

Environmental Justice/Title VI Review
International Paper Company
I.D. No.: 031471AAT
Application No. 25030004

1. Introduction

This document describes the various Environmental Justice (EJ) and Title VI¹-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 United States Environmental Protection Agency (USEPA) in February 2024² was applied to the review process.

2. Permitting Project:

International Paper Company (IPC) proposes to revise certain emission limits and update emission factors used for certain equipment at its existing corrugated box manufacturing facility. The facility currently operates its facility under a Lifetime Operating Permit. The revisions to the permitted emission limits and emission factors are being made through a construction permit to facilitate a future request for a Federally Enforceable State Operating Permit (FESOP). Facility operations include corrugating, printing, folding and gluing materials to meet customer specifications. The address of the manufacturing facility is 401 Northwest Avenue in Northlake, Illinois, which is near several other manufacturers and businesses located just east and adjacent to Interstate 294.

Northlake is a small city located in the western-most part of the City of Chicago whose name derives from two roads that intersect within its municipal boundaries (i.e., North Avenue and Lake Street). The municipality resides in Cook County and is comprised of nearly 13,000 residents. A privately-owned home improvement business appears to be the city's largest employer. The municipality has two elementary schools, two high schools, one private school and a local college.

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).

IPC is historically known as a paper manufacturer, but they are also engaged in the manufacture of packaging supplies. The Northlake facility is a container facility that manufactures, among other things, corrugated sheets and boxes. A corrugator is a device used to form a type of packaging material from corrugated (or rippled) paper or cardstock. At this facility, the manufacturing process creates a corrugated medium that is held together by a starched-based adhesive. The process is aided by converting and printing equipment, which perform folds, apply glues and inks, and make cuts to create the final corrugated packaging product. A cyclone separator helps separate corrugated scraps of paper or cardboard. The process involves the use of baghouses to control dust emissions, a parts washer for degreasing equipment, and several (24) space heaters for comfort heating.

For this construction permit, IPC is proposing operational limits (i.e., throughput) for the corrugator production process that will affect permitted limits for several equipment operations, namely, the converting and printing equipment, the waste-paper handling operations, and the starch storage silos. IPC also proposes changes to emission factors for the corrugator, waste-paper handling, starch storage silo, and natural gas boiler.

The issued construction permit will reflect increases in the permitted annual emissions of several pollutants from the facility, however, the facility will continue to operate at less than major source thresholds for both criteria pollutants and Hazardous Air Pollutants (HAPs). The emission increases associated with this project consist of the following:

Pollutants	Proposed Emissions Increase in Annual Permitted Emissions (Tons per Year)
Volatile organic material (VOM)	21.19 tpy
Sulfur dioxide (SO ₂)	0.05 tpy
Particulate matter (PM)	18.89 tpy
PM emissions of 10 microns or less (PM ₁₀)	4.56 tpy
PM emissions of 2.5 microns or less (PM _{2.5})	0.76 tpy
Hazardous Air Pollutant (HAP) combined	7.98 tpy
HAP single (Methanol)	6.29 tpy

The permitted annual emissions increases shown in the above table make this construction permit application for an anticipated Federally Enforceable State Operating Permit (FESOP) source and is therefore subject to the *General Iron* IRA referenced in the Introduction. As such, the commitments agreed to by the Illinois EPA in the IRA are applicable to the review of this permit application and are evidenced in several sections throughout the remainder of this document. It can be noted that the project will result in a decrease of nitrogen oxide (NO_x) emissions of 0.97 tpy and a decrease in carbon monoxide (CO) emissions of 0.1 tpy.

The converting and printing equipment, including the four flexographic folder gluers (FFGs) and rotary die cutter operations, will account for the lion's share of VOM emissions, which are limited

under the construction permit to various individual emission monthly and annual limits for printing ink, glue, pH adjuster and Defoamer materials. Total annual emissions from these processes are a total of 17.31 tpy. See, Special Condition 14(d). VOM emissions from the corrugator are also anticipated to increase from the project and are limited by the construction permit to 0.66 tons per month (tons/month) and 6.59 tpy. See, Special Condition 14(c).

HAP emission limits are included in the construction permit for the corrugator, expressed as both a combined HAP limit of 0.73 tons/month and 7.26 tpy and as a single HAP (Methanol) of 0.63 tons/month and 6.29 tpy.

Most of the PM emissions are stemming from the waste-paper handling operations, which are limited to 26.61 tpy for PM, 4.56 tpy for PM₁₀ and 0.76 tpy for PM_{2.5}. See, Special Condition 14(b). The natural gas boiler will emit minor emissions of criteria pollutants in its combustion gases, the most notable of which are limited by permit condition to CO at 3.35 tpy and NO_x at 3.13 tpy. See, Special Condition 14(a). Production limits based on the corrugator's board production throughput are expressed in several permit conditions as 381,060 thousand square feet per month (Msf/mo) and 3,810,600 Msf per year (Msf/yr). See, Special Condition 14(b), 14(c), and 14(d). The permit is issued based on only negligible emissions of PM from the starch storage unit, which are not to exceed 0.1 pounds per hour (lb/hr) and 0.44 tpy. See, Special Condition 14(e).

3. Mapping Tool Results:

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.

