NORTH CAROLINA DIVISION OF AIR QUALITY

Preliminary Determination and Application Review

Issue Date: TBD

Region: Mooresville Regional Office
County: Cabarrus
NC Facility ID: 1300117
Inspector's Name: Seth Hall
Date of Last Inspection: 10/09/2023
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Corning Incorporated

Facility Address:
Corning Incorporated
14556 Highway 601 South
Midland, NC 28107

SIC: 3229 / Pressed And Blown Glass, Nec
NAICS: 327212 / Other Pressed and Blown Glass and Glassware Manufacturing

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 02D .0530, 02D .0958, 02D .1806
NSPS: n/a
NESHAP: n/a
PSD: VOC
PSD Avoidance: n/a
NC Toxics: n/a
112(r): n/a
Other: n/a

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Janice Del Rio Rosario Environmental Specialist (704) 569-6017 14556 Highway 601 South Midland, NC 28107	Ted Talarek Plant Manager (704) 569-6041 14556 Highway 601 South Midland, NC 28107	Janice Del Rio Rosario Environmental Specialist (704) 569-6017 14556 Highway 601 South Midland, NC 28107

Application Data

Application Number: 1300117.23C
Date Received: 08/04/2023
Application Type: Modification
Application Schedule: PSD

Existing Permit Data

Existing Permit Number: 08436/T23
Existing Permit Issue Date: 06/20/2023
Existing Permit Expiration Date: 05/31/2024

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2022	0.0800	409.01	36.79	4.94	9.46	12.69	6.81 [Hydrogen chloride (hydrochlori]
2021	0.0800	365.31	34.94	4.46	84.49	10.14	5.92 [Hydrogen chloride (hydrochlori]
2020	0.0600	325.94	30.58	3.94	77.96	8.50	5.48 [Hydrogen chloride (hydrochlori]
2019	0.0800	345.62	41.20	4.66	95.39	9.97	6.41 [Hydrogen chloride (hydrochlori]
2018	0.1000	377.58	37.50	4.81	103.66	9.24	5.86 [Hydrogen chloride (hydrochlori]

Review Engineer: Russell Braswell

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue 08436/T24
Permit Issue Date: TBD
Permit Expiration Date: May 31, 2024

Preliminary Determination and Review of Application 1300117.23C

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1. Introduction and Purpose of Application

Corning Incorporated (Corning) currently operates a factory in Cabarrus County under Title V permit 08436T23 (the existing permit). This facility is an existing "major stationary source" as defined by 40 CFR 51.166(b)(1)(i)(*b*). Corning plans to modify the operations at the facility, and the proposed modification will increase emissions of volatile organic compounds (VOC) by an amount greater than the significant emission rate (SER) listed in 40 CFR 51.166(b)(23)(i). Therefore, Corning concluded that the proposed modification would be a major modification of an existing major stationary source. Therefore, in accordance with 15A NCAC 02D .0530(g), Corning submitted this application for a major modification of the existing permit.

Corning submitted this one-step significant modification application pursuant to 15A NCAC 02Q .0501(c)(1). Per 15A NCAC 02D .0530(r), this permit application shall be processed in accordance with the public participation procedures and requirements of 40 CFR 51.166(q).

As discussed below, Corning is proposing an increase in VOC emissions by revising (*i.e.,* raising) an existing BACT. Because Corning is proposing to raise a limit determined by a Best Available Control Technology (BACT) determination, DAQ must review and revise the original BACT determination rather than evaluating only the proposed increase in VOC emissions. Furthermore, because DAQ is reviewing the original BACT determination, all elements of PSD that pertained to the original BACT determination must be reviewed again.

2. Facility Description and Application History

2.1 Facility Operations

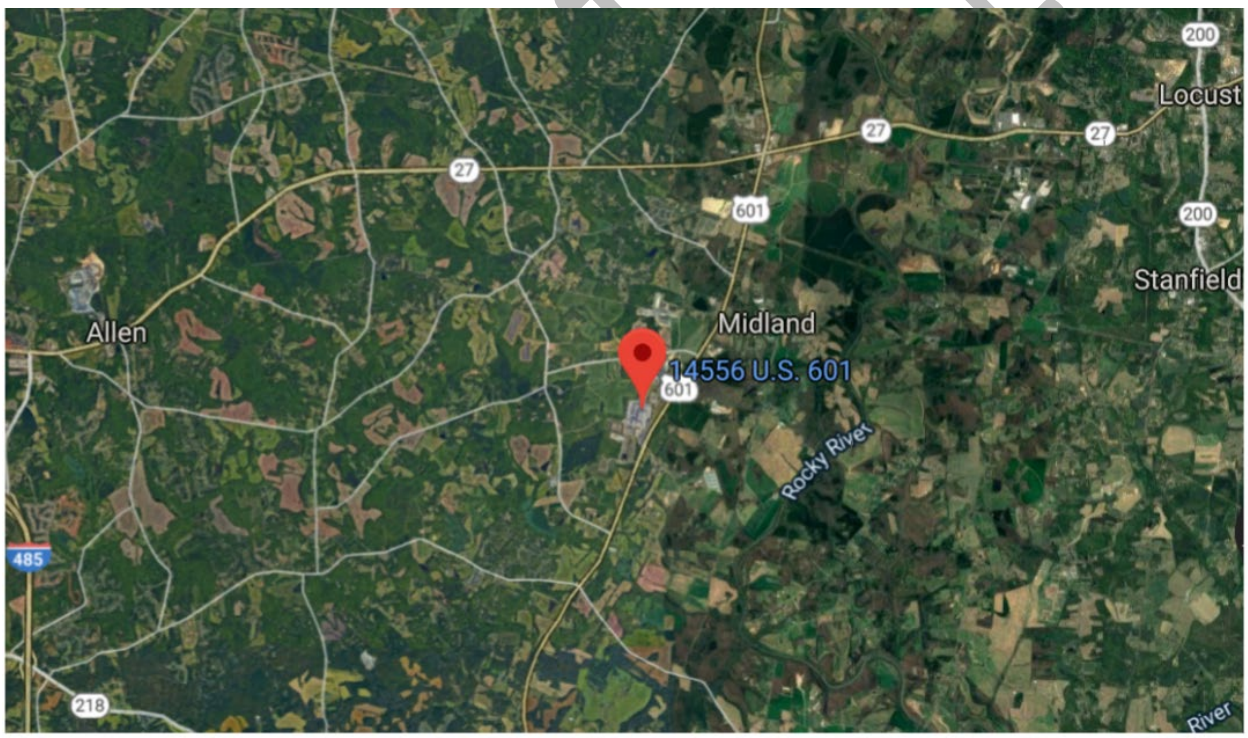
Corning Incorporated (Corning) operates a factory in Cabarrus County that produces optical glass fibers (Corning calls this product "optical waveguides"). This product is typically used in the telecommunication, networking, and semiconductor industries.

The existing facility consists of the waveguide laydown processes and supporting activities, such as boilers, emergency generators, and cleaning operations.

2.2 Facility Location

The facility is located in the city of Midland in Cabarrus County, which is classified as attainment for each pollutant subject to the National Ambient Air Quality Standards (NAAQS). See Figure 1 for a satellite view of the location.

