

**Environmental Justice/Title VI Review**  
**T5@Chicago III, LP**  
**I.D. No.:031471AEU**  
**Application No.: 24020017**

*1. Introduction*

This document describes the various Environmental Justice (EJ) and Title VI<sup>1</sup>-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<sup>2</sup> 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:*

T5@Chicago III, LP (T5@Chicago) proposes to construct an electronic data center located at 11650 West Grand Avenue, Northlake, Illinois. Northlake is a small community comprised of nearly 12,000 people that is located in Cook County. Most of the community's local economy is made up of manufacturing, healthcare/social assistance and the transportation and warehousing sectors. Data center operations are generally classified as Computer Processing and Data Preparation and Processing Services, Code 7376, under the Standard Industrial Classification system. Recent media reports indicate that increasing demands for internet-driven services, cloud storage and artificial intelligence (AI) technology are spurring new or expanding data center developments across the industry. Such efforts are generally viewed as essential to promoting the Nation's modern infrastructure needs.

T5@Chicago proposes to build 18 diesel-fired emergency generators (all units are Caterpillar Model C175-16 engines rated at 3,250 electric kilowatts (kWe)) at the new data center. The generators are used to support the data center when electrical generating power from the grid is not available due to outages. For this construction permit, T5@Chicago is limiting both its annual fuel oil consumption from the proposed project and its emissions to restrict its potential-to-emit to less than major source thresholds. For emissions of Nitrogen Oxides (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 on

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<sup>1</sup> 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.

<sup>2</sup> 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).

the annual hours of operation, the hours during which the facility may operate the facility, the number of engines that are permitted to run simultaneously under non-emergency conditions, and a cap on the number of hours per day that the generators will be operated at the facility.

This construction project would result in proposed increases in annual permitted emissions of criteria pollutants from the facility, as follows:

Pollutants	Proposed Emissions Increase
	(Tons per Year)
NOx	39.70
Carbon Monoxide (CO)	11.49
Particulate Matter (PM)	0.60
Volatile Organic Material (VOM)	0.55
Sulfur Dioxide (SO <sub>2</sub> )	0.03

Under the Illinois Environmental Protection Act, 415 ILCS 5/39 and 39.5, T5@Chicago must obtain both construction and operating permits for its emissions-related activities. The issued construction permit will allow the facility to operate its permitted equipment until a Federally Enforceable State Operating Permit (FESOP) is issued, provided that the company timely submits a Clean Air Act Permit Program (CAAPP) operating permit application to the Illinois EPA within 12 months after commencing operation. See, 415 ILCS 5/39.5(5)(x).

### 3. EJ Screen Results:

A copy of the USEPA's EJ Screen's Community Report was retrieved by the Illinois EPA for the facility's location utilizing a one-mile radius. A review of the EJ Indexes for this location (combining data on low income and people of color populations with selected environmental indicators) reveals percentiles greater than 80%<sup>3</sup> based on Illinois averages for several indicators: Nitrogen Dioxide (NO<sub>2</sub>) at 80%, Diesel Particulate Matter at 85%, Toxic Releases to Air at 88%, Traffic Proximity at 82%, Risk Management Program (RMP) Facility Proximity at 85% and Hazardous Waste Proximity at 88%.

A review of the Supplemental Indexes for this location (combining data on percent low income, percent persons with disabilities, percent less than high school education, percent limited English speaking, and percent low life expectancy with a single environmental indicator) reveals percentages of greater than 80% based on Illinois averages for several indicators: NO<sub>2</sub> at 82%, Diesel Particulate Matter at 89%, Toxic Releases to Air at 90%, Traffic Proximity at 86%, RMP Facility Proximity at 89%, and Hazardous Waste Proximity at 91%.

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<sup>3</sup> According to USEPA's EJ Screen technical manual [EJScreen Technical Documentation for Version 2.3 \(epa.gov\)](https://www.epa.gov/ej/ej-screen-technical-documentation-for-version-2.3), USEPA identified the 80th percentile filter as an initial starting point when screening for EJ concerns. In other words, an area with any of the 13 EJ Indexes at or above the 80th percentile should be considered as a potential candidate for further review.

A review of the Environmental Burden Indicators data from the Community Report, which provides estimated values for pollution impacts and proximity to other sources, reveals percentiles greater than 80% based on Illinois averages for the following indicators: Diesel Particulate Matter at 95%, Toxic Releases to Air at 99%, Traffic Proximity at 83%, RMP Facility Proximity at 96%, and Hazardous Waste Proximity at 99%.

#### *4. EJ Outreach and Public Participation Process:*

The Illinois EPA conducted enhanced outreach through the EJ notification process. The EJ notification letter was sent to 49 separate groups, individuals, and elected officials on March 14, 2024. No inquiries were received in response to the EJ notification letter.

In accordance with the Illinois EPA Language Access Plan (LAP), Illinois EPA reviewed the USEPA's EJ Screen community data for the area within one mile of the facility. The number of Limited English-Speaking is 13%.