At the time of this permit review, EJ Screen results previously obtained through the U.S. Environmental Protection Agency's EJScreen webpages were no longer available. Demographical information relating to the affected community can be found on Wikipedia: The Free Encyclopedia at [Northlake, Illinois - Wikipedia](#), as well as from the American Community Survey database maintained on the U.S. Census Bureau's website. In addition, demographical information is available for the area from a detailed facility report concerning the IPC's Northlake facility generated by USEPA's enforcement and tracking database known as the Enforcement and Compliance History Online (ECHO). See, Section 7 below.

4. EJ Outreach:

The Illinois EPA conducted enhanced outreach through the EJ notification process. The EJ notification letter was sent to 88 separate groups, individuals, and elected officials on March 25, 2025. No inquiries were received in response to the EJ notification letter.

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, within the context of both the National Ambient Air Quality Standards (NAAQS) and air toxics, associated with the project. An initial modeling report and electronic modeling files were submitted by IPC's consultant ALL4, LLC (ALL4) to the Illinois EPA on May 12, 2025, as part of the permit application. An updated analyses and modeling files were submitted on June 26, 2025.

An initial source impact (or significant impact) analysis of the project's impact revealed that maximum modeled impacts from the project's nitrogen dioxide (NO₂) emissions exceeded the significant impact levels (SILs) for the NO_x NAAQS for both the 1-hr and annual averaging periods. Maximum modeled impacts for PM₁₀ emissions also exceeded the SIL for the PM₁₀ for the 24-hr averaging period. These findings warranted additional analysis.

A NAAQS analysis evaluating the project's impact for the above-referenced pollutants was conducted using NO₂ data from a nearby monitoring station (7 kilometers away) and PM₁₀ data from a more distant monitoring station (44 kilometers away). The Modeling Unit audited the consultant's findings in a separate analysis. Both sets of analyses revealed that predicted impacts from the project, when combined with background concentrations of NO₂ and PM₁₀ for the relevant averaging periods, were below respective NAAQS values.

An air toxics analysis was also requested by the Illinois EPA. Potential HAP emissions were estimated by IPC's consultant, which enabled the Modeling Unit to perform an initial screening analysis using the Risk Assessment Screening Spreadsheet (RASS) program developed by Minnesota. The screening analysis determined that modeled impacts from Methanol, which comprise the largest source of HAPs from the facility, would be minimal. However, the screening analysis recommended a dispersion modeling analysis of seven additional pollutants: Acetaldehyde, Acrylic acid, 3,3-Dichlorobenzidine, Diethylene glycol monoethyl ether, EtO, Formaldehyde, and Polychlorinated biphenyls.

Reference concentrations levels (or benchmarks) for these pollutants were compared with maximum modeled impacts. The results showed that maximum modeled concentrations were below their respective benchmarks. For EtO, the Modeling Unit performed an additional risk-based evaluation consistent with USEPA guidance and past agency practice in modeling certain EtO sources operating in Illinois. This analysis estimates an overall cancer risk that is well below 100 in a million, which USEPA identifies as the upper limit of acceptable lifetime cancer risk for the most exposed person.

For additional details concerning the modeling analysis, see the Memorandum from the Modeling Unit to the FESOP/State Permits Section/BOA, dated March 4, 2026.

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.

As previously noted, the issued construction permit contains limitations on production rates and permitted emissions of both criteria pollutants and HAPs associated with the project. In doing so, the construction permit generally restricts criteria and HAP emissions to levels below the major source requirements found in the nonattainment areas regulations found at 35 Ill. Adm. Code Part 203. The finding of non-applicability of the major source rules for new construction or modification and for HAPs is shown in Special Condition 1(a) and 1(b) respectively.

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, IPC does not appear to have a history of noncompliance relating to its past operation of the Northlake, Illinois facility. A search of 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 for violations of Illinois' environmental statutes or regulations. A review of the applicant's compliance history for air-related matters from USEPA's ECHO database does not show any compliance concerns in the last five years. See, [Detailed Facility Report | ECHO | US EPA](#).

8. *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 are increases in permitted annual emissions of PM emissions with the project of 18.89 tpy and 0.76 tpy for PM_{2.5}. The air quality modeling analysis confirmed that maximum modeled concentrations of PM_{2.5} emissions for this project would be below the PM_{2.5} SIL for both averaging periods (i.e., 24-hr and annual). Similarly, an analysis of secondary PM_{2.5} formation showed impacts at less than significant for PM_{2.5}. For PM₁₀ emissions, the modeling revealed an exceedance of the PM₁₀ SIL based on a 24-hr averaging period, but a more detailed NAAQS analysis

showed modeled concentrations from the project, when combined with background concentrations, to be less than the PM₁₀ NAAQS value.

HAP-related emissions from a construction project may also pose public concerns due to their individual or collective impacts. The issued construction permit recognizes an increase in permitted emissions for single HAP (methanol) and combined HAPs (see, Special Condition 14(c) and (d)). However, the issued permit also contains a permit restriction common to minor source permits, as shown in Special Condition 1(a), 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 several pollutants. Based on the air quality modeling analysis, the increased emissions for the pollutants of concern associated with the project, VOM, PM₁₀ and PM_{2.5}, will not violate the NAAQS. The air toxics analysis demonstrated that several toxic pollutants of potential concern would not exceed their respective reference benchmarks. As noted above, the construction permit will limit production rate and emissions from existing equipment to assure that the source remains a minor source (nonmajor for purposes of air permitting programs). 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.