Figure 1: Site Location[1]



2.3 Permitting History

Corning has operated this facility since 1999. Beginning in 1999, Corning was a major source for Title V (as defined in 40 CFR 70.2) but was not a major stationary source for PSD because Corning complied with various avoidance limits as allowed by 15A NCAC 02Q .0317.

[1] This image was included in DAQ's preliminary determination for the initial PSD permit issued to Corning (permit no. 08436T21).

On January 30, 2019, Corning applied to remove the PSD avoidance limits and become a major stationary source as required by 40 CFR 51.166(r)(2). DAQ therefore issued Title V permit 08436T21 on April 29, 2020, which removed the PSD avoidance limits and included several Best Available Control Technology (BACT) limits. Corning then became a new major stationary source under PSD.

The following table summarizes modifications and determinations with regards to the Title V permit since revision T21 was issued

Revision / Determination (issued)	Type	Notes
Determination #3739 (November 3, 2021)	Applicability Determination	Corning requested a 30-month time extension for construction of the facility allowed by the T21 permit revision. DAQ granted an 18-month time extension rather than the 30-month requested.
Revision T22 (February 9, 2023)	Title V Significant Mod. (first step)	This action removed several emergency generators from the permit. In Corning's application, Corning stated these emergency generators are owned and operated by Duke Energy, not Corning. This permit was issued pursuant to 15A NCAC 02Q .0501(b)(2) (the "first step" of a two-step significant modification). This permit revision has no impact on the proposed change to the ES-C-Cleaning BACT.
Revision T23 (June 20, 2023)	Title V Significant Mod. (second step)	This action completed the two-step significant modification initiated by T22.

2.4 Application Chronology

Date	Event
June 29, 2023	Pre-application meeting with Corning and DAQ.
August 4, 2023	Application received.
December 19, 2023	Responsibility for this application was transferred to Russell Braswell.
January 8, 2024	Request for additional information sent to Corning via email.
January 17, 2024	Conference call with Corning, Trinity Consultants, and DAQ staff to discuss the January 8 request.
February 5, 2024	Response received to the January 8 request.
April 23, 2024	DAQ AQAB issued a memo concurring with Corning's updated modeling analysis.
April 24, 2024	An initial draft of this preliminary determination and revised permit were sent to DAQ Permits staff.
April 29, 2024	Response received to the April 24 draft.
April 30, 2024	A revised draft of this preliminary determination and permit were sent to DAQ SSCB staff, DAQ MRO staff, Corning staff, and Trinity Consultants staff.

Date	Event
May 7, 2024	Response received to the April 30 draft from Corning staff.
XXXXX	The Public Notice and EPA Review periods began.
XXXXX	TV revision T24 (renewal) issued.

3. Proposed Project and Emission Calculations

3.1 Proposed Emission Source

The application describes the "miscellaneous maintenance and cleaning process" (ID No. ES-C-Cleaning) as:

> "At intermittent steps in the glass development process, both the product and the manufacturing areas must be cleaned to remove any impurities, similar to a clean room. IPA [isopropyl alcohol] is used to clean the manufacturing areas. Material balances and projected production are utilized to develop potential emissions." (Application at 3-1)

Therefore, the emission source ES-C-Cleaning represents the distributed use of IPA throughout the facility as a cleaning solvent. In the existing permit, this source is subject to a BACT of 22.8 tons of VOC per year. DAQ approved this BACT with the initial PSD permit.

In the application, Corning explains why this limit must be revised:

> "More IPA is being used than was expected in 2019 when the last application was developed. It has been determined that the limit established in 2019/2020 was set too conservatively low for the plant needs…Corning is requesting the current BACT limit for miscellaneous maintenance and cleaning operations be changed from 22.8 tons to 63.6 tons per 12-month rolling period." (Application at 2-1)

In a phone call with Corning, Trinity Consultants, and DAQ on January 17, 2024, Corning explained that the facility had underestimated the amount of cleaning of the product, tooling, clean rooms, etc., necessary to ensure the required quality of the final product.

Corning has also stated that the facility as applied-for in 2019 has not yet been fully constructed. Instead, the facility has been under a "continuous program of construction." The 2019 PSD application allowed for construction of two sources: ES-C-012 and ES-C-014, and Corning expects to have a "partial startup" of ES-C-014 in 2024 (February 5 letter at page 1).

Therefore, as Corning continues to increase production in ES-C-012, it has become clear that the BACT will be untenable once ES-C-014 comes online.

It should also be noted that, in the application, Corning stresses that the use of more IPA will not allow the rest of the facility to increase production ("debottlenecking"). Instead, this will allow the rest of the facility to achieve the production levels initially applied for in the initial PSD permit. Therefore, the increase in the use of IPA will not result in increased emissions from other sources at the facility.

3.2 Emission Summary

When estimating emissions from the cleaning activities, Corning assumes that the cleaning solution is 100% IPA and that 100% of the IPA used is emitted as VOC (the so-called "mass-balance" approach). The application estimates that the total usage of cleaner will be 127,200 pounds per year, and therefore calculates the VOC emissions as 63.6 tons per year.

As stated above, this change will not debottleneck any other part of the facility. Therefore, no other emission increases need be considered under this application.

IPA is not a hazardous air pollutant (HAP) or toxic air pollutant (TAP). Therefore, the only change in emissions calculated by the application is for VOC. The change in potential emissions is calculated by:

(Proposed BACT) – (Existing BACT) = Increase in VOC emissions

(63.6 tons per year) – (22.8 tons per year) = 40.8 tons per year VOC increase

Corning's emission calculations are included here as Appendix 1.

3.3 Facility Emissions Review

Emission changes based on modified sources: Facility-wide potential emissions of VOC will increase by 40.8 tpy as discussed above. There are no other changes in emissions as a result of this project.

Title V: Corning is a major source for Title V because it has actual emissions of criteria pollutants greater than the major source threshold in 40 CFR 70.2. This project will not affect Corning's status as a major source for Title V.

HAP: Corning is a major source of hazardous air pollutants (HAP) because it has potential emissions of HAP greater than the major source threshold in 40 CFR 63.2. This project will not affect Corning's status as a major source of HAP.

PSD: Corning is a major stationary source under PSD because it has actual emissions of a regulated NSR pollutant greater than the threshold in 40 CFR 51.166(b)(1)(i)(*b*). This project will not affect Corning's status as a major stationary source for PSD.

4. Project Regulatory Review

This section discusses the various State and Federal regulations covering air emissions from Corning's facility and proposed project.

4.1 Applicable State Implementation Plan (SIP) Rules

This permit modification and PSD project focuses on the emission source ES-C-Cleaning. This emission source is subject to the following SIP rules (in addition to the General Conditions)

Ultimately, the permit will include specific conditions for the following rules:

- 15A NCAC 02D .0530 "Prevention of Significant Deterioration"
- 15A NCAC 02D .0958 "Work Practices for Sources of Volatile Organic Compounds"
- 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" [state-enforceable only]

4.1.1 15A NCAC 02D .0530 "Prevention of Significant Deterioration" (PSD)

Background: Pursuant to the Federal Register (FR) notice on February 23, 1982 (47 FR 7836), effective May 25, 1982, North Carolina has full authority from the US Environmental Protection Agency (EPA) to implement the PSD regulations in the State. North Carolina's SIP-approved PSD regulations have been codified in 15A NCAC 02D .0530 and 02D .0544,[2] which implement the requirements of 40 CFR 51.166 "Prevention of Significant Deterioration of Air Quality" with a few exceptions as included in these regulations. For the purposes of these rules, references to the CFR are to specifically the July 1, 2019 version of the CFR (see 15A NCAC 02D .0530(v)).

