

Prevention of Significant Air Quality Deterioration Review

Final Determination

March 18, 2019

Facility Name: Interfor U.S. Inc. – Perry Mill

City: Perry

County: Houston

AIRS Number: 04-13-153-00011

Application Number: TV-278859

Date Application Received: September 19, 2019



State of Georgia
Department of Natural Resources
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BACKGROUND

On September 19, 2018, Interfor U.S. Inc. – Perry Mill (hereafter “facility”) submitted an application for an air quality permit to construct and operate a direct-fired continuous kiln (ID No. DK-6). The facility is located at 903 Jernigan Street in Perry, Houston County. The facility also requested to install a fire suppression system that will include a backup diesel-fire engine.

On February 4, 2019, the Division issued a Preliminary Determination stating that the modifications described in Application No. TV-278859 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Interfor U.S. Inc. – Perry Mill place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in The Houston Home Journal (legal organ for Houston County) on February 13, 2019. The public comment period expired on March 15, 2019.

During the comment period, comments were received from the general public. There were no comments received from the U.S. EPA Region IV and facility.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

MACON AREA TRANSPORTATION STUDY COMMENTS

Comments were received from Mr. James P. Thomas, Executive Director, by letter on February 22, 2019. The comments are typed, verbatim, below. The comments are followed by EPD's responses.

Comment 1

Does Air Protection Branch foresee any circumstances under which wind patterns from Houston County could transport emissions from the proposed continuous kiln into the Macon air shed/MATS MPO jurisdiction? If so, are there any suggestions/opportunities to mitigate foreseeable impacts of these transported emissions on the MATS MPO area?

EPD Response:

EPD's wind analysis at the Middle Georgia Regional Airport (Figures 1 and 2) suggests that winds are mostly from the west. The facility is located approximately 27.5 miles (44 km) south/southwest of Macon. Therefore, pollutants from the facility are not expected to significantly impact the air quality in the Macon area.

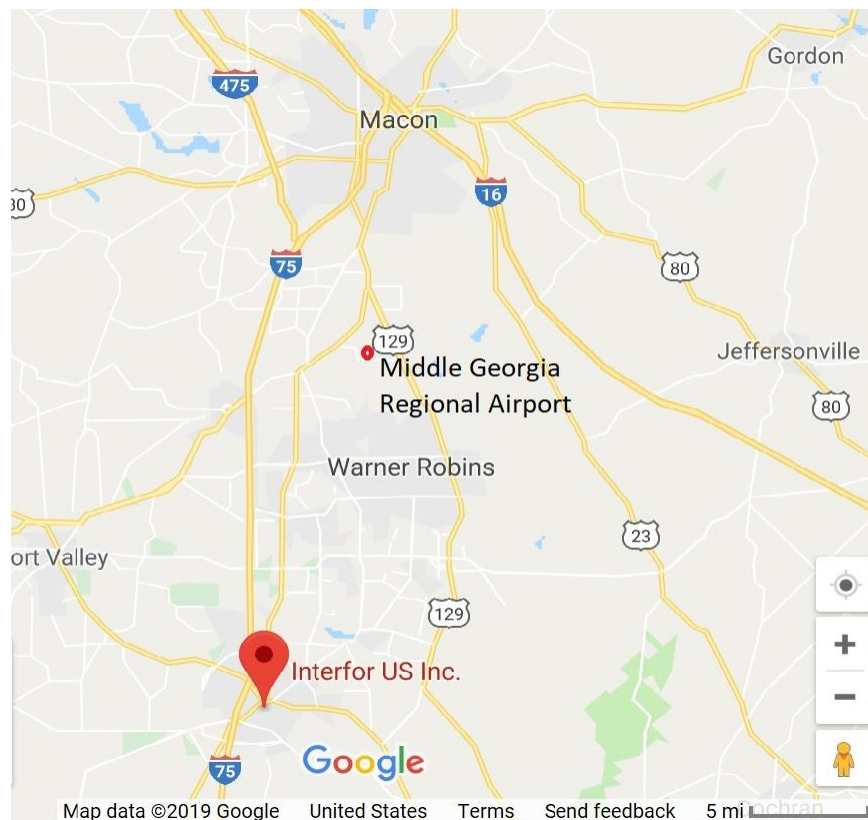


Figure 1. Google Map showing relative location of Macon, Middle Georgia Regional Airport, and Interfor US Inc.

