

February 9, 2024

Via Electronic Mail: epdcomments@dnr.ga.gov

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RE: Public Comments on Draft Title V Permit Amendment No. 2499-271-0022-V-05-2 for Telfair Forest Products, LLC.

Dear Mr. Allison:

The Southern Environmental Law Center, on behalf of itself, Georgia Interfaith Power and Light, the Georgia Chapter of the Sierra Club, Dogwood Alliance, Our Children's Earth Foundation, and the Concerned Citizens of Cook County, hereby submits public comments on Draft Title V Permit Amendment No. 2499-271-0022-V-05-2 for Telfair Forest Products, LLC (hereafter, "Telfair" or "the facility"), which is currently out for public notice and comment with the Georgia Environmental Protection Division (EPD). The facility is an existing wood pellet and wood shavings manufacturing plant located at 11 West Industrial Boulevard, Lumber City, Telfair County, Georgia. The Draft Permit serves as both a construction permit issued under Georgia's State Implementation Plan as well as an amendment to the facility's Part 70 or Title V permit.

With this modification, Telfair seeks to more than double the facility's drying capacity by adding a new 165,000 ton-per-year (tpy) wood dryer—currently the facility is limited to drying just 129,700 tpy—for a total drying capacity of 290,000 tpy. Telfair seeks permission to eliminate existing emission limits that the facility accepted to avoid classification as a major source under the Clean Air Act's Prevention of Significant Deterioration (PSD) program. Telfair now wants to increase allowable volatile organic compound (VOC) emissions from 249 tpy to 498 tpy (and, including fugitive emissions, up to 585 tpy) without undergoing PSD review and permitting. **If authorized, Telfair would become the largest emitter of VOCs in Georgia that has not undergone PSD, and the 8th largest emitter in the state overall, despite being a relatively small operation.**¹ As permitted, the facility would also become the highest emitting wood pellet plant in the nation by a significant margin, emitting more than twice the level of VOCs than most of its significantly larger competitors.²

¹ Based on EPA's 2020 National Emissions Inventory. We have also verified that all seven sources that emitted more than 585 tons of VOCs in Georgia in 2020 have previously undergone major-source PSD permitting.

² All or almost all larger wood pellet plants operate VOC controls and are permitted as synthetic minor sources, with emissions of VOCs lower than 250 tpy.

As described below, the draft permit is unlawful. As a synthetic minor source that previously agreed to enforceable facility-wide limits on its potential to emit (PTE) VOCs, Telfair may not now disregard those limits and become a major source without undergoing the requisite PSD permitting.

Additionally, Telfair has substantially underestimated hazardous air pollutants (HAPs) and incorrectly classified the modified facility as an area (minor) source under Section 112 of the Clean Air Act. With this modification, Telfair will become a major source of HAPs that must comply with case-by-case Maximum Achievable Control Technology (MACT) requirements. EPD must address these and the other deficiencies identified below and reissue a revised draft permit for additional notice and comment.

I. As a Synthetic Minor Source, Telfair Cannot Take Advantage of the One-Time-Doubling Exception to Major Source PSD Permitting.

With this application, Telfair is attempting to perform a “one-time-doubling” to circumvent major source PSD permitting.³ One-time-doubling is an interpretation of the Clean Air Act and EPA’s rules that allows for *true* minor sources to become major sources without undergoing PSD.⁴ However, the same does not apply to *synthetic* minor sources that have previously agreed to enforceable restrictions on PTE to avoid major source PSD. The so-called Source Obligation Rule⁵ and longstanding EPA Guidance are explicit that *only* true minor sources may undertake one-time doubling. Simply put, once a source has agreed to synthetic minor limits, it must either abide by those limits or undergo PSD if it decides to disregard those limits. That is the case with Telfair.

Telfair’s current permit contains several synthetic minor limits implemented explicitly to avoid PSD applicability. First, Condition 2.1.1 restricts facility-wide VOC emissions to less than 249 tpy, citing to “40 CFR 52.21 [PSD] Avoidance.”⁶ Next, Condition 6.2.3 effectively constrains the facility’s total production by requiring Telfair to calculate 12-month rolling VOC emissions by multiplying monthly production rates and emission factors to ensure emissions do not exceed the 249 tpy limit. Finally, Condition 3.2.1 places limits on the number of wood dryers Telfair can operate as well as their production limits, again specifically for PSD avoidance.

³ Telfair Forest Products LLC, Construction Permit and Title V Operating Permit Modification Application, at 3 (Aug. 2023) (Hereafter, the “Telfair Application”).

⁴ Specifically, the definition of a “Major Modification” under the PSD rules states that a major modification that would trigger PSD occurs when a *major* source makes certain physical or operational changes that increase emissions beyond the relevant thresholds. 40 C.F.R. § 52.21(b)(2)(i). Through this definition, one-time-doubling allows true minor sources to make modifications that increase emissions beyond the major source threshold without applying PSD. As discussed herein, however, the Source Obligation Rule at 40 C.F.R. § 52.21(r)(4) prohibits the use of this technique for synthetic minor sources.

⁵ 40 C.F.R. § 52.21(r)(4) (“At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of [PSD] shall apply to the source or modification as though construction had not yet commenced on the source or modification.”). The Source Obligation Rule is also incorporated by reference into Georgia’s rules (*see* Ga. Comp. R. & Regs. 391-3-1-.02(7)(b)15) and approved into the State Implementation Plan at 85 Fed. Reg. 57694 (Sep. 16, 2020).

⁶ Georgia EPD, Part 70 Operating Permit No. 2499-271-V-05-0 for Telfair Forest Products (May 24, 2021).

These limits do not apply to individual units, but to the entire facility. For instance, Condition 2.1.1, which limits facility-wide VOC emissions to 249 tons or less per year, is within the permit section titled “Requirements Pertaining to the Entire Facility.” Section 2.1, in particular, is titled “Facility Wide Emission Caps and Operating Limits.” Additionally, the draft permit narrative for this modification explains that “[e]xisting Condition 2.1.1. of the Permit limited **facility-wide** VOC and PM emissions to no more than 249 tpy.”⁷

Telfair now seeks to eliminate all of these facility-wide synthetic minor limits without undergoing PSD review. As a result, the draft permit explicitly states that the existing permit Condition 2.1.1, limiting facility-wide PTE limit to 249 tons per year, has been “removed.”⁸ After this modification, the facility would be authorized to emit 498 tons of VOCs per year (585 tpy with fugitive emissions) without undergoing PSD permitting.

This is unlawful. EPA has repeatedly dealt with similar attempts to evade PSD and has consistently held that the Source Obligation Rule requires PSD review in this scenario. For example, when discussing the relaxation of an identical 249 tpy PTE limit, EPA wrote: “[a]lthough the facility-wide emission limit of 249.0 tpy for CO is enumerated in the permit, the permit should also state that if this limit is relaxed at any time, the facility will be subject to the requirements of 40 Code of Federal Regulations (CFR) 52.21(r)(4) [requiring PSD permitting as if construction had never commenced].”⁹

EPA has further explained that:

[The Source Obligation Rule] simply states that any relaxation of an established limit that would make the project “major” would at that point in time make PSD applicable. That is, the (r)(4) provision must be considered for the life of any project for which enforceable limits were established such that any subsequent requests for a relaxation of the aforementioned limitations will necessitate [PSD review].¹⁰

Here, the “project” in question is the construction and operation of the entire shavings and pellet mill manufacturing facility, including several furnaces, dryers, log shavers, hammermills, pellet mills, and other equipment. This is the “project” for which the 249 tpy facility-wide limit on VOCs and the other synthetic minor limits were established. Simply adding one new piece of equipment—a third dryer—does not redefine the “project” or the facility for purposes of the facility-wide 249 tpy synthetic minor limit. Moreover, the new dryer is not a separate or stand-alone facility on its own, but instead will be an integral part of the pellet and shavings manufacturing process, alongside the other two dryers, which will produce dried material for the pelletizing and shavings lines.

⁷ Draft Permit Narrative at 4 (emphasis added).

⁸ Draft Permit at 2.

⁹ EPA Region 9, Comments on Draft Air Quality Operating Permit - Lockwood Regional Landfill (LRL), at 1 (Mar. 29, 2011) (Attachment A).

¹⁰ EPA Region 2, Request for PSD Applicability Determinations for Burlington 12 and Kearny 12 Generating Stations, at 2 (Feb. 11, 2009). (Attachment B).

EPD’s one-sentence contention that the **facility-wide** 249 tpy limit does not apply to the new dryer is absurd.¹¹ The dryer will be part of this facility by any reasonable definition of “facility,” and Telfair accepted and has benefited from the facility-wide PTE limit in order to avoid PSD for well over a decade, during which time Telfair made many other modifications that did not redefine the “facility.” Simply stated, Telfair’s entire operation is currently limited to 249 tons of VOCs per year, but this modification would allow this “facility” to emit 498 tons without undergoing PSD. This relaxation of the facility-wide PTE limit is exactly the kind of circumvention the Source Obligation rule is intended to prevent.