Note that Cabarrus County is currently in attainment for each classifiable pollutant, so the PSD program (and not the NA NSR program) is applicable.

Major stationary source: Under PSD, all new or modified major stationary sources of air pollutants as defined in CAA §169 must be reviewed and permitted, prior to construction, in accordance with CAA §165. A "major stationary source" is defined in 40 CFR 51.166(b)(1) as any one of 28 named source categories which emits or has a potential to emit (PTE) of 100 tons per year (tpy) of any "regulated NSR pollutant." Corning manufacturers optical fiberglass, which is not one of the named source categories. Therefore, the threshold is 250 tpy of any regulated NSR pollutant. Corning has actual emissions of NOx greater than this threshold, and therefore is a major stationary source.

Existing facility: The existing facility was issued a permit under PSD in 2019. Before that permit was issued, the facility was already designated a major stationary source for PSD because the facility had total potential emissions greater than the threshold. However, the facility had no specific requirements under PSD because Corning had accepted various avoidance limits as allowed by 15A NCAC 02Q .0317 "Avoidance Conditions." In 2019, Corning applied to "relax" (*i.e.*, remove) those limits. Per 40 CFR 51.166(r)(2), at that time the entire facility was treated as though the facility had not previously commenced construction (*i.e.*, the entire facility was considered a new source under PSD). As a result of the initial PSD application,

[2] While portions of the PSD regulations are included in NC's SIP rule 15A NCAC 02D .0544, that rule only addresses greenhouse gasses. Corning has not triggered PSD requirements for greenhouse gasses, so this rule will not be discussed further in this determination.

the entire existing facility underwent a PSD review, and the existing permit includes Best Available Control Technology (BACT) requirements for various emission sources.

Revising an existing BACT: In this application, Corning is proposing to revise the existing BACT for facility-wide cleaning operations. As discussed in Section 3, Corning believes this is necessary because the original BACT was set too conservatively low; in practice, Corning uses more cleaning material than was originally anticipated.

EPA has previously considered the scenario of a BACT being revised due to incorrect assumptions in the original BACT determination. In a memo to EPA Region VI, EPA stated:

> "Any time a permit limit founded in BACT is being considered for revision, a corresponding reevaluation (or reopening) of the original BACT determination is necessary. This is necessary even if the permit limit is exceeded by less than a "significant" amount…
>
> If a revision to the permit is determined to be appropriate, the revision must also address all other PSD requirements which may be affected by an allowable increase in permitted or newly regulated emissions (e.g., protection of the standards and increments, additional impacts, monitoring)."[3]

Because Corning is proposing to revise (increase) an existing BACT determination, DAQ must reopen the original BACT determination.

Hereafter, DAQ will consider Corning's proposed BACT for cleaning operations as though Corning had initially proposed this BACT in 2019.

Applicability: Consistent with 40 CFR 51.166(b)(4), the PTE estimates for all emissions units have been based upon the maximum process rate or design capacity, as applicable, and control device efficiency (if applicable). The baseline emissions (pre-change) for all new units resulting from the initial construction will be zero per 40 CFR 51.166(b)(47)(iii). For PTE calculations for all sources other than ES-C-Cleaning, refer to DAQ's final determination for the T21 permit revision (issued April 29, 2020). For PTE emissions for ES-C-Cleaning, Corning based the calculations on activities at the current facility.

Based on DAQ's final determination for the T21 permit revision, it can be concluded that this facility will be a major stationary source for PSD because the PTE of at least one pollutant is greater than 250 tpy. Furthermore, because this facility will be a major stationary source, per 40 CFR 51.166(b)(23), any pollutant that has a PTE greater than the significance level will be subject to review under PSD. Therefore, PSD requirements were reviewed for:

- NOx
- PM, PM_{10}, and $PM_{2.5}$, and
- VOC

The proposed revision to the cleaning BACT only affects VOC emissions. Therefore, there will not be a further review of NOx, PM, PM_{10}, or $PM_{2.5}$ emissions. When considering source impacts (e.g., modeling for the NAAQS), the emission calculations from the 2019 PSD application will be used in all cases except

[3] See EPA's memo *Request for Determination on Best Available Control Technology (BACT) Issues -- Ogden Martin Tulsa Municipal Waste Incinerator Facility* issued November 19, 1987. Available at: https://www.epa.gov/sites/default/files/2015-07/documents/ogden.pdf

for VOC. For VOC, wherever the 2019 analysis used 22.8 tpy of VOC from the cleaning operations, that value will be replaced with the 63.6 tpy value proposed by this application.

BACT analysis: See Section 5 for the revised PSD review and BACT analysis for VOC from the cleaning operations.

PSD Increment Tracking: The Minor Source Baseline Date for a specific county is set by the date that the first complete PSD permit application for that county is submitted to the DAQ. The Cabarrus County airshed has been triggered for increment tracking for PM_{10} and SO_2. This proposed project will not increase emissions of either of those pollutants, so no increment tracking is required.

Compliance requirements: Compliance with PSD is determined on a source-by-source basis. For ES-C-Cleaning, Corning must calculate VOC emissions based on the amount of IPA used (assuming that VOC emissions are equal to the amount of IPA used). Corning must keep records of VOC emissions and submit a semiannual summary report. As discussed below, Corning will also be required to demonstrate compliance with the work practice standards by performing the monthly inspections required by 02D .0958.

Changes to the existing permit:

- As requested by the application, the VOC BACT emission limit for ES-C-Cleaning will be revised to 63.6 tpy.

- In the existing permit, the specific condition for 02D .0530 does not explicitly include a method of demonstrating compliance with the BACT "good housekeeping practices." DAQ will require Corning to perform the monthly facility-wide inspections and recordkeeping required by 02D .0958. Note that the existing permit already includes a specific condition for 02D .0958, and therefore this change is not expected to increase Corning's compliance requirements.

4.1.2 15A NCAC 02D .0958 "Work Practices for Sources of Volatile Organic Compounds"

Applicability: This rule applies to facilities that work with VOC-containing compounds and are located in the areas specifically listed in 02D .0902(f). Corning is located in Cabarrus County, which is a listed location.

Requirements: This rule requires a facility properly store and handle VOC-containing materials. The rule includes specific work practices for storage and cleaning activities. Corning demonstrates compliance with these work practice requirements by performing a monthly facility-wide inspection of processes that use VOC-containing materials.

Recordkeeping: Corning must keep records of inspections and records of noncompliant conditions.

Reporting: Corning must submit a semiannual summary report of the inspections and results.

Compliance: Corning appears to be in compliance with this rule. Revising the VOC BACT for ES-C-Cleaning is not expected to affect Corning's ability to comply with this rule.

