hour $PM_{2.5}$ Extended Maintenance scenario, cumulative concentrations were compared against 90% of the applicable NAAQS. Receptors exceeding this level were subject to a further MAXDCONT analysis, consistent with USEPA guidance, to evaluate the facility's contribution to the cumulative concentrations. The analysis showed that the facility's maximum contribution remained below the applicable 24-hour $PM_{2.5}$ SIL.

Ramboll conducted a modeling analysis for air toxics emissions from the generators. In particular, Ramboll modeled for emissions of acetaldehyde and benzene for their potential emissions and compared them to reference concentrations from the Minnesota Department of Health-Based Guidance for Air Site Assessment and Consultation Unit, as well as USEPA's Integrated Risk Information System (IRIS). Based on this comparison, all modeled concentrations were below their respective reference concentrations.

For additional details concerning the modeling analysis, see the Memorandum from the Modeling Unit to the State Permits and FESOP Unit of the Permit Section, October 16, 2026.

7. Permit Enhancements:

Permit enhancements consist of permit conditions that are incorporated into construction permits by the Illinois EPA to ensure that a source can achieve compliance with applicable requirements, or that are necessary to accomplish the purposes of the Illinois Environmental Protection Act (Act) and are not inconsistent with Illinois Pollution Control Board (PCB) regulations. The Illinois EPA frequently considers permit enhancements when authorized by existing law.

The issued permit establishes limitations on daily operating schedules, annual runtime in hrs/yr for individual generators and the combined engines, maintenance and testing operations, and criteria pollutant emissions in lb/hr and tons/yr. See Special Conditions 13(a) and 14(a), (b) and (c). The modeling analysis also resulted in a few restrictions, mentioned above in the modeling discussion, that are also carried over into the construction permit. As a result of these limitations, the permittee's proposed facility will be restricted to emission levels that are protective of the NAAQS and that are below emission thresholds that would otherwise trigger major source requirements under the nonattainment areas regulations found at 35 Ill. Adm. Code Part 203. The finding of non-applicability of the major source rules is shown in Special Condition 1(a) of the permit.

The original permit application proposed the use of ultra-low sulfur diesel for the emergency generators and a sulfur content limitation of no more than 15 parts per million by weight is contained in the permit at Special Condition 11(a)(i). In addition, the source has submitted an episode action plan for the facility, consistent with other recent data center projects permitted by the Illinois EPA. In this regard, the source will comply with the requirements of Subpart C, entitled Episode Action Plans, of 35 Ill. Adm. Code Part 244. Special Condition 12(a) of the construction permit address these requirements.

8. Past Adjudications and/or Past Compliance History of Applicant:

Because the construction project implicated the requirements of the *General III* IRA, the EJ/Title VI review document for this permitting action affirmatively considered the prior adjudications and past compliance history of the permit applicant, consistent with existing permit authorities found in the Act.

In this instance, the applicant does not have a history of past operation at the proposed location. Two additional "fully leased" facilities are shown on the company's website, which apparently include a 2080 Lunt Avenue address and a 1925 Busse Road address in the Elk Grove Village vicinity. A search for the applicant's name does not reveal any prior adjudications or the entry of agreed consent orders by Illinois state courts or by the PCB. A review of the applicant's past compliance history for air-related matters from USEPA's Enforcement and Compliance History Online (ECHO)) does not show compliance data entries or compliance issues for the applicant or its related facilities in Elk Grove Village.

9. Additional Considerations:

Increased emissions of PM (especially $PM_{2.5}$) and HAP-related emissions from a permitting project may present concerns to people residing in the vicinity of a project's planned location, particularly where there are other industrial sources located nearby. $PM_{2.5}$ is often a pollutant of concern in communities that border areas of industrial or manufacturing activity because of the adverse effects that smaller-sized particles of PM may pose to the environment or to human health. For this project, there is a negligible increase in permitted annual emissions of PM_{10} and $PM_{2.5}$ from all engines (i.e.. 0.95 tons/yr). The air quality modeling analysis confirmed that modeled concentrations of PM_{10} and $PM_{2.5}$ for this project would be below the applicable NAAQS standard and respective averaging period for both components of PM.

HAP-related emissions from a construction project may also pose public concerns due to their individual or collective impacts. For this project, the Modeling Unit concluded that a toxics analysis of two Organic Process HAPs expected from the generator operations. The modeling analysis showed that predicted pollutant concentrations would be below reference concentration levels identified by the Minnesota Department of Health-Based Guidance for Air Site Assessment and Consultation Unit, and those in USEPA's IRIS. The construction permit also contains a permit restriction common to minor source permits, as shown in Special Condition 14(d), for limiting the project's potential to emit to less than 10 tpy for any single HAP and 25 tpy for any combination of total HAPs, assuring that the source avoids major source status under the requirements of Section 112(g) of the Clean Air Act.

10. Evaluation of Title VI Criteria for Disparate Impact Discrimination:

As described by the Overview and Implementation webpage for the *General III* IRA, the criteria for evaluating whether agency action is responsible for disparate impact discrimination is 1) identifying the policy or practice at issue, 2) a showing of adversity/harm, 3) a showing of disparity and 4) a showing of causation. Although this examination can be complicated, the operative criterion in most cases involving the permitting of air pollution sources is adversity/harm. The Illinois EPA's analysis in this review document examines the issue of alleged adversity/harm by assessing whether circumstances would support an enforcement action brought under existing environmental laws and regulations.

a. Substantive Standards

The issued construction permit will increase annual permitted emissions of NOx and, to a lesser degree, CO and VOM. Permitted emissions of PM and SO_2 associated with the project are fairly *de minimis*. Based on the air quality modeling analysis, increased emissions from the project will not violate the NAAQS. As noted, the construction permit will limit runtime and emissions from the emergency generators to assure that the source remains a minor source (nonmajor for purposes of air permitting programs). Other permit restrictions were established in the construction permit based on results of the modeling analysis. Nothing presented in the permit review indicates that the proposed project would cause a violation of air emission standards addressed by the Act, the PCB's Subtitle C (Air Pollution) regulations, or applicable federal regulations adopted by USEPA and enforceable by the Illinois EPA under state law.

b. Narrative Standards

The Illinois EPA has no information that demonstrates a violation of a narrative standard of air pollution based on possible health impacts.

c. Nuisance-Based Standards

There is no history of odor complaints or nuisance believed to be associated with the proposed facility, such that a claim of statutory or common law nuisance could be demonstrated.