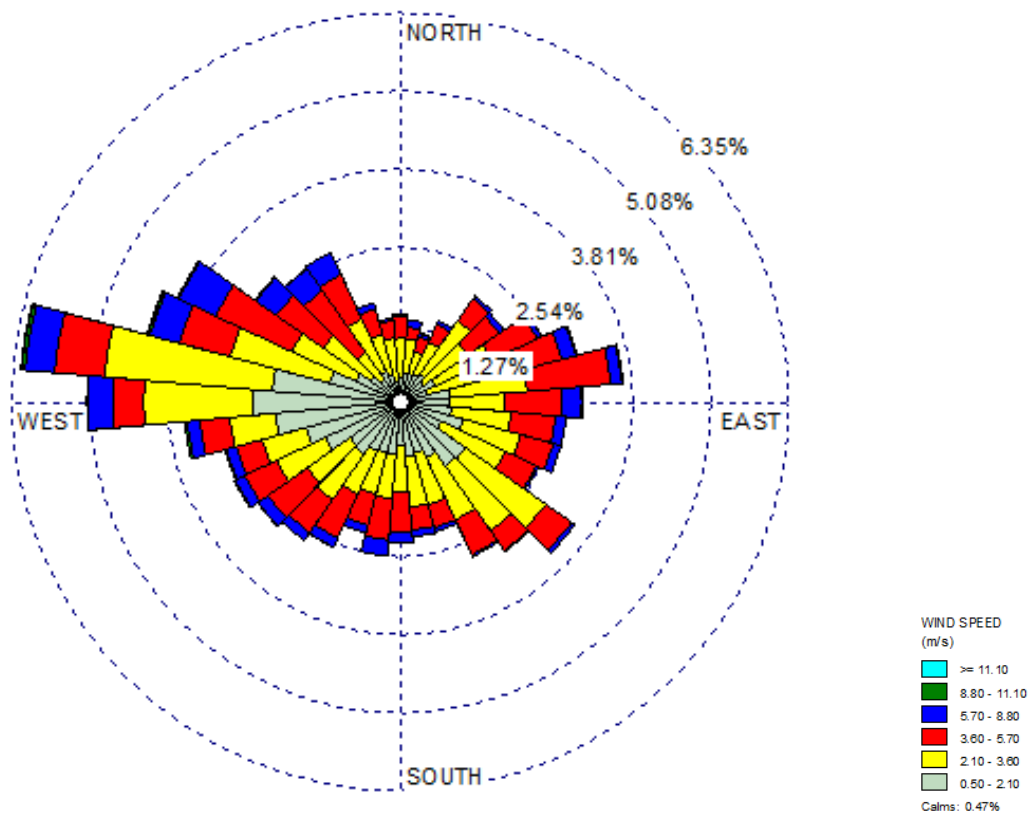


Figure 2. Wind rose analysis.