4.1.3 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" [state-enforceable only]

Applicability: This rule applies to facilities that emit, or could potentially emit, odorous emissions. The existing permit includes a specific condition for this rule.

Monitoring, recordkeeping, and reporting: The existing permit does not require any specific monitoring, recordkeeping, or reporting for this rule.

Compliance: It is not expected that increasing the VOC BACT for ES-C-Cleaning will require any changes to the existing permit with regards to this rule.

4.2 Applicable Federal Rules

NSPS (40 CFR Part 60), NESHAP (40 CFR Part 61), MACT/GACT (40 CFR Part 63), and CAM (40 CFR Part 64)

In DAQ's review of the T21 permit revision (i.e., the initial PSD permit), DAQ determined that no rules under NSPS, NESHAP, MACT/GACT, or CAM apply to the cleaning operation ES-C-Cleaning.

Revising the BACT for ES-C-Cleaning will not trigger applicability for any of those rules.

5. Prevention of Significant Deterioration (PSD)

(Note: See Section 4.1.1 above for the basis of PSD within North Carolina's SIP, the history of PSD permitting at this facility, and Corning's requirements under 15A NCAC 02D .0530.)

The United States Congress first established the New Source Review (NSR) program as a part of the 1977 Clean Air Act (CAA) Amendments and modified the program in the 1990 amendments. The NSR program includes requirements for obtaining a pre-construction permit and satisfying all preconstruction review requirements for major stationary sources and major modifications, before beginning actual construction for both attainment areas and non-attainment areas. The NSR program for facilities located in attainment areas is called "Prevention of Significant Deterioration" (PSD). Cabarrus County is currently not listed as nonattainment for any pollutant, so the PSD program is applicable.

The basic goal for PSD is to ensure that the air quality in attainment areas does not significantly deteriorate while maintaining a margin for future industrial growth. The PSD regulations focus on industrial facilities, both new and modified, that create large increases in the emission of certain pollutants.

Under PSD, all major new or modified stationary sources of air pollutants regulated and listed in this section of the Clean Air Act must be reviewed and approved prior to construction by the permitting authority. As discussed above, Corning is a major stationary source because it has actual emissions of a regulated NSR pollutant greater than the threshold in 40 CFR 51.166(b)(i)(*b*).

In the original PSD permit (see the T21 permit revision), a PSD analysis was required for each pollutant indicated in Section 4.1.1, above. Because this proposed modification is only revising the VOC BACT for ES-C-Cleaning, only the VOC BACT for ES-C-Cleaning will be reviewed here.

The elements of a PSD review are as follows:

1) A BACT Determination as determined by the permitting agency on a case-by-case basis in accordance with 40 CFR 51.166(j),

2) A Source Impact Analysis including compliance with NAAQS and PSD increments in accordance with 40 CFR 51.166(k), and

3) An Additional Impacts Analysis including effects on soils and vegetation and impacts on local visibility in accordance with 40 CFR 51.166(o).

5.1 BACT Determination

5.1.1 Background and BACT Determination Process

The Clean Air Act (CAA) §169(3) defines BACT as:

> "The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this Act emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such

> pollutant. In no event shall application of "best available control technology" result in emissions of any pollutant which will exceed the emissions allowed by any applicable standard established pursuant to section 111 or 112 of this Act. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to enactment of the federal Clean Air Act Amendments of 1990."

Given the variation between emission sources, facility configuration, local airsheds, and other case-by-case considerations, Congress determined that it was impossible to establish a single BACT determination for a particular pollutant or source. Economic, energy, and environmental impacts are mandated in the CAA to be considered in the determination of case-by-case BACT for specific emission sources. In most instances, BACT may be defined through an emission limitation. In cases where this is impracticable, BACT can be defined using a particular type of control device, work practice, or fuel type. In no event can a technology be recommended which would not comply with any applicable standard of performance under CAA §§111 (NSPS) or 112 (NESHAP). Note that, for ES-C-Cleaning, there are no applicable NSPS or NESHAP rules (see Section 4.2).

The EPA developed guidance, commonly referred to as "Top-Down" BACT,[4] for PSD applicants for determining BACT. This guidance is a non-binding reference material for permitting agencies, which process PSD applications pursuant to their SIP-approved regulations. As stated in Section 5.1 above, NCDAQ issues PSD permits in accordance with its SIP-approved regulation in 15A NCAC .02D .0530. Therefore, the DAQ does not strictly adhere to EPA's "top-down" guidance. Rather, it implements BACT in accordance with the statutory and regulatory language. As such, NCDAQ's BACT conclusions may differ from those of the EPA.

After establishing the baseline emissions levels required to meet any applicable NSPS, NESHAPs, or SIP limitations, the "top-down" procedure followed for each pollutant subject to BACT is outlined as follows:

Step 1	Identify all available control options	• from review of US EPA RACT/BACT/LAER Clearinghouse (RBLC), • agency permits for similar sources, • literature review, • and contacts with air pollution control system vendors
Step 2	Eliminate technically infeasible options	Evaluation of each identified control to rule out those technologies that are not technically feasible (i.e., not available and applicable per US EPA guidance)
Step 3	Rank remaining control technologies	"Top-down" analysis, involving ranking of control technology effectiveness
Step 4	Evaluate most effective controls and document results	Economic, energy, and environmental impact analyses are conducted if the "top" or most stringent control technology is not selected to determine if an option can be ruled out based on unreasonable economic, energy or environmental impacts

[4] *Improving New Source Review (NSR) Implementation*, J. Craig Potter, Assistant Administrator for Air and Radiation US EPA, Washington D.C., December 1, 1987, and *Transmittal of Background Statement on "Top-Down" Best Available Control Technology*, John Calcagni, Director, Air Quality Management Division, US EPA, OAQPS, RTP, NC, June 13, 1989.

Step 5	Select the BACT	The highest-ranked option that cannot be eliminated is selected, which includes development of an achievable emission limitation based on that technology

5.1.2 References Used to Identify Control Technology

In order to determine relevant control technologies and other important information for review, various EPA reports on emissions control technologies were consulted. In addition, both Corning and DAQ searched the EPA's RACT/BACT/LAER Clearinghouse (RBLC) for current regulatory BACT/LAER determinations for the cleaning operations.

When searching the RBLC, the following search criteria were used, and only results with VOC emission limits were considered: "cleaning," "IPA," "isopropyl alcohol."

These search terms yield several results. The summary of RBLC results with associated VOC emission limits are included in Appendix 2.

5.1.3 Summary of Relevant BACT Determinations

When determining available control technologies, and especially BACT emission limits, it is necessary to only compare similar facilities and processes. For example, it is not reasonable to compare a foundry producing steel bars to a foundry producing aluminum bars; although they are both involved in metal smelting, the two processes are drastically different. Similarly, a cleaning process at (for example) an automobile factory is not comparable to the cleaning operations at this optical fiberglass facility.

When reviewing the RBLC results, the industrial source category of the determinations should be considered to determine if an entry in the RBLC is relevant. When considering if two facilities are similar enough to be considered the same stationary source under PSD (see 40 CFR 51.166(b)(6)(i)), the rule looks at the first two digits of the Standard Industrial Classification (SIC) code (the so-called major group). Sources with the same major group code are considered similar enough to be the same stationary source.