In fact, EPA Region 4 squarely addressed this issue in a 2001 letter to North Carolina authorities in which EPA explained that the rule itself as well as the preamble to the federal PSD regulations “does not provide any support for the idea that a modification would preclude the applicability of the relaxation provision.”¹² EPA continued that “[i]f any modification, including a modification that was not “major,” would nullify applicability of the relaxation provision, then misuse of the clause would occur,” and that “to exclude projects involving a modification easily could lead to an abuse akin to sham permitting.”¹³ Finally, EPA summarized that “[i]f a source owner elects to accept an enforceable limitation to avoid PSD requirements . . . then a revision of that limitation for any reason (including a physical change) could trigger the relaxation provision.”¹⁴

In sum, Telfair would currently be a major source of VOCs if it had not agreed to enforceable synthetic minor limits that, to date, have allowed the facility to operate without undergoing PSD permitting. As the foregoing makes clear, Telfair cannot now shed those enforceable limits—and double VOC emissions in the process—without undergoing PSD review.

Finally, as discussed below, it is also unconscionable that EPD would allow this abuse of the PSD rules in Telfair County—one of the poorest counties in Georgia (153rd out of 159 counties)¹⁵—and Lumber City in particular, which has a population that is more than 70% Black and in the 86th percentile (nationwide) for low-income individuals.¹⁶ In particular, despite Telfair’s contentions otherwise, about a third of the 585 tons of VOCs the facility would emit are Hazardous Air Pollutants (HAPs)—i.e., pollutants designated by Congress and EPA as especially toxic and/or carcinogenic even in very low concentrations. As such, this unlawful modification would have a substantial negative impact in the community.

¹¹ Draft Permit Narrative at 6.

¹² EPA Region 4, Response to Questions from Dr. Donald R. van der Vaart, Division of Air Quality, North Carolina Department of Environment and Natural Resources, at 4 (Aug. 8, 2001) (emphasis added) (Attachment C).

¹³ *Id.*

¹⁴ *Id.*

¹⁵ U.S. Census Bureau, American Community Survey Data, <https://www.census.gov/programs-surveys/acs/data.html> (Visited Feb. 9, 2024), *see also*

[https://en.wikipedia.org/wiki/List_of_Georgia_\(U.S._state\)_locations_by_per_capita_income](https://en.wikipedia.org/wiki/List_of_Georgia_(U.S._state)_locations_by_per_capita_income) (Visited Feb. 9, 2024).

¹⁶ Georgia Municipal Association, GMA Dashboard results for Lumber City, <https://www.gacities.com/Resources/Data-Tools/GMA-Dashboard.aspx> (visited Feb. 9, 2024); EPA, EJScreen Community Report for 3-mile radius centered on Telfair Forest Products (Including all of Lumber City) (Attachment D).

II. Telfair Underestimates HAP Emissions and the Draft Permit Fails to Restrict PTE for Aggregate HAPs to Area Source Levels.

Telfair estimates that after this modification, the facility will remain an area (i.e., minor) source of HAPs, meaning potential HAP emissions would remain below the major source thresholds of 10 tpy (for any single HAP) and 25 tpy for total HAPs. Unfortunately, Telfair's HAP emission calculations are flawed or otherwise not plausible in several critical ways, and the modified facility will be a major source of HAPs. Major sources of HAPs are required to implement Maximum Achievable Control Technology (MACT), an important pollution control standard critical to protecting the public from especially dangerous toxic pollutants. By underestimating HAPs emissions, Telfair is attempting to skirt the MACT standard.¹⁷

A substantial portion of the VOCs emitted by the facility are also HAPs. If this modification is approved, Telfair will be permitted to emit more than 585 tons of VOCs per year, including fugitive emissions.¹⁸ Telfair in turn estimates that just 10.1 tons of these VOCs will also be organic HAPs; in other words, Telfair believes that just 1.7% of all VOCs emitted by the facility will also be HAPs. This is a ratio of organic HAPs to VOCs that is contrary to a substantial amount of wood pellet testing.

For instance, Enviva, which has conducted more stack testing at wood pellet plants than any other entity, recently conceded to EPD that its Waycross, GA pellet plant emits 79 tons of HAPs per year.¹⁹ That facility emits 248 tons of VOCs, meaning that about 33% of all VOCs emitted are also organic HAPs.²⁰ Drax, another significant player in the wood pellet industry, also recently conducted compliance tests, revealing a similar ratio of HAPs to VOCs, and has begun using those emission factors for permitting new wood pellet plants. For instance, in Mississippi and Washington, Drax estimates based on its own compliance testing that its pellet plants will emit 120 tons of VOCs and 40 tons of HAPs, which is again about 33%.²¹ As applied to Telfair, these ratios show the modified facility will emit 193 tons of organic HAPs. As explained below, this discrepancy is due in part because the stack tests Telfair relies upon undermeasure methanol emissions, as well as the fact that Telfair has neglected to include HAP emissions from numerous units.

Additionally, while the Enviva and Drax facilities differ from Telfair in that they utilize VOC control technology, which could potentially alter the ratio of HAPs to VOCs, testing at uncontrolled wood pellet plants still show Telfair will still vastly exceed the major source MACT

¹⁷ We believe Telfair is likely already a major source of HAPs, and that this modification would trigger case-by-case MACT under part 112(g)(2)(a). Alternatively, if the facility is currently a minor or area source of HAPs, this modification would result in the facility becoming a major source, also requiring case-by-case MACT. The situation is analogous to the current permit proceeding for Enviva Waycross, which is also undergoing case-by-case MACT permitting after testing revealed it was a major source.

¹⁸ Fugitive emissions are counted toward the major source HAPs threshold for determining MACT applicability.

¹⁹ Enviva Pellets Waycross, Application for Significant Permit Modification, at 20 (Oct. 30, 2021).

²⁰ *Id.*

²¹ Drax Amite BioEnergy, LLC, Title V Air Permit Application, at 1-1 (Feb. 2022) (This is the Gloster, Mississippi facility with a PTE for VOCs of 120 tpy and a PTE for HAPs of 40 tpy) (Excerpt attached as Attachment E); Pinnacle Renewable Holdings, LLC, (also known as the Drax Longview facility), Letter from Trinity Consultants to Danny Phipps, Southwest Clean Air Agency, at Attachment 2, Updated Potential Emissions Calculations and Stack Test Data (Mar. 29, 2023) (Attachment F).

thresholds. The table below is from testing at Enviva Wiggins, which was uncontrolled for VOCs at the time of the testing:²²

Analyte	Dryer 1	Dryer 2	Dry Hammermill 2	Green Hammermill	Pellet Cooler 1	Pellet Cooler 2	Aspirator	Dry Hammermill 1	Total
Total VOC	66.3	57.6	11.1	21.1	15.7	7.8	46.4	7.4	233.5
Organic HAPs									
Methanol	1.85	7.26	0.08	0.27	0.16	0.24	0.34	0.05	10.3
Acetaldehyde	0.00	1.40	0.25	0.61	0.39	0.35	0.23	0.17	2.0
Acrolein	1.03	2.32	0.43	1.24	0.77	0.68	0.20	0.29	7.0
Formaldehyde	2.01	3.48	0.39	0.37	0.49	0.34	0.03	0.26	7.4
Phenol	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.4
Propionaldehyde	1.06	1.82	0.17	0.09	0.16	0.11	0.00	0.11	3.5
Total HAPS	5.96	14.87	1.32	2.59	2.35	1.72	0.80	0.88	31.89

Figure 1: Enviva Wiggins Stack Test Excerpt

The ratio of HAPs to VOCs for the total facility is 13.3%, resulting in an emission rate of 77 tpy at Telfair, including 25 tons of methanol, 17.5 tons of formaldehyde, and 17 tons of the particularly toxic HAP acrolein (which would rank Telfair the largest emitter of acrolein in Georgia²³), all of which significantly exceed the relevant 10 and 25 tpy MACT thresholds.

Telfair's HAP emissions are also not plausible when considering other large emitters of VOCs. For example, we surveyed the 30 largest emitters of VOCs in Georgia based on EPA's National Emissions Inventory and EPD's permits. Twenty-three of these sources emitted less VOCs than Telfair will (i.e., emitted less than 585 tons of VOCs). Of these 30 sources, all but three are major sources of HAPs; one of these three minor facilities only uses and emits pentane (which is a VOC but not a HAP), while the other two are Telfair's sister facilities (Appling County Pellets and Varn Wood Products, both owned by Telfair's parent company, Fram Renewable Fuels), both of which reported *zero* HAP emissions, which is plainly not plausible. The table below sets out the results of this survey:

²² Enviva Pellets Wiggins, LLC, Air Emission Test Report, at 1 (Oct. 31, 2013) (Attachment J).

²³ Per 2020 EPA National Emissions Inventory.