The projected Volatile Organic Compound (VOC) emissions increase triggered the Prevention of Significant Deterioration (PSD) review. As required by the 2017 revisions to EPA's *Guideline on Air Quality Models* (Appendix W), an analysis of the impact of the projected VOC and NO_x emissions on secondary ozone formation was performed following EPA's "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program" (December 2, 2016), and GA EPD's "Guidance on the Use of EPA's MERPs to Account for Secondary Formation of Ozone and PM_{2.5} in Georgia" (February 25, 2019). MERPs can be used to estimate the maximum impact of (1) NO_x and VOC emissions on 8-hour ozone and (2) NO_x and SO₂ emissions on annual and daily PM_{2.5} concentrations. EPD conducted a quantitative analysis with MERPs to examine the impact of NO_x and VOC emission increases from the facility on secondary ozone formation. The projected VOC emission increase of 240.5 tpy equates to a maximum ozone impact of 0.06 ppb. The projected NO_x emission increase of 17.3 tpy equates to a maximum ozone impact of 0.111 ppb. Therefore, the maximum ozone increase from the NO_x and VOC emission increases is **0.171 ppb at the facility**. The nearest ozone monitor to the facility is the EPD Macon monitor (located at Georgia Forestry Commission, Dry Branch, Bibb County, AQS ID 13-021-0012), which is located approximately 44 km north/northeast of the facility. The latest design value (i.e., 3-year average of 4th highest maximum daily 8-hour ozone concentrations during 2015-2017) is 65 ppb. The maximum impact of ozone at the EPD Macon monitor, which is 44 km away, would be far

less than 0.171 ppb. Therefore, GA EPD does not expect the projected emissions will cause nonattainment for the Macon area with the 2015 ozone National Ambient Air Quality Standard (NAAQS) of 70 ppb.

The emission increases of PM/PM₁₀/PM_{2.5} are all below the associated PSD significant emission rates and therefore do not trigger any PSD review. With the small amounts of PM/PM₁₀/PM_{2.5} emission increases, the 44-km distance between the facility and the EPD Macon monitor, and the majority of wind coming from the west, the Division believes that the additional PM/PM₁₀/PM_{2.5} emissions caused by the continuous kiln project would not cause any significant impact on the Macon air shed/MATS MPO jurisdiction.

Comment 2

In Permit Applicant's Project Report, Applicant anticipates an additional 6,889 VMT/yr on paved roads, and 5,741 VMT/yr on unpaved roads in the Houston County area, related to the proposed continuous kiln expansion. This seems inconsistent with the finding in the Preliminary Determination where Air Protection Branch says "The proposed project will not cause a permanent increase in mobile source traffic in the area... (pg. 21, par. 4). Please clarify the discrepancy.

EPD Response:

The Division recognizes that the statement in the fourth paragraph in Page 21 is misleading and needs to be modified. As shown in Table B-12 of the application, due to the production increase, the facility expects to have additional log truck traffic of 6,889 VMT/yr on paved roads, and 5,741 VMT/yr on unpaved roads. This is a minimal increase in mobile source traffic.