The SIC code for Corning is 3229, and therefore the major group is 32. Looking at the SIC codes for the RBLC search results in Appendix 2, there are no RBLC results for VOC BACT determinations for cleaning activities at facilities under major group 32.

Therefore, it can be concluded that there are no relevant BACT determinations for comparison to the cleaning operations at Corning.

5.1.4 BACT Analysis

Step 1: Identify all available control options.

As discussed above, there are no relevant RBLC entries for the cleaning operations at Corning.

However, the cleaning operations will emit IPA (a VOC), and there are, in general, several common methods for controlling emissions of VOC. Common examples include various oxidizers and carbon adsorption. Additionally, alternative cleaning materials (presumably with a lower VOC content) and good work practices should be considered.

Therefore, additional consideration is required.

Step 2: Eliminate technically infeasible options.

The VOC emissions from the cleaning operations will be fugitive because they occur throughout the facility and do not have any dedicated emission points. Corning has previously claimed, and continues to claim, that there can be no collection systems for VOC from cleaning due to the size of the facility, and therefore add-on control devices (such as oxidizers and adsorbers) are technically infeasible.[5] DAQ concurs with Corning; it is technically infeasible to install VOC control devices to control VOC from cleaning operations at this facility.

With regards to alternative cleaning materials, Corning claims that there are no other appropriate materials; isopropyl alcohol is the only option. Considering the need for an effective cleaning solvent that leaves behind no residue, it is almost certain that any alternative to isopropyl alcohol would also be 100% VOC, and therefore provide no benefit for this analysis. DAQ concurs with Corning; there are no technically feasible alternative cleaning materials.

"Good work practices" is broad term that can include things like operator training to ensure the minimal amount of cleaning agent is used and good storage practices to ensure cleaning agents are not left to needlessly evaporate. The existing permit currently identifies "good housekeeping practices" (a functionally synonymous term) as BACT for cleaning operations. The existing permit defines "good housekeeping practices" as

> "Includes measures, as applicable, for preventing formation of and controlling fugitive emissions, minimizing amounts of cleaners, use of water-based cleaners where practicable, storing of all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use, cleaning up spills as soon as possible following proper safety procedures, and storing wipe rags in closed containers." (see existing permit at 31)

In the application, Corning proposes the work practices specified in 15A NCAC 02D .0958 as BACT. DAQ concurs that "good work practices" is a technically feasible option for BACT, noting that the existing permit includes a specific definition of "good work practices" *and* a separate specific condition for the requirements of 02D .0958.

Step 3: Rank remaining control technologies.

Good work practices are the only technically feasible option, so no further ranking or analysis is required.

Step 4: Evaluate most effective controls and document results.

Good work practices are, by default, the most effective option.

Step 5: Select the BACT.

In the application, Corning proposes a BACT of 63.6 tpy of VOC with the control method being the work practices identified in 15A NCAC 02D .0958. In subsequent correspondence, Corning explained that a limit on annual usage of VOC cleaning agents is most practical. The cleaning agents are not ingredients in the

[5] See Application at 5-4. Furthermore, see DAQ's Final Determination for the T21 permit revision, issued April 29, 2020 (page 43).

final products and are instead used intermittently throughout the facility. The use of VOC is therefore not directly correlated to any specific product or throughput, and therefore it would not be appropriate to have a BACT with units of (for example) pounds of VOC per ton of glass produced.

DAQ proposes BACT for the cleaning operations to be the "good housekeeping practices" identified in the existing permit (see above). Note that this is slightly different than 15A NCAC 02D .0958, and that the permit contains a separate specific condition for 15A NCAC 02D .0958. DAQ also proposes that the permit explicitly require Corning to perform the monthly facility-wide inspections required by 15A NCAC 02D .0958 in order to demonstrate compliance with the "good housekeeping practices."

DAQ concurs with Corning's proposed annual limit of 63.6 tpy of VOC.

5.2 Ambient Impact Analysis[6]

The updated analysis was received on February 5, 2024, and addresses increased usage of isopropyl alcohol (IPA) in cleaning. IPA is a VOC and the increased usage's impacts on ozone is addressed. The 2023 PSD application addressed the change from the existing permit limit to the requested permit limit of 63.6 tons per 12-month period. The entire application, other than the MERP (Modeled Emission Rates for Precursors) analysis, addresses the 63.6 tons per 12-month period requested as BACT and does not look at the incremental effect of adding 40.8 tons per 12-month period. As such, the additional impacts analysis was complete as written. There is no growth associated with the project and no modeling or other analyses required for this VOC-only PSD application.

An updated Tier 1 screening analysis was conducted to evaluate project NO_X and VOC emissions impacts on secondary formation of ozone in Class II areas. The screening analysis was based on representative ozone monitoring data paired with conservative ozone modeling data taken from Appendix A of EPA's draft Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier I Demonstration Tool for Ozone and PM2.5 under the PSD Permitting Program (December 2, 2016). This Tier I screening approach is consistent with Section 5.3.2(b) of Appendix W.

A representative 8-hour ozone design value of 61 ppb was calculated from the Rockwell monitoring station (Rowan County) located approximately 50 km north of the project covering the period 2015-2017. The 61 ppb ozone design value was added to the estimated secondary formation impacts from the Corning project NO_X and VOC emissions. NO_X and VOC project emissions impacts on ozone formation were scaled according to the conservatively representative MERPs hypothetical source located in Nash County, North Carolina.

Ozone values for NO_X and VOC emissions were based on the 500-tpy, low-release hypothetical source showing modeled ozone impacts of 1.977 ppb and 0.085 ppb, respectively. These ozone impacts from the MERPs modeling were scaled to Corning project emissions as follows:

Ozone from Corning NO_X Emissions = (1.977 ppb) x (895.94 tpy NOX) / (500 tpy) = 3.543 ppb

Ozone from Corning VOC Emissions = (0.085 ppb) x (101.09 tpy VOC) / (500 tpy) = 0.017 ppb

Combining the scaled modeled ozone concentrations with the Rockwell ozone design concentration results in a total 8-hour ozone concentration of 64.56 ppb, below the ozone NAAQS of 70 ppb. Therefore, impacts from

[6] The information and data in this section is taken from DAQ's memorandum *Review of PSD and Air Toxics Dispersion Modeling Analyses for Corning, Inc.* (issued April 23, 2024).

project NO_X and VOC emissions are not expected to cause or contribute to a violation of the 8-hour ozone NAAQS.

5.3 Additional Impacts Analysis

Class II Area Visibility Impact Analysis: DAQ's initial PSD determination for this facility did not conduct a Class II area visibility analysis because no state parks or other receptors sensitive to plume blight were located within the 1.3 kilometer Significant Impact Area (SIA) modeled for $PM_{2.5}$. Given that this application does not propose any increase in PM emissions, and therefore there can be no expansion of the SIA, that conclusion remains unchanged.

Soil and Vegetation: DAQ's initial PSD determination for this facility concluded that "little or no significant impacts are anticipated from the project to soils and/or vegetation" based on comparing the maximum modeled concentrations to secondary NAAQS and screening thresholds recommended in EPA's "A Screening Procedure for Impacts of Air Pollution Sources on Plants, Soils and Animals" (EPA 450/2-81-078). Given that this application does not result in a change to secondary NAAQS, that conclusion remains unchanged.