Facility	Facility Type	VOC Emissions (tons/yr)	Major Source of HAPs?	Notes
Rayonier Performance Fibers, LLC	Pulp and Paper Plant	1,356	Yes	
International Paper - Savannah	Pulp and Paper Plant	1,066	Yes	
Graphic Packaging Macon Mill	Pulp and Paper Plant	870	Yes	
Graphic Packaging International, LLC	Pulp and Paper Plant	816	Yes	
Brunswick Cellulose LLC	Pulp and Paper Plant	687	Yes	
Georgia-Pacific Cedar Springs LLC	Pulp and Paper Plant	617	Yes	
International Paper - Flint River Mill	Pulp and Paper Plant	602	Yes	
Telfair Forest Products	Wood Pellet Plant	585	No	
Appling County Pellets	Unspecified	567	No	Sister Facility to Telfair, reported zero HAP emissions
PCA Valdosta Mill	Pulp and Paper Plant	523	Yes	
ADM Valdosta	Food Products Processing Plant	518	Yes	
Georgia-Pacific Wood Products LLC (Warrenton)	Lumber/Sawmill	495	Yes	
Dart Container Corporation of Georgia	Unspecified	466	No	The only significant VOC used and emitted is pentane, which is not a HAP
Interfor Preston Division	Lumber/Sawmill	448	Yes	
Huber Engineered Woods, LLC	Plywood & Engineered Wood Products	423	Yes	
Georgia-Pacific Wood Products South LLC Lumber Plant	Lumber/Sawmill	416	Yes	
Varn Wood Products, LLC	Unspecified	412	No	Sister Facility to Telfair, reported zero HAP emissions
Pinova, Inc.	Chemical Plant	353	Yes	

Armstrong World Industries Inc.	Unspecified	342	Yes	
Interfor Perry Division	Lumber/Sawmill	342	Yes	
Hartsfield-Jackson Atlanta International Airport	Airport	339	Yes	
Langdale Forest Products Co.	Lumber/Sawmill	339	Yes	
Interfor U.S. Inc. - Baxley Sawmill	Lumber/Sawmill	323	Yes	
Interfor U.S. Inc. - Swainsboro Sawmill	Lumber/Sawmill	315	Yes	
Georgia-Pacific Savannah River LLC	Pulp and Paper Plant	301	Yes	
Albany Lumber	Lumber/Sawmill	300	Yes	
Interfor U.S. Inc. - Meldrim	Lumber/Sawmill	297	Yes	
Meggitt (Rockmart), Inc.	Aircraft, Aerospace, or Related Parts Plant	293	Yes	
Jordan Forest Products, LLC	Lumber/Sawmill	291	Yes	
International Paper Company (Rome Linerboard Mill)	Pulp and Paper Plant	286	Yes	

As the foregoing table further demonstrates, it is just not plausible that a facility—especially a wood products facility like Telfair—can emit 585 tons of VOCs without being a major source of HAPs.

A. Telfair’s Stack Tests for Methanol Have Historically Undermeasured Emission Rates.

Telfair’s current and past permits have required compliance testing for methanol, formaldehyde, and acetaldehyde using NCASI Method 105.1.²⁴ Telfair’s PTE estimates for HAPs rely on these stack tests, as well as stack tests from a related facility, Jasper Pellets in South Carolina, which also utilized NCASI Method 105.1.

NCASI, or the National Council for Air and Stream Improvement, is a forest products industry group that represents the interests of sources like Telfair. Although NCASI methods may be reliable in certain instances, Method 105.1 has been shown to significantly undermeasure methanol at wood pellet plants. For instance, as EPD is aware, the wood pellet plant Enviva Waycross conducted methanol tests in 2021 using EPA Method 320 after years of using NCASI Method 105.1. The results showed vastly higher methanol emission rates, resulting in permit violations. The new testing also revealed that the facility was a major source of methanol, which necessitated case-by-case MACT permitting.²⁵ Despite the negative consequences for the company, Enviva “determined that the [new methanol test results], based on the requirement to use EPA Method 320, are valid and representative.”²⁶

The Enviva testing showed that using EPA’s method rather than NCASI’s method resulted in its dryers emitting as much as 15 times more methanol than previously believed.²⁷ Telfair, meanwhile, calculates it will emit just 1.38 tons of methanol per year based on the NCASI stack tests (out of a total of 580+ ton of VOCs); correcting for the difference between NCASI and EPA’s method results in a PTE for methanol of about 20 tpy at Telfair.

We note that Enviva Waycross calculates that it emits 44 tons of methanol out of a total of 248 tons of VOCs, meaning 18% of all the VOCs emitted by that facility are methanol.²⁸ Likewise, Drax’s recent emissions estimates also show about 17% of all of the VOCs emitted by its facilities are methanol.²⁹ Meanwhile, the foregoing calculation for Telfair—emitting 20 tons of methanol out of a total of 585 tons of VOCs—is still only a methanol-to-VOC ratio of 3.4%. In other words, this test method discrepancy does not fully explain the difference between the Enviva, Drax, and Telfair estimates.

Finally, we note that the use of VOC and HAP control technology also doesn’t account for the different ratios of VOCs and HAPs between Enviva, Drax, and Telfair. As just one example,

²⁴ Existing permit at Condition 4.1.3(1).

²⁵ Enviva Pellets Waycross, Response to Notice of Violation Dated November 12, 2021, at 1-2 (Nov. 24, 2021).

²⁶ *Id.*

²⁷ Enviva Waycross’s NCASI stack tests showed the dryer emitted 0.27 lbs of methanol at a throughput rate of 51.1 tons, for an emission factor of 0.005 lb/ton; the EPA Method 320 testing, meanwhile, showed the same unit emitting at a rate of 0.077 lb/ton. *Compare* EPD, Source Test Review for Georgia Biomass [now Enviva Waycross], RTO 1 (Sep. 10, 2014; testing occurred June 18, 2014) and Enviva Pellets Waycross, Air Emission Test Report (July 1, 2021).

²⁸ Enviva Pellets Waycross, Application for Significant Permit Modification, at Appendix C, Potential Emissions Calculations (Oct. 30, 2021).

²⁹ Drax Amite BioEnergy, LLC, Title V Air Permit Application, at 1-1 (Feb. 2022) (This is the Gloster, Mississippi facility with a PTE for VOCs of 120 tpy and a PTE for HAPs of 40 tpy) (Excerpt attached as Attachment E).

Enviva has conducted stack tests on uncontrolled green hammermills that showed 10 to 12 percent of all VOCs emitted by these units were HAPs.³⁰ Although this is lower than the more recent Enviva tests, these rates are still vastly higher than the 1.7% estimated by Telfair.

B. Telfair Omits Organic HAPs from Several Significant Sources.

Telfair estimates that its green hammermill (ID: HAMG) will emit 35 tons of VOCs per year, but zero HAPs. Likewise, Telfair only includes a handful of HAPs for pellet Handling/Storage (ID: HAND) and shavings bagging lines (ID: BAG 1, 2, & 3), which will emit 33 tons and 20 tons of VOCs, respectively. All told, these three units will emit 88 tons of VOCs but, according to Telfair, just 0.53 tons of HAPs. As demonstrated above, this is simply not plausible, and we calculate that each unit will emit considerably higher levels of HAPs:

- **Green Hammermill:** Currently, Telfair does not list any HAP emissions from this unit, despite estimating it will emit 35 tons of VOCs. Using the same ratio of HAPs to VOCs as Telfair’s dry hammermills, we calculate that the green hammermill will emit 5.9 tons of organic HAPs. Similar rates are shown based on the emission factors from the Enviva stack tests cited above (for instance, Enviva estimates that most log yard units like chippers emit at least methanol at rates that amount to 20% of all VOCs, which would amount to 7 tons at Telfair).
- **Pellet Handling and Storage and Shaving Side Bagging Lines:** Telfair does include methanol, formaldehyde, and acetaldehyde for these units, but not acrolein, phenol, or propionaldehyde. To calculate these emissions, we prorated an emission factor for each pollutant using the ratio of each HAP to VOC as emitted from that production line’s dryer, which results in an additional 0.67 tpy of HAPs.

We believe the foregoing are reasonable approaches to calculating the missing HAP emissions from these units. Based on these approaches, we estimate they will emit an additional 6.57 tpy of HAPs. At a bare minimum, however, EPD must require Telfair to account for these HAP emissions and units as part of the facility-wide HAP PTE calculation.

Finally, the fact that the draft permit’s monitoring, recordkeeping, and reporting requirements do not include HAP emissions from these units in the actual-emissions monitoring equations means the permit also fails to assure compliance with the MACT-avoidance limits, which is a defect in the Title V permit’s monitoring, recordkeeping, and reporting requirements.

C. Telfair’s PTE Tables Are Also Miscalculated.

Table 1 of Telfair’s application (Page 2), titled “PTE Summary” (as well as Table 4 of the Emissions Estimates Appendix) lists the facility’s existing and future PTE. Unfortunately, Telfair has made a miscalculation in these tables. The rightmost column lists the new emissions

³⁰ See, SELC Comments to EPD on Hazlehurst Wood Pellets, at 2-4 (Nov. 9, 2023), *citing* Enviva Pellets Wiggins, LLC, Air Emission Test Report, at 1 (Oct. 31, 2013) and Enviva Pellets Amory, LLC, Air Emission Test Report, at 1 (Oct. 31, 2013).

associated with Dryer 4, but the THAP row (presumably “Total HAPs”) is incorrectly listed as 1.78 tpy— correctly tallying the HAP emissions in this column results in a total of 3.18 tpy.