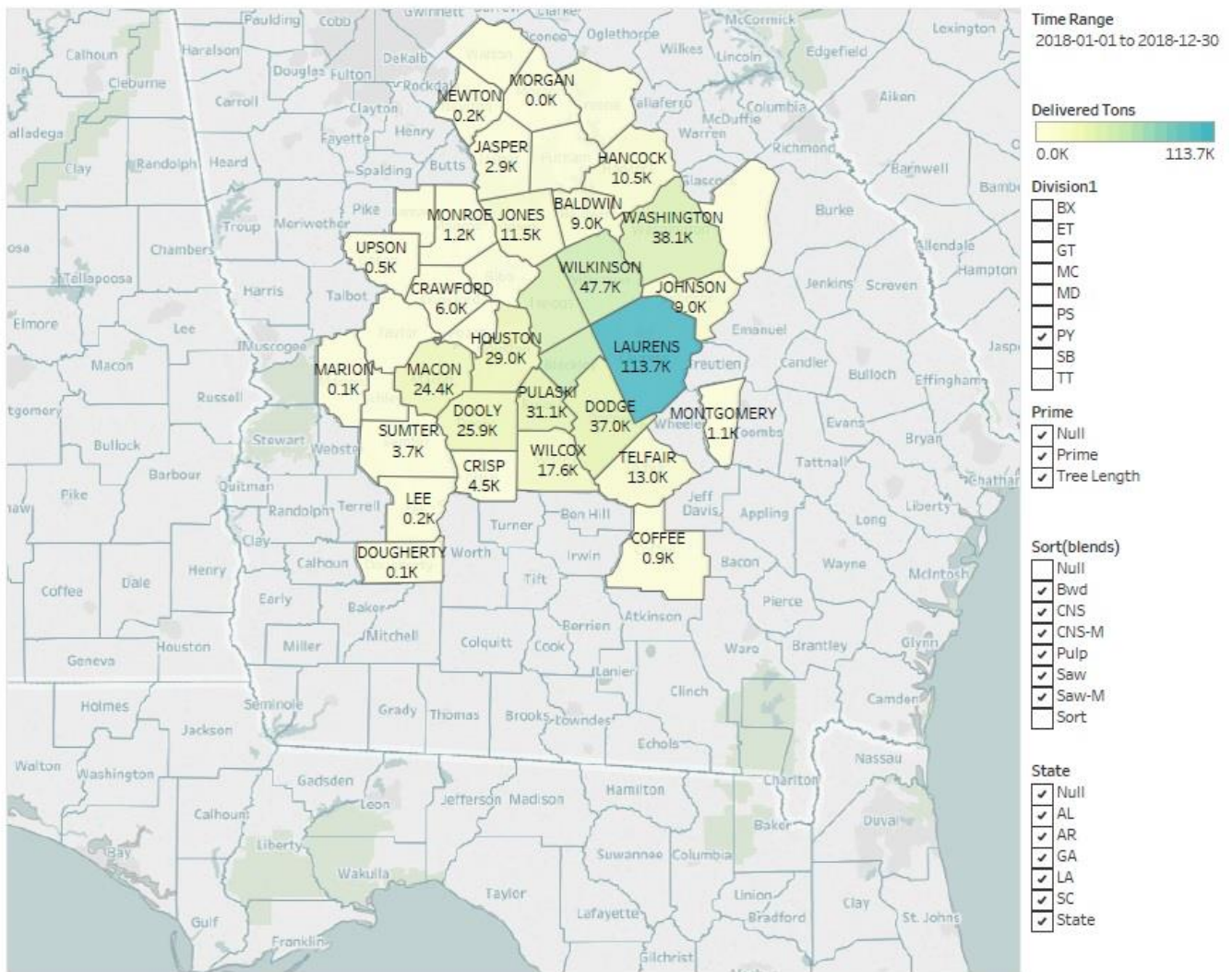
Comment 3

Building on the point raised in item #2, if there are going to be vehicles anticipated to be coming to the facility as a result of the proposed continuous kiln, is there any analysis of where will these vehicles be coming from/returning to? If these additional vehicles, or any proportion thereof, are anticipated to traverse the MATS MPO/Macon air shed, has Air Protection Branch evaluated, or have others evaluate, the potential impacts on:

- a. NO_x (as a precursor to Ozone)
- b. VOC (as a precursor to Ozone)
- c. PM/PM₁₀/PM_{2.5}

EPD Response:

Since the new continuous kilns will increase the facility-wide throughput rate, additional delivery of wood/log by log trucks is expected. The Division contacted the facility and requested that the facility provide a wood basket map for the Perry Mill. The facility provided the following map with some explanation.



The facility stated that, in 2018, only 6% of deliveries were from counties north of Houston County. According to the wood basket chart, the majority of log comes from southeast of the Macon area, the Division is convinced that the increase truck traffic would not pass through the Macon area. Interfor U.S. Inc. – Perry Mill received logs heavily from the East (Laurens and Wilkerson) and that will continue with the increased volume.

As discussed in the Division response to Comment No. 1, wind mostly blows from west to east. Therefore, the Division has determined that the increased log truck traffic by the continuous kiln project will not cause any significant impact to the MATS MPO/Macon air shed.

Note that none of the comments above would result in any changes to the requirements included in the draft PSD Permit/Title V Permit Amendment.

APPENDIX A

AIR QUALITY PERMIT

2421-153-0011-V-05-1

APPENDIX B

WRITTEN COMMENTS RECEIVED DURING COMMENT PERIOD