Population and Infrastructure Growth Impacts: DAQ's initial PSD determination for this facility concluded that the project at that time would not have any "secondary growth" (*i.e.,* population and infrastructure). Given that this application does not propose any expansion of production at the facility, that conclusion remains unchanged.

6. State Toxic Air Pollutants and State Ambient Air Quality Standards

6.1 Toxic Air Pollutants (TAP)

The rules for toxic air pollutants under 15A NCAC 02D .1100 and 02Q .0700 apply to facilities that emit toxic air pollutants. In general, if a facility would emit a TAP at rates greater than the TAP permitting emission rates (TPER) listed in 02Q .0711, the facility must first conduct an air dispersion modeling demonstration under 15A NCAC 02D .1104.

In this application, Corning proposed increasing the emission rate of isopropyl alcohol by approximately 40 tpy, but did not change any other emission sources or emission rates. Isopropyl alcohol is not a TAP. Therefore, increasing emission rates of isopropyl alcohol will not be a modification under 02Q .0706.

6.2 State Ambient Air Quality Standards (SAAQS)

While the TSP NAAQS was revised in 1987 to narrow focus on the regulation of PM_{10}, North Carolina SAAQS currently still require evaluation of TSP separately in accordance with 15A NCAC 02D .0403.

In this application, Corning proposed increasing the emission rate of isopropyl alcohol by approximately 40 tpy, but did not change any other emission sources or emission rates. Isopropyl alcohol is a vapor and will not contribute to TSP emissions. Therefore, this proposed project does not cause an increase in TSP greater than the SER, and no further SAAQS analysis is required.

7. Other Application Requirements

7.1 Compliance Status

- Within the previous five years, Corning has been issued one Notice of Violation (NOV). DAQ issued an NOV to Corning on April 29, 2021 due to a stack test exceeding an emission limit. DAQ considers this matter resolved as of May 7, 2021.

- This facility was most recently inspected by DAQ on October 9, 2023. Corning appeared to be in compliance with the Title V permit at that time.

- The application submitted by Corning included form E5 "Title V Compliance Certification." This form was signed by Don Hefner, Plant Manager (responsible official for Corning). On this form, Corning certified that the facility was in compliance with all applicable requirements.

7.2 Zoning Consistency Determination

Per 15A NCAC 02Q .0507(d), a zoning consistency determination is only required for a new facility or the expansion of an existing facility. Corning is not a new facility and is not proposing expansion of an existing facility, so no zoning consistency determination is required.

7.3 Professional Engineer's Seal

Pursuant to 15A NCAC 02Q .0112 "Application requiring a Professional Engineering Seal," a professional engineer's seal (PE Seal) is required to seal technical portions of air permit applications for new sources and modifications of existing sources as defined in 02Q .0103.

The application submitted by Corning included Form D5 "Technical Analysis to Support Permit Application," which includes a PE seal from M. Dale Overcash (#12627). According to the North Carolina Board of Examiners for Engineers and Surveyors' license lookup tool, the PE license is "current" through December 31, 2024.

7.4 Application Fee

Applications for major PSD modifications require an application fee. Corning paid the required fee by ePay.

7.5 Removal of References to Affirmative Defense

EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions.[7] Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses[8] and will harmonize the EPA's treatment of affirmative defenses across different CAA programs.

[7] NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).
[8] In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing

As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), it will be necessary for states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised.

DAQ has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition J. Per EPA, DAQ is required to promptly remove such impermissible provisions from individual Title V permits after August 21, 2023 through normal course of permit issuance.

affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).

8. Pre-Public Notice Draft Versions

Initial draft: An initial draft permit and a draft of this preliminary determination were provided to DAQ Permits staff on April 24, 2024. Comments were received in-person April 30, 2024. The comments pointed out typos and minor corrections to the initial drafts.

Revised draft: A revised draft permit (a.k.a. a pre-public notice version of the draft permit) was provided to Corning staff, DAQ SSCB staff, and DAQ MRO staff on April 30, 2024. Comments were received from Corning on May 7, 2024.

Corning comment 1: Update the facility/technical contact to Janice Del Rio Rosario.

DAQ response: Agreed.

Corning comment 2: [With regards to Section 4.1.1 of the preliminary determination] 02D .0544 is the PSD regulation for Greenhouse Gases. Corning did not trigger PSD for GHG. For accuracy, it would seem that this rule should be deleted from this review.

DAQ response: This section is discussing how the Federal PSD rules are implemented into NC's SIP. 02D .0544 is one of the rules that implements PSD, so it must at least be mentioned here. For clarity, DAQ will add a note that states that Corning has not triggered a PSD review for GHG.

Corning comment 3: Both this modification (1300117.23C) and the Title V renewal modification (1300117.23B) made changes to version T23 of the permit (both are being processed now), but neither modification incorporated the changes from the other. Is it possible to combine both draft permits into one and allow Corning one final review before public notice?

DAQ response: DAQ cannot incorporate both the Title V renewal and this PSD major modification into a single permitting action. Whichever of the two pending revisions that is issued second will incorporate all of the changes made as part of the first revision. This being said, Corning will have an opportunity to review the final revision of the permit before it is issued.

DAQ SSCB had no comments on the revised draft. No response was received from DAQ MRO.

9. Public Notice, EPA, and Affected States Review

This permit application processing is conforming to the public participation requirements, pursuant to both 15A NCAC 02D .0530 "Prevention of Significant Deterioration" and 15A NCAC 02Q .0500 "Title V Procedures."

Satisfying the PSD requirements, a public notice for the availability of the preliminary determination and the draft Title V will be published in a local newspaper of general circulation for 30 days for review and comments on XXXXXXX. A copy of the public notice will be provided to the EPA, and all local and state authorities having authority over the location at which the proposed modification is to be constructed. Finally, all documents will be placed on the NCDEQ website and a complete administrative record for the draft permit documents will be kept for public review at the NCDEQ's Mooresville Regional Office for the entire public notice period (30 days).

With respect to Title V procedures for public participation, in addition to the public participation steps mentioned above, a notice of the draft Title V Permit will be placed on NCDEQ website on XXXXXXXX. The notice will provide for a 30-day comment period with an opportunity for a public hearing. Copies of the public notice will be sent to persons on the Title V mailing list and EPA on XXXXXXXXX.

Pursuant to 15A NCAC 02Q .0522, a copy of the permit application and the proposed permit (*i.e.*, the draft permit) will be provided to EPA for their 45-day review on XXXXXXX. Also pursuant to 02Q .0522, a notice of the *draft* Title V Permit will be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. A copy of the final permit will also be provided to the EPA upon issuance as per 02Q .0522.

Appendix 3 includes the public notice and a listing of both the entities and the documents to be sent to each listed entity for the proposed PSD major modification, satisfying the requirements in §51.166(q) "public participation.