D. Telfair’s Air Toxics Modeling Is Likewise Deficient.

As part of this application, Telfair was required to conduct an air toxics impacts assessment pursuant to EPD’s Toxic Impact Assessment Guideline. As set out above, Telfair’s estimated HAP emissions, which are also air toxics, are deeply flawed. As such, Telfair’s air toxics impacts assessment is likewise inaccurate. EPD must require an additional toxics assessment with corrected PTE rates.

III. The Draft Permit Fails to Include Adequate Monitoring, Recordkeeping, and Reporting Requirements.

EPD must substantially strengthen the stack testing requirements in Telfair’s current Title V permit. Title V permits must contain “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit.”³¹ For several reasons, the draft Title V permit amendment and the underlying Title V permit to be modified are deficient on this front.

Critically, Telfair’s current Title V permit only requires stack testing for three of the seven significant HAPs emitted by wood pellet plants: acetaldehyde, formaldehyde, and methanol. Telfair has never been required to test for acrolein, phenol, or propionaldehyde. This is despite the fact that Telfair’s own emissions estimates show that the facility emits some of these pollutants, such as acrolein, at higher rates than the HAPs for which EPD has required testing (*see, e.g.*, Telfair’s Dry Hammermill emission estimates, where acrolein is the highest-emitted HAP). As shown above, there is significant reason to doubt Telfair’s HAP emission estimates, and EPD must strengthen the testing provisions in order to assure compliance with the 10 and 25 tpy MACT-avoidance limits.

We recognize that EPD has revised the periodic compliance testing condition in the draft permit to include testing for “other HAPs” in addition to methanol, formaldehyde, and acetaldehyde.³² “Other HAPs,” however, is not defined in the permit or statement of basis. It is totally unclear then which HAPs Telfair must monitor through stack testing. This ambiguity alone is grounds for an objection by EPA, as the public cannot ascertain whether the monitoring provision of the draft Title V permit are adequate to assure compliance with the MACT-avoidance limit.

More to the point, it is simply not believable that this facility would emit 585 tons of VOCs and just 10.1 tons of HAPs, and EPD must include stack testing for all six of the primary wood-products HAPs from each of the major units in order to assure compliance with the 10 and 25 tpy major-source MACT avoidance condition.³³

³¹ 40 C.F.R. 70.6(a)(3)(i)(B).

³² Draft Permit Condition 4.2.2.

³³ Existing Permit, Condition 2.1.2.

Additionally, as discussed above, Telfair’s Title V permit requires methanol testing using an NCASI method that substantially undermeasures methanol emissions, if not other organic HAPs as well. As such, the draft Title V permit does not contain adequate monitoring requirements to reliably measure methanol emissions and assure compliance with the MACT-avoidance limits. EPD must revise the draft permit to require EPA’s Method 320 for methanol (and potentially for other organic HAPs, to the extent EPD determines that the same flaws with the NCASI method apply to other organic HAPs).

In sum, the draft Title V permit fails to assure compliance with the MACT-avoidance limits because it does not set out the specific HAPs that must be included in the periodic compliance tests, and also because it requires the use of the unreliable NCASI test method rather than EPA’s Method 320.

IV. EPD Must Account for Environmental Justice Impacts and Should Deny This Modification Accordingly.

A. EPD has an Obligation to Consider the Disparate Impacts Its Permitting May Have.

Georgia EPD must ensure that its permitting actions are safeguarding “the public health, safety, and welfare of the people of the State of Georgia.” *See, e.g.*, Ga. Comp. R. & Regs. 391-3-1-.02(2)(a)(2). It furthermore is responsible for ensuring that its permitting programs are not causing disproportionate harm to protected classes of Georgians.

By accepting federal funding from EPA, EPD accepts its obligation to comply with EPA’s regulations for non-discrimination. 40 CFR Chap. 1 Sec. 7.80(a). EPD must determine whether its permitting actions “have the *effect* of discrimination on the basis of race, color, or national origin,” even if that was not EPD’s intent.³⁴ In determining whether an action has a potential disparate adverse impact, a state agency must consider cumulative impacts, including the consideration of heightened health risks resulting from the community’s “[t]otal exposure to multiple environmental stressors . . . , including exposures originating from multiple sources, and traveling via multiple pathways over a period of time.”³⁵

In addition, EPA’s guidance encourages EPD to conduct an environmental justice analysis to encourage fair treatment and meaningful community involvement when—like here—a permitting action “may result in disproportionately high and adverse human health or environmental effects on a community.”³⁶

³⁴ U.S. Dep’t of Justice, Title VI of the Civil Rights Act of 1964 42 U.S.C. § 2000D et seq., <https://www.justice.gov/crt/fcs/TitleVI-Overview> (emphasis added). *See Guardians Ass’n v. Civil Serv. Comm’n*, 463 U.S. 582, 593 (1983) (“Title VI reaches unintentional, disparate-impact discrimination as well as deliberate racial discrimination.”).

³⁵ Draft Title VI Guidance, 65 Fed. Reg. at 39,684; *see also id.* at 39,678 (explaining that “cumulative impacts of regulated and unregulated sources can be considered to determine the cumulative level of potential adverse impacts”).

³⁶ EPA, Principles for Addressing Environmental Justice Concerns in Air Permitting, at 2 (Dec. 2022), *available at* <https://www.epa.gov/system/files/documents/2022-12/Attachment%20-%20EJ%20in%20Air%20Permitting%20Principles%20.pdf>.

An environmental justice analysis accomplishes two important policy objectives: (1) it addresses the principle of fair treatment by further evaluating adverse and disproportionate impacts and identifying ways to prevent or mitigate such impacts; and (2) it addresses the principle of meaningful involvement by fostering enhanced community engagement in the permitting decision.³⁷

B. Telfair’s Permit Modification Requires Special Consideration for Potential Environmental Discrimination Arising from this Permitting Process

As explained above, if this permit modification is approved, Telfair would be 8th largest emitter of VOCs in the state of Georgia, and if the application is accepted as-is, Georgia EPD would still have never conducted a PSD review, which could ultimately require a cumulative impacts review. This approach to this permit application would not be consistent with Clean Air Act regulations—and Georgia’s related implementation of those regulations. This approach would also be inconsistent with EPD’s mission to take measures necessary to protect the health and safety of all Georgians.

EPD’s public health and non-discrimination mandates require EPD to account for the particular vulnerabilities and susceptibilities of the communities that will breathe the toxins that EPD allows to be emitted. It is well-accepted that certain characteristics make individuals either more vulnerable or susceptible to health impacts from air pollution, including proximity, race/ethnicity, age, and socioeconomic status.³⁸

Factors Affecting Susceptibility	
Intrinsic Factors (Biological)	Extrinsic Factors (Exposure-Related)
<ul style="list-style-type: none"> • Age and lifestage • Gender • Race/ethnicity • Genetic polymorphisms 	<ul style="list-style-type: none"> • Disease status • Socioeconomic status • Nutrition status • Geographic proximity • Lifestyle

Figure 2: Graph from EPA’s Guidelines for Exposure Assessment

Telfair proposes to vastly increase its pollution next to a community that is predominately Black, has high rates of poverty, and has profound health vulnerability indicators, without analyzing the impact its increased pollution may have on this community. EPD can play an important role in ensuring that the health and safety of the population nearby is protected.