#### *5. 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 was submitted by T5@Chicago's consultant to the Illinois EPA in September 2024 proposing a limit of 52 hours per year for each generator operating at full load. An auditing of the modeling analysis by the Bureau of Air/Permits Section's Modeling Unit led to a request for revision to the analysis for the maximum 1-hour (hr.) nitrogen dioxides (NO<sub>2</sub>) impact from the project because of a concern that the proposed project could potentially exceed the National Ambient Air Quality Standards (NAAQS) standard. Upon submittal of the revised analysis, T5@Chicago proposed lowering the load limit on the individual generators to 42 hrs. per year.

The source impact analysis of the relevant NAAQS and their respective averaging periods showed modeled concentrations from the facility operating at various loads and their comparison to USEPA's significant impact levels (SILs) for the various pollutants. The modeling results, which took into account increases from precursor pollutants (i.e., NO<sub>x</sub>, SO<sub>2</sub>, and VOM) to assess the effects of secondarily formed ozone (O<sub>3</sub>) and PM<sub>2.5</sub>, showed some pollutants exceeding the SILs, including for CO, NO<sub>2</sub> and PM<sub>10</sub>. Because these results indicated that further analysis was needed to assure protection of the NAAQS, the Modeling Unit developed a cumulative modeling analysis assessing the background concentrations from the project and other selected emissions inventory sources. This analysis for the 1-hr and 8-hr CO, annual NO<sub>2</sub>, and 24-hr PM<sub>10</sub> and PM<sub>2.5</sub> was based on the earlier 52 hrs of operation per year and showed that all modeled concentrations for these pollutants and averaging times were below applicable NAAQS. As previously mentioned, for the 1-hr NO<sub>2</sub> was evaluated using the revised 42 hrs operating restriction reflected in the revised modeling submission. This analysis also showed that modeled concentrations for this pollutant and averaging times was below the NAAQS.

The Modeling Unit screened the project for air toxics but did not perform a formal analysis because the screening results did not reveal an appreciable impact.

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, January 6, 2025.

#### 6. *Permit Enhancements:*

Permit enhancements consist of permit conditions that are incorporated into construction permits by the Illinois EPA to assure 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 construction permit contains limitations on both the fuel usage of the emergency generators and on permitted emissions. Special Condition 12(a) provides for separate limits on the fuel consumption (expressed in gallons per month (gal/month) and gallons per year (gal/year)) and emission limits (expressed in pounds (lb) per hour and tpy) for the 18 generators. As such, the construction permit restricts emissions, and particularly for the pollutant of concern, NOx emissions, to levels below that which would 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.

T5@Chicago originally proposed an annual 52 hr. limit per generator, however, following an initial review of air quality modeling results, the company proposed a lower limit of 42 hr. limit per generator. This limit is reflected in Special Condition 12(c). The modeling analysis for the project also resulted in limits on the maximum number of emergency generators that can be operated at any one time (6 hrs. simultaneously) during non-emergency situations, on the daily operating hours of the facility (7:00 am to 7:00 pm), and in the total hours per day that the facility will be operated (4 hrs. per day), as shown in Special Conditions 12(b), 12(c) and 12(d) respectively. The issued permit also reflects a total runtime for the generator sets that cannot exceed 936 hours per year, as shown in Special Condition 12(a).

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 11(a) of the construction permit address these requirements.

#### 7. *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 in the Northside vicinity and the permitted facility is a new source. T5@Chicago operates an existing data center located at 200

Innovation Drive, Elk Grove Village, Illinois. A search of the applicant's name does not reveal any prior adjudications or the entry of agreed consent orders by Illinois state courts, federal courts, or by the PCB. Similarly, a review of the applicant's past compliance history for air-related matters for the Elk Grove Village facility (per USEPA's Enforcement and Compliance History Online (ECHO)) does not reveal any recent involvement by the source in the pre-enforcement processes of either the Illinois EPA or USEPA.

#### 8. *Additional Considerations:*

Increased emissions of PM (especially PM<sub>2.5</sub>) 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<sub>2.5</sub> 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 (i.e., at 0.6 tpy) associated with the new data center. As shown by EJ Screen's Community Report profile, environmental indicators rank PM pollution as being slightly above the state average for this location (source value of 9.29 as compared to State average of 8.96) but in the 67<sup>th</sup> percentile of total rankings. The air quality modeling analysis confirmed that modeled concentrations of PM<sub>2.5</sub> and PM<sub>10</sub> emissions 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 as part of its screening analysis that no appreciable impacts would occur. The construction permit also contains a permit restriction common to minor source permits, as shown in Special Condition 13, 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.

#### 9. *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 NO<sub>x</sub> and, to a lesser degree, CO. Permitted increases of VOM, PM, and SO<sub>2</sub> emissions associated with the project are *de minimis*. However, based on the air quality modeling analysis, these increased emissions from the project will not violate the NAAQS. As noted, the construction permit will limit fuel usage and hours of operation 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 for modeling

purposes. 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 would demonstrate 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.