10. Summary of Changes to the Existing Permit

The following changes were made to Air Permit No. 08436T23:*

Page No.	Section	Description of Changes
Throughout	Throughout	• Updated dates and permit numbers • Fixed formatting issues where appropriate. Changes to formatting are for clarity and consistency with DAQ's other Title V permits and are not intended to affect the Permittee's compliance requirements.
31	2.2 B.1.b	• Changed BACT limit for ES-C-Cleaning to 63.6 tons of VOC per year.
33	2.2 B.1.f.ii (new)	• Added requirement that the Permittee demonstrate compliance with the work practice requirements by complying with 15A NCAC 02D .0958.
37	4	• Updated General Conditions to version 7.0.

*This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

11. Conclusion

Based on the application submitted and the review of this proposal, NCDAQ is making a preliminary determination that the project can be approved and the proposed permit issued. After consideration of all comments, a final determination will be made.

Appendix 1: Emission Calculations

The following calculations were performed by Trinity Consultants (a firm representing Corning) and included with the application.

Form D5, Section A - Potential and Actual Emissions
Source: ES-C-Cleaning
Updated: 06/22/23

Source: ES-C-Cleaning Misc. Maintenance and Cleaning

EPN: Fugitive

Synopsis: A non-photochemically reactive solvent (isopropyl alcohol - IPA) is used for miscellaneous maintenance and cleaning operations.

Variables: IPA Usage
PSD review is triggered for VOC for this major modification.
Controls: N/A

Basis: Emissions are based on the 100% volatility of the IPA and the maximum usage rate

MAXIMUM EMISSIONS

Maximum potential usage rate of IPA: 127200 lb/yr
Percent volatility of IPA: 100%

VOC Emissions

$$127200 \frac{\text{lb IPA}}{\text{yr}} \times \frac{1 \text{ lb VOC}}{1 \text{ lb IPA}} = 127200 \frac{\text{lb VOC}}{\text{yr}}$$

$$127200 \frac{\text{lb}}{\text{yr}} \times \frac{\text{yr}}{8760 \text{ hr}} = 14.5205 \frac{\text{lb VOC}}{\text{hr}}$$

$$14.521 \frac{\text{lb}}{\text{hr}} \times \frac{24 \text{ hr}}{\text{day}} = 348.493 \frac{\text{lb VOC}}{\text{day}}$$

$$127200 \frac{\text{lb}}{\text{yr}} \times \frac{\text{ton}}{2000 \text{ lb}} = 63.60 \frac{\text{ton VOC}}{\text{yr}}$$

EMISSION TOTALS

Pollutant	ES-C-Cleaning			
	lbs/hr	lbs/day	lbs/yr	tons/yr
Before Controls				
VOC	14.52	348.49	127,200	63.6
After Controls				
VOC	14.52	348.49	127,200	63.6

FORM D1

FACILITY-WIDE EMISSIONS SUMMARY

REVISED 09/22/16 — NCDEQ/Division of Air Quality - Application for Air Permit to Construct/Operate — D1

CRITERIA AIR POLLUTANT EMISSIONS INFORMATION - FACILITY-WIDE

AIR POLLUTANT EMITTED	EXPECTED ACTUAL EMISSIONS (AFTER CONTROLS / LIMITATIONS)	POTENTIAL EMISSIONS (BEFORE CONTROLS / LIMITATIONS)	POTENTIAL EMISSIONS (AFTER CONTROLS / LIMITATIONS)
	tons/yr	tons/yr	tons/yr
PARTICULATE MATTER (PM)	32.03	4709.68	32.03
PARTICULATE MATTER < 10 MICRONS (PM_{10})	32.02	4709.66	32.02
PARTICULATE MATTER < 2.5 MICRONS ($PM_{2.5}$)	31.92	4709.57	31.92
SULFUR DIOXIDE (SO_2)	0.33	0.33	0.33
NITROGEN OXIDES (NOx)	895.94	895.94	895.94
CARBON MONOXIDE (CO)	40.79	40.79	40.79
VOLATILE ORGANIC COMPOUNDS (VOC)	101.09	101.09	101.09
LEAD	9.19E-05	9.19E-05	9.19E-05
GREENHOUSE GASES (GHG) (SHORT TONS)	43291.93	43291.93	43291.93
OTHER			

HAZARDOUS AIR POLLUTANT EMISSIONS INFORMATION - FACILITY-WIDE

HAZARDOUS AIR POLLUTANT EMITTED	CAS NO.	EXPECTED ACTUAL EMISSIONS (AFTER CONTROLS / LIMITATIONS)	POTENTIAL EMISSIONS (BEFORE CONTROLS / LIMITATIONS)	POTENTIAL EMISSIONS (AFTER CONTROLS / LIMITATIONS)
		tons/yr	tons/yr	tons/yr
Cl2	7782-50-5	17.74	553.86	17.74
HCl	7647-01-0	16.38	2275.38	16.38
Benzene	71-43-2	0.01	0.01	0.01
Cobalt	7440-48-4	1.54E-05	1.54E-05	1.54E-05
Dichlorobenzene	106-46-7	2.21E-04	2.21E-04	2.21E-04
Formaldehyde	50-00-0	1.58E-02	1.58E-02	1.58E-02
Hexane	110-54-3	3.30E-01	3.30E-01	3.30E-01
Lead	N/A	9.19E-05	9.19E-05	9.19E-05
Naphthalene	91-20-3	2.17E-03	2.17E-03	2.17E-03
Selenium	N/A	1.36E-06	1.36E-06	1.36E-06
Total POM	N/A	6.55E-06	6.55E-06	6.55E-06
Toluene	108-88-3	1.46E-01	1.46E-01	1.46E-01
Xylene	1330-20-7	1.44E-01	1.44E-01	1.44E-01
Acetaldehyde	75-07-0	8.80E-04	8.80E-04	8.80E-04
Acrolein	107-02-8	1.81E-04	1.81E-04	1.81E-04
1,3-Butadiene	106-99-0	2.50E-05	2.50E-05	2.50E-05
Ethylbenzene	100-41-4	1.56E-02	1.56E-02	1.56E-02
Anthracene	120-12-7	2.02E-05	2.02E-05	2.02E-05

TOXIC AIR POLLUTANT EMISSIONS INFORMATION - FACILITY-WIDE

INDICATE REQUESTED ACTUAL EMISSIONS AFTER CONTROLS / LIMITATIONS. EMISSIONS ABOVE THE TOXIC PERMIT EMISSION RATE (TPER) IN 15A NCAC 2Q .0711 MAY REQUIRE AIR DISPERSION MODELING. USE NETTING FORM D2 IF NECESSARY.

TOXIC AIR POLLUTANT EMITTED	CAS NO.	lb/hr	lb/day	lb/year	Modeling Required ? Yes	No	

COMMENTS:

The application is for a VOC emission increase from ES-C-Cleaning. The VOC is solely Isoporpyl aclohol, which is not a TAP or HAP. As such, the air toxics section above is left blank.

Appendix 2: RBLC Search Results

The following table summarizes the RBLC search results for the terms “cleaning,” “IPA,” and “isopropyl alcohol.” Only process names with an emission limit for VOC are included here. Note that none of the SIC codes match Corning’s, which is 3229. Therefore, DAQ concludes there are no applicable BACT emission limits for IPA-based cleaning at Corning.