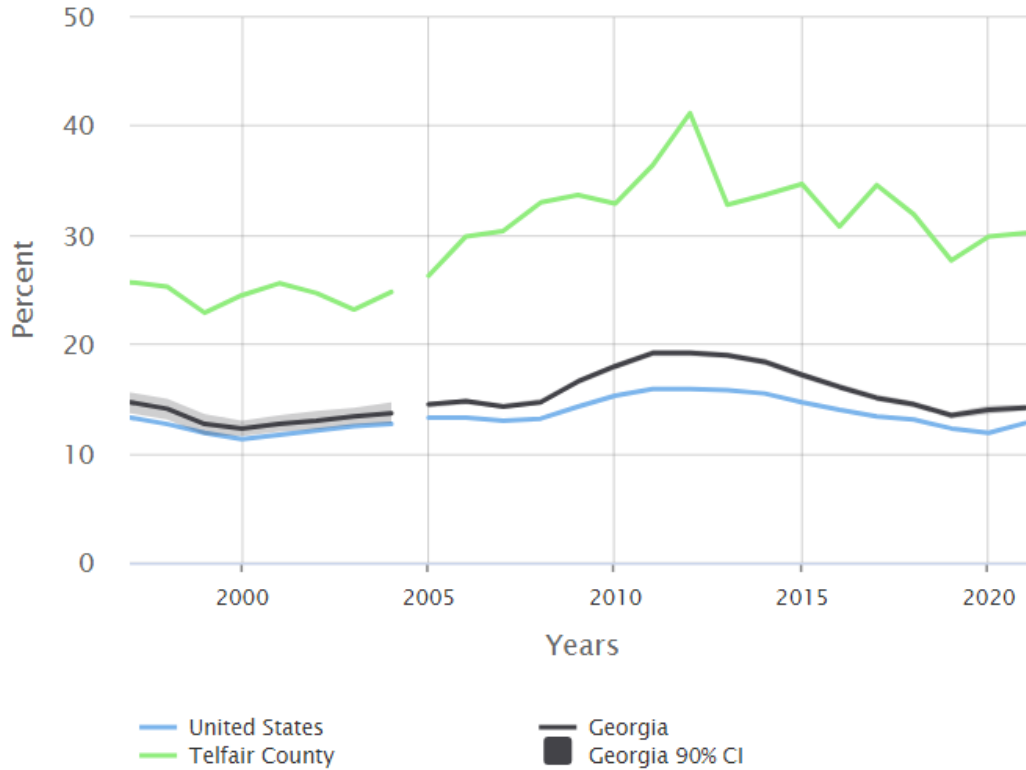
The Telfair facility is in the middle of Lumber City, which is estimated to have a population that is 72% Black with a median household income of less than \$29,000 a year.³⁹ Furthermore,

³⁷ EPA’s EJ in Air Permitting, Principles for Addressing Environmental Justice Concerns in Air Permitting (Dec. 2022), available at <https://www.epa.gov/system/files/documents/2022-12/Attachment%20-%20EJ%20in%20Air%20Permitting%20Principles%20.pdf>.

³⁸ See EPA, *Exposure Assessment Tools by Lifestages and Populations – Highly Exposed or Other Susceptible Population Groups*, <https://www.epa.gov/expobox/exposure-assessment-tools-lifestages-and-populations-highly-exposed-or-other-susceptible>.

³⁹ Lumber City: 2023 Georgia Municipal Association Member City Data (Attachment G).

Telfair County has extremely high poverty rates compared to Georgia and the rest of the United States.



Source: U.S. Census Bureau, Small Area Income and Poverty Estimates.

Though White residents of Telfair County have high poverty levels (at approximately 19.7%), rates of poverty more than double among the Black population in Telfair (at approximately 42%).⁴⁰

Telfair also has significant health risk indicators, as reflected by it ranking last among 156 Georgia counties for health factors by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.⁴¹ The ranked health factors consider measures of health behaviors, access to and use of clinical care, and socio-economic factors.⁴²

Telfair is already located in an area with unusually high exposure to pollution from VOCs and HAPs. EJ Screen estimates the Telfair location to be exposed to more particulate matter than 88% of the country and more ozone than 56% of the country.⁴³ EJ Screen also estimates that Telfair has more estimated air toxics cancer and respiratory risks than over 87% of the country.⁴⁴ As discussed above, we believe Telfair is significantly underestimating its air toxics emissions, and, at minimum, it stands to reason that if EPD were to approve Telfair’s request to double VOC emissions, most air toxics emitted by the facility would likewise double, significantly

⁴⁰ See, e.g., <https://www.census.gov/library/visualizations/interactive/acs-percentage-poverty-2015-2019.html>.

⁴¹ See 2021 County Health Rankings for Georgia (Attachment H).

⁴² *Id.*

⁴³ See EJ Screen Community Report for 1-Mile Ring around Telfair (Attachment I).

⁴⁴ *Id.*

increasing the air toxics exposure of the already overburdened community. EPD must reject this doubling both under the requirements of the Clean Air Act and under its separate but equally important Environmental Justice mandate.

Conclusion

The Telfair facility must not be allowed to circumvent both PSD and case-by-case MACT permitting with this modification. First, as a synthetic minor source, if Telfair wishes to expand and become a major source, it must undergo PSD permitting, including the requisite Best Available Control Technology determination. Second, EPD must not allow Telfair to unlawfully evade case-by-case MACT by wildly underestimate the facility's HAP emissions. Additionally, the draft Title V permit is devoid of adequate monitoring, recordkeeping, and reporting requirements necessary to assure compliance with key permit conditions. Finally, we ask that EPD formally withdraw this draft Title V permit from EPA's concurrent review now that the agency has received substantive comments, and that EPD update the undersigned when a response to comments is available.

Respectfully submitted,

/s/ Patrick Anderson

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On behalf itself and Georgia Interfaith Power and Light, the Georgia Chapter of the Sierra Club, Dogwood Alliance, Our Children's Earth Foundation, and the Concerned Citizens of Cook County

CC: Brad Akers, EPA Region 4 Air Permit Section Manager, Akers.Brad@epa.gov.

Attachments: Comment Attachments A through J.

September 29, 2023

Via Electronic Mail: epdcomments@dnr.ga.gov

Steve Allison, Program Manager
Stationary Source Permitting Program
Air Protection Branch
Environmental Protection Division
4244 International Parkway, Suite 120
Atlanta, GA 30354

RE: Public Comments on Air Permit Application No. 780227 for Telfair Forest Products, LLC.

Dear Mr. Allison:

The Southern Environmental Law Center, on behalf of itself and Georgia Interfaith Power and Light, the Georgia Chapter of the Sierra Club, Dogwood Alliance, Our Children's Earth Foundation, and the Concerned Citizens of Cook County, hereby submits public comments on Air Permit Application No. 780227 for Telfair Forest Products, LLC (hereafter, "Telfair" or "the facility"), which is currently out for public notice and comment with the Georgia Environmental Protection Division (EPD). The facility is an existing wood pellet and wood shavings manufacturing plant located at 11 West Industrial Boulevard, Lumber City, Telfair County, Georgia.

With this application, Telfair seeks to more than double the facility's drying capacity by adding a new 165,000 ton-per-year (tpy) wood dryer—currently the facility is limited to drying just 129,700 tpy—for a total drying capacity of 290,000 tpy after the modification and revision to existing throughput limits. More critically, Telfair also seeks permission to eliminate existing emission and operating limits the facility accepted in order to avoid classification as a major source under the Clean Air Act's Prevention of Significant Deterioration (PSD) program. Instead, Telfair now wants to increase allowable volatile organic compound (VOC) emissions from 249 tpy to 498 tpy (and, including fugitive emissions, up to 586 tpy) without undergoing PSD review and permitting. **If authorized, Telfair would become the largest emitter of VOCs in Georgia that has not undergone PSD, and the 8th largest emitter in the state overall, despite being a relatively tiny operation.**¹

As described below, EPD must reject Telfair's attempt to evade PSD requirements for major sources of air pollution. As a synthetic minor source that previously agreed to enforceable limits on the facility's potential to emit (PTE) VOCs, Telfair may not now simply disregard those limits and become a major source without undergoing the requisite PSD permitting.

Additionally, Telfair has substantially underestimated hazardous air pollutants (HAPs) and incorrectly classified the facility as an area (minor) source under Section 112 of the Clean Air

¹ Based on EPA's 2020 National Emissions Inventory. We have also verified that all seven sources that emitted more than 586 tons of VOCs in Georgia in 2020 have previously undergone major-source PSD permitting.

Act. With this modification, Telfair will become a major source of HAPs that must comply with case-by-case Maximum Achievable Control Technology (MACT) requirements. EPD must address these and the other deficiencies identified below prior to releasing a draft permit for public notice and comment.

I. As a Synthetic Minor Source, Telfair Cannot Take Advantage of the One-Time-Doubling Exception to Major Source PSD Permitting.

With this application, Telfair is attempting to utilize a technique known as “one-time-doubling” to circumvent major source PSD permitting.² One-time-doubling is an interpretation of the Clean Air Act and EPA’s rules that allows for *true* minor sources to become major sources without undergoing PSD.³ However, the same does not apply to *synthetic* minor sources that have previously agreed to enforceable restrictions on PTE to avoid major source PSD. The so-called Source Obligation Rule⁴ and longstanding EPA Guidance are explicit that *only* true minor sources may undertake one-time-doubling. Simply put, once a source has agreed to synthetic minor limits to avoid PSD, it must either abide by those limits or undergo PSD if it decides to disregard those limits. That is the case with Telfair.

Telfair’s current permit contains several synthetic minor limits implemented explicitly to avoid PSD applicability. First, Condition 2.1.1 restricts VOC emissions to less than 249 tpy, citing to “40 CFR 52.21 [PSD] Avoidance.”⁵ Next, Condition 6.2.3 effectively constrains the facility’s total production by requiring Telfair to calculate 12-month rolling VOC emissions by multiplying monthly production rates and emission factors to ensure emissions do not exceed the 249 tpy limit. Finally, Condition 3.2.1 places limits on the number of wood dryers Telfair can operate as well as their production limits, again specifically for PSD avoidance.

Telfair now seeks to eliminate or substantially relax all of these synthetic minor limits without undergoing PSD review. This is unlawful. EPA has repeatedly dealt with similar attempts to evade PSD and has consistently held that the Source Obligation Rule requires PSD in this scenario. For example, when discussing the relaxation of an identical 249 tpy PTE limit, EPA wrote: “[a]lthough the facility-wide emission limit of 249.0 tpy for CO is enumerated in the

² Telfair Forest Products LLC, Construction Permit and Title V Operating Permit Modification Application, at 3 (Aug. 2023) (Hereafter, the “Telfair Application”).

³ Specifically, the definition of a “Major Modification” under the PSD rules states that a major modification that would trigger PSD occurs when a *major* source makes certain physical or operational changes that increase emissions beyond the relevant thresholds. 40 C.F.R. § 52.21(b)(2)(i). Through this definition, one-time-doubling allows true minor sources to make modifications that increase emissions beyond the major source threshold without applying PSD. As discussed herein, however, the Source Obligation Rule at 40 C.F.R. § 52.21(r)(4) prohibits the use of this technique for synthetic minor sources.

⁴ 40 C.F.R. § 52.21(r)(4) (“At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of [PSD] shall apply to the source or modification as though construction had not yet commenced on the source or modification.”). The Source Obligation Rule is also incorporated by reference into Georgia’s rules (*see* Ga. Comp. R. & Regs. 391-3-1-.02(7)(b)15) and approved into the State Implementation Plan at 85 Fed. Reg. 57694 (Sep. 16, 2020).

⁵ Georgia EPD, Part 70 Operating Permit No. 2499-271-V-05-0 for Telfair Forest Products (May 24, 2021).

permit, the permit should also state that if this limit is relaxed at any time, the facility will be subject to the requirements of 40 Code of Federal Regulations (CFR) 52.21(r)(4).”⁶

Additionally, in the context of a generating station that requested to relax limits on annual capacity to combust certain fuels, EPA wrote:

[The Source Obligation Rule] does not discuss intent; it simply states that any relaxation of an established limit that would make the project “major” would at that point in time make PSD applicable. That is, the (r)(4) provision must be considered for the life of any project for which enforceable limits were established such that any subsequent requests for a relaxation of the aforementioned limitations will necessitate [PSD review].⁷

Here, the project in question is the construction and operation of the entire facility, for which the 249 tpy facility-wide limit on VOCs and the other synthetic minor limits were established. As EPA has explained in the foregoing guidance, relaxation of these limits subjects facilities like Telfair to PSD review.

Finally, the fact that Telfair is also simultaneously undertaking a physical modification of the facility, in addition to relaxing synthetic minor limits, does not impact applicability of the Source Obligation Rule. In fact, EPA Region 4 squarely addressed this issue in a 2001 letter to North Carolina authorities in which EPA explained that the preamble to the federal PSD regulations “**does not provide any support for the idea that a modification would preclude the applicability of the relaxation provision.**”⁸ EPA continued that “[i]f any modification, including a modification that was not “major,” would nullify applicability of the relaxation provision, then misuse of the clause would occur,” and that “to exclude projects involving a modification easily could lead to an abuse akin to sham permitting.”⁹ Finally, EPA summarized that “[i]f a source owner elects to accept an enforceable limitation to avoid PSD requirements for an emissions unit or process, then a revision of that limitation for any reason (including a physical change) could trigger the relaxation provision.”¹⁰

In sum, Telfair would currently be a major source of VOCs if it had not agreed to enforceable synthetic minor limits that, to date, have allowed the facility to operate without undergoing PSD permitting. As the foregoing makes clear, Telfair cannot now simply shed those enforceable limits—and double VOC emissions in the process—without undergoing PSD review. Finally, as discussed below, it is also unconscionable that EPD would allow this abuse of the PSD rules in

⁶ EPA Region 9, Comments on Draft Air Quality Operating Permit- Lockwood Regional Landfill (LRL), at 1 (Mar. 29, 2011) (Attachment A).

⁷ EPA Region 2, Request for PSD Applicability Determinations for Burlington 12 and Kearny 12 Generating Stations, at 2 (Feb. 11, 2009). (Attachment B).

⁸ EPA Region 4, Response to Questions from Dr. Donald R. van der Vaart, Division of Air Quality, North Carolina Department of Environment and Natural Resources, at 4 (Aug. 8, 2001) (emphasis added) (Attachment C).

⁹ *Id.*

¹⁰ *Id.*

Telfair County—one of the poorest counties in Georgia (153rd out of 159 counties)¹¹—and Lumber City in particular, which has a population that is more than 70% Black and in the 86th percentile (nationwide) for low-income individuals.¹²

II. Telfair Underestimates HAP Emissions and the Draft Permit Fails to Restrict PTE for Aggregate HAPs to Area Source Levels.

Telfair estimates that after this modification, the facility will remain an area (i.e., minor) source of HAPs, meaning potential HAP emissions would remain below the major source thresholds of 10 tpy (for any single HAP) and 25 tpy for total HAPs. Unfortunately, Telfair’s HAP emission calculations are flawed or otherwise not plausible in several critical ways, and the facility would be a major source, with a PTE of at least 44 tpy, if this modification is approved.

A. Telfair Omits ‘OHAP,’ or Other HAPs, From Dryer 3 and Dryer 4 Emission Calculations.

Telfair’s application lists six organic HAPs from all three dryers, but it does not list any non-organic or combustion HAPs, such as hydrogen chloride (HCL), for Dryers 3 and 4. Instead, Telfair included emissions of “OHAP,” which we understand represents “other HAPs,” only for Dryer 2. This appears to be a substantial omission, as both Dryers 3 and 4 are functionally similar to Dryer 2, i.e., they are heated by wood-fired burners¹³ and will emit HCL and other OHAPs that are productions of combustion.

Telfair lists an emission factor for OHAP from Dryer 2 (but, again, not Dryers 3 and 4) of 0.19 lb/ton of wood dried. We see no evidence from the record that this emission factor should not apply equally to Dryers 3 and 4. Applying this emission factor equally to all three dryers (which Telfair lists as having a combined throughput of 290,000 tpy) results in a PTE of 27.55 tpy for OHAP, which exceeds the major source threshold for total HAPs, even without considering other HAP emissions at the facility.

Likewise, EPD’s current Title V permit for Telfair directs the facility to utilize an emission factor for OHAP of 0.1 lb/ton, which would result in 13.25 tons of OHAP from Dryers 3 and 4. We believe Telfair’s own emission factor of 0.19 lb/ton should be used for these two dryers, but

¹¹ U.S. Census Bureau, American Community Survey Data, <https://www.census.gov/programs-surveys/acs/data.html> (Visited Sep. 28, 2023), *see also* [https://en.wikipedia.org/wiki/List_of_Georgia_\(U.S._state\)_locations_by_per_capita_income](https://en.wikipedia.org/wiki/List_of_Georgia_(U.S._state)_locations_by_per_capita_income) (Visited Sep. 28, 2023).

¹² Georgia Municipal Association, GMA Dashboard results for Lumber City, <https://www.gacities.com/Resources/Data-Tools/GMA-Dashboard.aspx> (visited Sep. 29, 2023); EPA, EJScreen Community Report for 3-mile radius centered on Telfair Forest Products (Including all of Lumber City) (Attachment D).

¹³ Telfair’s Application (in the Emissions Calculations Appendix) seems to list all three dryers as heated by gas-fired burners, but this is contrary to the facility’s current Title V permit (No. 2499-271-V-05-0, May 2021) and EPD’s related Application Review, which both state that Dryers 2 and 3 are heated by wood-fired burners (as is also the case for previous Telfair applications). We are skeptical therefore that any of the three dryers are actually gas-fired, and nothing in this application, or previous applications that we are aware of, explains that the facility is switching from wood-fired to gas-fired burners. We note finally, however, that at a bare minimum, we see no reason why the “OHAP” emission factor from Dryer 2 should not apply to each similarly-situated dryer at the facility.

even using this lower 0.1 lb/ton emission factor for Dryers 3 and 4 still means that the facility's total HAP emissions exceed the 25 tpy major source threshold when also accounting for the miscalculated emissions discussed immediately below (let alone the other underestimated emissions discussed in Section II.C).

B. Telfair's PTE Tables Are Miscalculated.

Table 1 of Telfair's application (Page 2), titled "PTE Summary" (as well as Table 4 of the Emissions Estimates Appendix) lists the facility's existing and future PTE. Unfortunately, Telfair has made a miscalculation in these tables. The rightmost column lists the new emissions associated with Dryer 4, but the THAP row (presumably "Total HAPs") is incorrectly listed as 1.78 tpy—tallying the HAP emissions in this column actually results in a total of 3.18 tpy.

C. We Are Also Skeptical of Telfair's Organic HAP Emissions Estimates.

If this modification is approved, Telfair's potential VOC emissions will exceed 585 tons per year. Telfair in turn estimates that just 10.1 tons of these VOCs will also be organic HAPs, a ratio of organic HAPs to VOCs that is contrary to a substantial amount of wood pellet testing.