RBLC ID	Facility Name	SIC Code	Process name
IN-0337	TOYOTA MOTOR MANUFACTURING, INDIANA, INC.	3711	Solvent Cleaning/ Purge Capture System
		3711	Plastic Parts Die Caster Cleaning Process
KY-0108	TOYOTA MOTOR MANUFACTURING, KENTUCKY, INC.	3711	Non-Process Cleaning - Purging and cleaning G19
KY-0110	NUCOR STEEL BRANDENBURG	3312	EP 16-01 - Cleaning Tanks #1 - #16
KY-0115	NUCOR STEEL GALLATIN, LLC	3316	Cold Mill Complex Cleaning Tank (EP 21-20)
		3316	Galvanizing Line #2 Alkali Cleaning Section Heater (EP 21-07B)
LA-0321	MONROE PACKAGING PLANT	2657	CLEAN-Cleaning Operations
MI-0444	WARREN TRUCK ASSEMBLY PLANT	3711	EUPURGECLEANWEST (purge/clean process)
		3711	EUBODYWIPEWEST (Body wipe cleaning process)
		3711	EUPURGECLEANEAST (purge/clean process)
MI-0449	WARREN TRUCK ASSEMBLY PLANT	3711	EUPURGECLEANWEST (Purge/clean process)
		3711	EUBODYWIPEWEST (Body wipe cleaning process)
		3711	EUPURGECLEANEAST (Purge/clean process)
SC-0182	FIBER INDUSTRIES LLC	2821	Die Head Cleaning
SC-0183	NUCOR STEEL - BERKELEY	3312	Galvanizing Line Equipment (galvanizing line 2 cleaning section heaters)
		3312	Galvanizing Line Equipment (galvanizing line/alkali cleaning section heaters)
SC-0193	MERCEDES BENZ VANS, LLC	3713	Paint Shop Purge/Cleaning Solvent
SC-0204	MERCEDES-BENZ VANS LLC - CHARLESTON PLANT	3711	Cleaning Solvent
*SC-0205	SCOUT MOTORS INC A DELAWARE CORPORATION - BLYTHEWOOD PLANT	3711	Cleaning Solvent
*TN-0185	BLUE OVAL CITY	3711	Purge and Cleaning Solvent
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	3711	Plant-wide General Process Cleaning
*TX-0956	ENTERPRISE MONT BELVIEU COMPLEX	2869	EQUIPMENT CLEANING MSS
*TX-0956	ENTERPRISE MONT BELVIEU COMPLEX	2869	EQUIPMENT CLEANING MSS
		2869	EQUIPMENT CLEANING MSS
		2869	EQUIPMENT CLEANING MSS
		2869	EQUIPMENT CLEANING MSS
WI-0283	AFE, INC. LCM PLANT	3679	F10 Fugitive Wipe Cleaning Operations
WI-0287	SIO INTERNATIONAL WISCONSIN, INC. -ENERGY PLANT	3679	F10 & F11 Miscellaneous Cleaning and Repairing Operations
WI-0312	ESSITY PROFESSIONAL HYGIENE NORTH AMERICA LLC-MENASHA	2621	Paper Machine #3 Solvent Cleaning (P54)
		2621	Paper Machine #4 Solvent Cleaning (P56)

Appendix 3: Public Notice Documents

Listing of Entities and Documents to be Sent

Entity	Name and Address	Documents to be Sent
Newspaper	Independent Tribune Amanda Boan PO Box 968, Hickory, NC 28603	Public Notice
Officials	Mike Downs County Manager 65 Church Street Concord, NC 28025	Public Notice
Source	Ted Talarek, Plant Manager Corning Incorporated 14556 Highway 601 South Midland, NC 28107	Preliminary Determination Draft Permit Public Notice
EPA	Brad Akers, EPA Region 4 Air Permitting Section Chief, Air Permitting Section US EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303	Preliminary Determination Draft Permit Public Notice
FLM	Andrea Stacy National Park Service, Air Resources Division PO Box 25287 Denver, CO 80225 (303) 969-2816	Preliminary Determination Draft Permit Public Notice
Mooresville Regional Office	Melina Wolanin Winston Salem Regional Office 450 West Hanes Mill Road Suite 300 Winston Salem, NC 27105	Preliminary Determination Draft Permit Public Notice

PUBLIC NOTICE
PUBLIC NOTICE ON PRELIMINARY DETERMINATION REGARDING APPROVAL FOR AN APPLICATION SUBMITTED UNDER THE REGULATIONS FOR THE "PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY"

Corning Incorporated has applied to the North Carolina Department of Environmental Quality, Division of Air Quality (DAQ), Permitting Section, to make modifications to the facility located at 14556 Highway 601 South, Midland in Cabarrus County. The proposed modification revises a previous BACT determination and increases emissions of VOC from the facility-wide cleaning operations.

The facility is subject to review and processing under North Carolina Administrative Code, Title 15A, Subchapter 02D .0530, "Prevention of Significant Deterioration." The facility is defined as an existing "major stationary source." The proposed modification will result in a significant emissions increase of VOC.

The Corning Incorporated application has been reviewed by the DAQ, Air Quality Permitting Section in Raleigh, North Carolina to determine compliance with the requirements of the North Carolina Environmental Management Commission air pollution regulations.

A preliminary review, including analysis of the impact of the facility emissions on local air quality, has led to the determination that the facility can be approved, and the DAQ air permit issued, if certain permit conditions are met.

Cabarrus County is classified as an attainment area for all pollutants. Compliance with all ambient air quality standards and the PSD increments is projected.

Persons wishing to submit written comments or request a public hearing regarding the Air Quality Permit are invited to do so. Requests for a public hearing must be in writing and include a statement supporting the need for such a hearing, an indication of your interest in the facility, and a summary of the information intended to be offered at such hearing.

Written comment or requests for a public hearing should be postmarked no later than June 17, 2024 (30 days after issuance of this notice) and addressed to daq.publiccomments@deq.nc.gov (please type "Corning.23C" in the subject line) or mail written comments to: NC DEQ, Division of Air Quality, 1641 Mail Service Center, Raleigh, NC 27699-1641.

All comments received or postmarked by this date will be considered in the final determination regarding the Air Quality Permit. A public hearing may be held if the Director of the DAQ determines that significant public interest exists or that the public interest will be served.

A copy of all data and the application submitted by Corning Incorporated, and other material used by the DAQ in making this preliminary determination are available for public inspection during normal business hours at the following locations:

NC DEQ
Division of Air Quality
Air Quality Permitting Section
217 West Jones Street, Suite 4000
Raleigh, NC 27603

or

NC DEQ
Mooresville Regional Office
610 East Center Avenue
Suite 301
Mooresville, NC 28115

Information on the proposed permit, the permit application, and the staff review is available on the DAQ website (https://deq.nc.gov/about/divisions/air-quality/events) or by writing or calling:

NC DEQ
Mark J. Cuilla, EIT, CPM
Chief, Permitting Section
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, North Carolina 27699-1641
Telephone: 919-707-8400

After weighing relevant comments received by June 17, 2024 (30 days after issuance of this notice) and other available information on the facility, the DAQ will act on the PSD application.

Michael A. Abraczinskas, Director
Division of Air Quality, NCDEQ