For instance, Enviva, which has conducted more stack testing at wood pellet plants than any other entity, recently conceded to EPD that its Waycross, GA pellet plant emits 79 tons of HAPs per year.¹⁴ That facility emits 248 tons of VOCs, meaning that about 33% of all VOCs emitted are also organic HAPs.¹⁵ Drax, another significant player in the wood pellet industry, also recently conducted compliance tests with a similar ratio, and has begun using those emission factors for permitting new wood pellet plants. For instance, in Mississippi and Washington, Drax estimates that its pellet plants will emit 120 tons of VOCs and 40 tons of HAPs, which is again about 33%.¹⁶ As applied to Telfair, these ratios show the facility will emit 193 tons of organic HAPs. At least some of this discrepancy is due to Telfair's failure to quantify organic HAPs from several sources, as discussed below.

1. Telfair Omits Organic HAPs from Several Significant Sources.

Telfair estimates that its green hammermill (ID: HAMG) will emit 35 tons of VOCs per year, but zero HAPs. Likewise, Telfair only includes a handful of HAPs for pellet Handling/Storage (ID: HAND) and shavings bagging lines (ID: BAG 1, 2, & 3), which will emit 33 tons and 20 tons of VOCs, respectively. All told, these three units will emit 88 tons of VOCs but, according to Telfair, just 0.53 tons of HAPs. This is improper, and we calculate that each unit will emit considerably higher levels of HAPs:

¹⁴ Enviva Pellets Waycross, Application for Significant Permit Modification, at 20 (Oct. 30, 2021).

¹⁵ *Id.*

¹⁶ Drax Amite BioEnergy, LLC, Title V Air Permit Application, at 1-1 (Feb. 2022) (This is the Gloster, Mississippi facility with a PTE for VOCs of 120 tpy and a PTE for HAPs of 40 tpy) (Excerpt attached as Attachment E); Pinnacle Renewable Holdings, LLC, (also known as the Drax Longview facility), Letter from Trinity Consultants to Danny Phipps, Southwest Clean Air Agency, at Attachment 2, Updated Potential Emissions Calculations and Stack Test Data (Mar. 29, 2023) (Attachment F).

- **Green Hammermill:** Currently, Telfair does not list any HAP emissions from this unit, despite estimating it will emit 35 tons of VOCs. Using the same ratio of HAPs to VOCs as Telfair’s dry hammermills, we calculate that the green hammermill will emit 5.9 tons of organic HAPs;
- **Pellet Handling and Storage and Shaving Side Bagging Lines:** Telfair does include methanol, formaldehyde, and acetaldehyde for these units, but not acrolein, phenol, or propionaldehyde. To calculate these emissions, we prorated an emission factor for each pollutant using the ratio of each HAP to VOC as emitted from that production line’s dryer, which results in an additional 0.67 tpy of HAPs.

We believe the foregoing are reasonable approaches to calculating the missing HAP emissions from these units, and in doing so estimate they will emit an additional 6.57 tpy of HAPs. At a bare minimum, however, EPD must require Telfair to account for these HAP emissions and units as part of the facility-wide HAP PTE calculation.

D. In Total, We Calculate Telfair’s PTE for HAPs to Be 44 Tons Per Year, Greatly Exceeding the 25 Ton Per Year Major Source Threshold.

As discussed above, Telfair has made several independent and significant errors in calculating its PTE for HAPs. The table below sums up our best attempt to reasonably correct Telfair’s errors and present a legitimate calculation for the facility’s PTE should this modification be approved. Highlighted cells represent SELC’s calculations, as explained above and in notes to the table.

Telfair VOC and HAP Emissions (Tons Per Year)										
	VOC	Methanol	Formalde -hyde	Acet- aldehyde	Acrolein	Phenol	Propion- aldehyde	OHAP (Other HAP)	Total HAPs	Notes
Pellet Side										
Green Hammermill	35	0.46	0.14	0.07	1.87	2.46	0.60		5.60	1
Dryer 2	21.3	0.23	0.26	0.11	0.08	0.11	0.03	2.38	3.20	
Dry Hammermills/ PCs	9.94	0.13	0.04	0.02	0.53	0.7	0.17		1.59	
Pellet Mills	163	0.48	0.15	0.09	0.53	0.7	0.17		2.12	
Pellet Handling	33	0.08	0.17	0.08	0.12	0.17	0.05		0.67	2
Shavings Side										
Dryer 3	51.6	0.16	0.79	0.13	0.32	0.42	0.1	9.5	11.42	3
Bagging Lines	20	0.05	0.1	0.05	0.12	0.16	0.04		0.53	4
New Dryer 4										
Dryer 4	248	0.26	1.3	0.22	0.53	0.7	0.17	15.7	18.9	3
Totals	582	1.85	2.95	0.77	4.10	5.43	1.32	27.58	44.0	

Notes:

1. Each HAP prorated from VOC-to-HAP ratio from the Dry Hammermills
2. Acrolein, phenol, and propionaldehyde calculated based on prorated Dryer 2 VOC to HAP ratios
3. OHAP calculated using Telfair's 1.9E-01 lb/ton emission factor from Dryer 2
4. Acrolein, phenol, and propionaldehyde calculated based on prorated Dryer 3 VOC to HAP ratios

As this table and the foregoing discussion shows, Telfair's PTE for total HAPs greatly exceeds the 25 tpy major source threshold; we calculate it as 44 tpy, almost twice the major source threshold. We note that the most significant contribution to Telfair's PTE comes from Telfair's own emission factor for OHAPs of 1.9E-01 lb/ton from Dryer 2 emission estimates, which Telfair has failed to apply to Dryers 3 and 4.

Finally, we point out that no such "one-time-doubling" applies to MACT area sources, and that Telfair must undergo case-by-case MACT permitting if it is allowed to move forward with this modification.

III. EPD Must Require Thorough Stack Testing

EPD must substantially strengthen the stack testing requirements in Telfair's current Title V permit for several reasons. First, although Telfair is currently a relatively small facility, if EPD approves this modification, the facility will be a top-ten emitter of VOCs in the state of Georgia. Additionally, as shown herein, there is significant evidence that Telfair is substantially underestimating its HAP emissions, and if EPD disagrees that Telfair is a major source of HAPs, then it must at least implement stack testing requirements to confirm Telfair's PTE calculations.

Critically, Telfair's current Title V permit only required stack testing for three of the seven significant HAPs emitted by wood products facilities: acetaldehyde, formaldehyde, and methanol. Telfair has never been required to test for acrolein, phenol, propionaldehyde, or hydrogen chloride (HCL). This is despite the fact that Telfair's own emissions estimates show that the facility emits some of these pollutants, such as acrolein, at higher rates than the HAPs for which EPD has required testing (*see, e.g.*, Telfair's Dry Hammermill emission estimates, where acrolein is the highest-emitted HAP). EPD must therefore require testing for all six organic HAPs from each of the major units at Telfair.

Additionally, EPD has wavered on HCL emission factors over the past decade, and is currently allowing Telfair to utilize a substantially lower emission factor than EPD previously required. Specifically, when EPD published its 2013 wood pellet emission factor memo,¹⁷ EPD found that the AP-42 emission factor for HCL was appropriate; that emission factor would result in Telfair emitting 11.7 tpy of HCL (exceeding the 10 tpy major source threshold).¹⁸ Now, however, EPD has approved a vastly lower emission factor for Telfair based on testing at a single wood pellet plant,¹⁹ rather than the AP-42 emission factor which was developed based on numerous sources. Considering this reversal, and the fact that it allows Telfair to avoid major-source MACT, EPD must require HCL testing on all three dryers to confirm the lower emission factor.

¹⁷ EPD, Emission Factors for Wood Pellet Manufacturing (Jan. 29, 2013).

¹⁸ The EPD-recommended emission factor was 1.9E-02 lb/MMBtu. Telfair will operate one 40 MMBtu/hr burner and two 50 MMBtu/hr burners, for a total of 140 MMBtu/hr, or 1,226,400 MMBtu/year.

¹⁹ EPD, Application Review for Permit No. 2499-271-V-05-0, Addendum at 1 (May, 2021) (authorizing an emission factor of just 0.002 lb/ton from testing at the Hazlehurst wood pellet plant).

IV. EPD Must Account for Environmental Justice and Should Deny This Modification Accordingly

A. EPD has an Obligation to Consider the Disparate Impacts Its Permitting May Have.

Georgia EPD must ensure that its permitting actions are safeguarding “the public health, safety, and welfare of the people of the State of Georgia.” *See, e.g.*, Ga. Comp. R. & Regs. 391-3-1-.02(2)(a)(2). It furthermore is responsible for ensuring that its permitting programs are not causing disproportionate harm to protected classes of Georgians.

By accepting federal funding from EPA, EPD accepts its obligation to comply with EPA’s regulations for non-discrimination. 40 CFR Chap. 1 Sec. 7.80(a). EPD must determine whether its permitting actions “have the *effect* of discrimination on the basis of race, color, or national origin,” even if that was not EPA’s intent.²⁰ In determining whether an action has a potential disparate adverse impact, a state agency must consider cumulative impacts, including the consideration of heightened health risks resulting from the community’s “[t]otal exposure to multiple environmental stressors . . . , including exposures originating from multiple sources, and traveling via multiple pathways over a period of time.”²¹

In addition, EPA’s guidance encourages EPD to conduct an environmental justice analysis to encourage fair treatment and meaningful community involvement when—like here—a permitting action “may result in disproportionately high and adverse human health or environmental effects on a community.”²²

An environmental justice analysis accomplishes two important policy objectives: (1) it addresses the principle of fair treatment by further evaluating adverse and disproportionate impacts and identifying ways to prevent or mitigate such impacts; and (2) it addresses the principle of meaningful involvement by fostering enhanced community engagement in the permitting decision.²³

B. Telfair’s Application Requires Special Consideration for Potential Environmental Discrimination Arising from this Permitting Process

As explained above, if this permit application is approved, Telfair would be 8th largest emitter of VOCs in the state of Georgia, and if the application is accepted as-is, Georgia EPD would still

²⁰ U.S. Dep’t of Justice, Title VI of the Civil Rights Act of 1964 42 U.S.C. § 2000D et seq., <https://www.justice.gov/crt/fcs/TitleVI-Overview> (emphasis added). *See Guardians Ass’n v. Civil Serv. Comm’n*, 463 U.S. 582, 593 (1983) (“Title VI reaches unintentional, disparate-impact discrimination as well as deliberate racial discrimination.”).

²¹ Draft Title VI Guidance, 65 Fed. Reg. at 39,684; *see also id.* at 39,678 (explaining that “cumulative impacts of regulated and unregulated sources can be considered to determine the cumulative level of potential adverse impacts”).

²² EPA, Principles for Addressing Environmental Justice Concerns in Air Permitting, at 2 (Dec. 2022), *available at* <https://www.epa.gov/system/files/documents/2022-12/Attachment%20-%20EJ%20in%20Air%20Permitting%20Principles%20.pdf>.

²³ EPA’s EJ in Air Permitting, Principles for Addressing Environmental Justice Concerns in Air Permitting (Dec. 2022), *available at* <https://www.epa.gov/system/files/documents/2022-12/Attachment%20-%20EJ%20in%20Air%20Permitting%20Principles%20.pdf>.

have never conducted a PSD review, which could ultimately require a cumulative impacts review. This approach to this permit application would not be consistent with Clean Air Act regulations—and Georgia’s related implementation of those regulations. But this approach would also be inconsistent with EPD’s mission to take measures necessary to protect the health and safety of all Georgians.

EPD’s public health and non-discrimination mandates require EPD to account for the particular vulnerabilities and susceptibilities of the communities that will breathe the toxins that EPD allows to be emitted. It is well-accepted that certain characteristics make individuals either more vulnerable or susceptible to health impacts from air pollution, including proximity, race/ethnicity, age, and socioeconomic status.²⁴

Factors Affecting Susceptibility	
Intrinsic Factors (Biological)	Extrinsic Factors (Exposure-Related)
<ul style="list-style-type: none"> • Age and lifestage • Gender • Race/ethnicity • Genetic polymorphisms 	<ul style="list-style-type: none"> • Disease status • Socioeconomic status • Nutrition status • Geographic proximity • Lifestyle

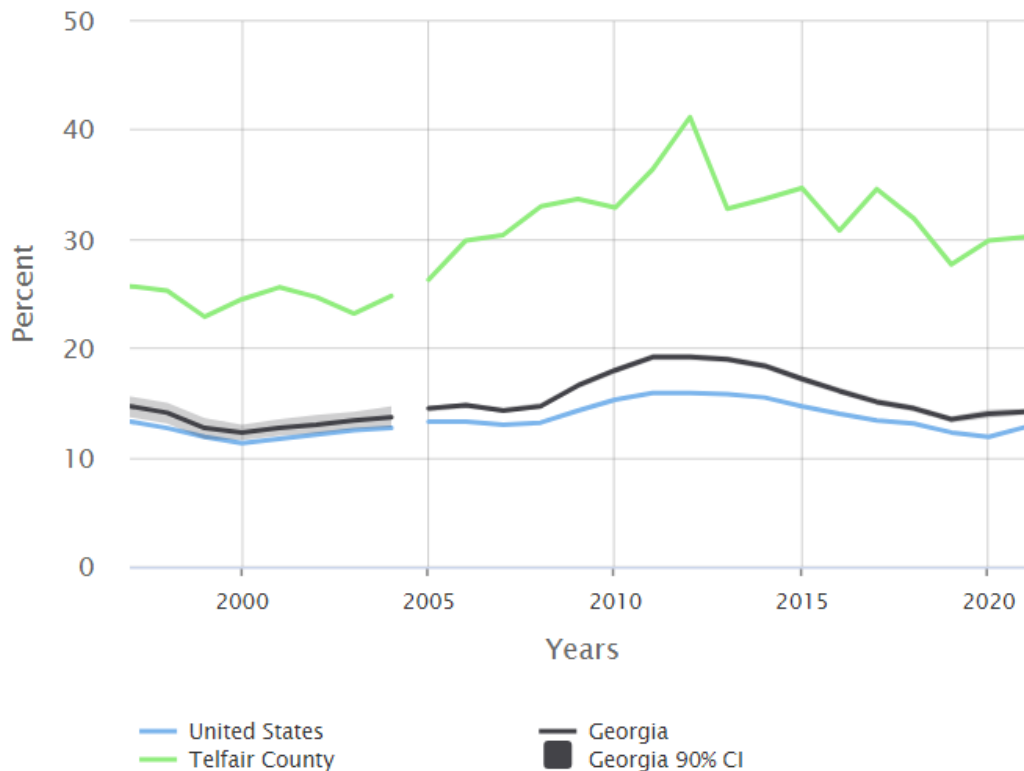
Figure 1: Graph from EPA’s Guidelines for Exposure Assessment

Telfair proposes to vastly increase its pollution next to a community that is predominately Black, has high rates of poverty, and has profound health vulnerability indicators, without analyzing the impact its increased pollution may have on this community. EPD can play an important role in ensuring that the health and safety of the population nearby is protected.

The Telfair facility is in the middle of Lumber City, which is estimated to have a population that is 72% Black with a median household income of less than \$29,000 a year.²⁵ Furthermore, Telfair County has extremely high poverty rates compared to Georgia and the rest of the United States.

²⁴ See EPA, *Exposure Assessment Tools by Lifestages and Populations – Highly Exposed or Other Susceptible Population Groups*, <https://www.epa.gov/expobox/exposure-assessment-tools-lifestages-and-populations-highly-exposed-or-other-susceptible>.

²⁵ Lumber City: 2023 Georgia Municipal Association Member City Data (Attachment G).



Source: U.S. Census Bureau, Small Area Income and Poverty Estimates.

Though White residents of Telfair County have high poverty levels (at approximately 19.7%), rates of poverty more than double among the Black population in Telfair (at approximately 42%).²⁶

Telfair also has significant health risk indicators, as reflected by their ranking last among 156 Georgia counties for health factors by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.²⁷ The ranked health factors consider measures of health behaviors, access to and use of clinical care, and socio-economic factors.²⁸

Telfair is already situated in a location with unusually high exposure to pollution from VOCs and HAPs. EJ Screen estimates the Telfair location to be exposed to more particulate matter than 88% of the country and more ozone than 56% of the country.²⁹ EJ Screen also estimates that Telfair has more estimated air toxics cancer and respiratory risks than over 87% of the country.³⁰ As discussed above, we believe Telfair is significantly underestimating its air toxics emissions, and, at minimum, it stands to reason that if EPD were to approve Telfair’s request to double VOC emissions, most air toxics emitted by the facility would likewise double, significantly increasing the air toxics exposure of the already overburdened community. EPD must reject this

²⁶ See, e.g., <https://www.census.gov/library/visualizations/interactive/acs-percentage-poverty-2015-2019.html>.

²⁷ See 2021 County Health Rankings for Georgia (Attachment H).

²⁸ *Id.*

²⁹ See EJ Screen Community Report for 1-Mile Ring around Telfair (Attachment I).

³⁰ *Id.*

doubling both under the requirements of the Clean Air Act and under its separate but equally important Environmental Justice mandate.

Conclusion

We appreciate the opportunity to provide comments on Telfair's air permit application. However, as discussed above, the Telfair facility must not be allowed to circumvent both PSD and case-by-case MACT permitting with this modification. First, as a synthetic minor source, if Telfair wishes to expand and become a major source, it must undergo PSD and the requisite Best Available Control Technology determination. Second, EPD must not allow Telfair to wildly underestimate the facility's HAP emissions in order to unlawfully evade case-by-case MACT.

Respectfully submitted,

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On behalf itself and Georgia Interfaith Power and Light, the Georgia Chapter of the Sierra Club, Dogwood Alliance, Our Children's Earth Foundation, and the Concerned Citizens of Cook County

Attachments: Comment Attachments A through I.