

Blue Ridge Environmental Defense League

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March 3, 2021

NCDEQ
Division of Air Quality
Air Permits Section
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Raleigh, NC 27603
Email: DAQ.publiccomments@ncdenr.gov
Subject: International Tie

Comments regarding International Tie Disposal, LLC Draft Air Permit No. 10676R00 Facility ID# 7700101

To Whom It May Concern:

I am submitting comments on behalf of the Blue Ridge Environmental Defense League (BREDL) and our members in North Carolina. BREDL is a regional, community-based, non-profit environmental organization. BREDL has chapters throughout the Southeast, including our chapter in Richmond County.

We respectfully request that this draft air permit be denied because this facility will significantly impact the ambient air quality of the surrounding community affecting public health. The permitting process should be put on hold until air dispersion modeling has been completed, evaluated and shared with the impacted community.

Air Dispersion Modeling must be completed

During the NCDQAQ February 22, 2021 informational meeting, on numerous occasions NCDQAQ referenced the Biochar Now facility in Colorado. One thing that was not mentioned is that the Colorado Department of Public Health & Environment did require AERMOD air dispersion modeling for that facility. Colorado required air modeling for PM₁₀ because emissions exceeded the thresholds set forth in the Colorado Modeling Guideline for Air Quality Permits.¹

To date, NCDQAQ has not required air dispersion modeling for the proposed International Tie Disposal (ITD) facility. **We are respectfully requesting that NCDQAQ require AERMOD air modeling for ITD at least for the criteria pollutant of NO₂.**

¹ Air Quality Dispersion Modeling Analysis, Biochar Now, LLC, Berthoud Plant, Trinity Consultants, Project 150601.0046, July 2015

In the ITD air permit application, the applicant states:

The proposed project results in emissions of toxic air pollutants (TAP). As shown in Appendix A, facility-wide emissions of all toxic air pollutants are less than the toxic pollutant exemption rates (TPERs) provided in 15A NCAC 02Q.0711. Therefore, no toxic air pollutant or dispersion modeling demonstration is required.²

The air dispersion modeling determination regarding TAPs in no way alleviates the responsibility of performing air dispersion modeling regarding criteria pollutants also referred to as PSD pollutants.

In the NCDAQ Draft Permit Review, it is mentioned:

PSD – Potential emissions of NO_x and VOC both exceed PSD thresholds. The facility is accepting a PSD Avoidance condition to avoid PSD permitting. PSD minor-source increment tracking has been triggered in Richmond County for PM₁₀, SO₂ and NO_x. This application will consume 1.1 lb/hr of PM₁₀, 0.01 lb/hr of SO₂ and 22.3 lb/hr of NO_x.³

Avoiding the PSD permitting conditions in the air permit does not alleviate NCDAQ from its responsibility to ensure that “no facility or source of air pollution shall cause any ambient air quality standard ... to be exceeded or contribute to a violation of any ambient air quality standard”.⁴

“Currently, NC requires an ambient air quality analysis for all PSD pollutants exceeding the SERs [significant emission rates] except for asbestos, fluorides, and sulfuric acid mist.”⁵ This guidance is for PSD regulated pollutants not PSD permit conditions. While this PSD modeling guidance is a requirement for PSD permits, it does not exclude the guidance from being used to evaluate PSD pollutants in other non-PSD permits. For example, in Caswell County NCDAQ conducted additional AERMOD air modeling for the PSD regulated pollutants NO₂, SO₂ and CO for two Carolina Sunrock (CS) air permit applications - both of which were not deemed a major stationary source under the PSD permitting program.

In fact the Carolina Sunrock air permit applications are identical in category type as the ITD facility – synthetic minor.

The emissions for NO_x (97.84 tpy) for the ITD facility will be nearly 2.5 times the significant emissions rate of 40 tpy (NO₂).⁶ In addition, the NO_x emissions for the ITD facility is more than

² Air Quality Construction Permit Application, International Tie Disposal, LLC, Hamlet, NC, Trinity Consultants, Project 203402.0124, August 2020, p.4-5

³ NCDAQ Application Review, Facility ID: 7700101, p. 9

⁴ 15A NCAC 02D .0401.

⁵ North Carolina Prevention of Significant Deterioration Modeling Guidance, 2.0 PSD Regulated Pollutants, July 1, 2020, <https://deq.nc.gov/about/divisions/air-quality/air-quality-permits/modeling-meteorology/modeling>

⁶ Ibid., Table 1 PSD Regulated Pollutants/Significant Emission Rates

double that of the NO_x emissions of the proposed CS Prospect Hill facility and more than six times that of the proposed. CS Burlington North facility.

NC DEQ must adhere to their air modeling policy and conduct ambient air modeling for NO₂.

Facility	NO _x (tpy) Expected Emissions	Air Dispersion Modeling
CS Burlington North	15.68	Yes
CS Prospect Hill	45.26	Yes
ITD Hamlet	97.84	No

BREDL completed AERMOD air dispersion modeling for NO₂. Since air modeling was not completed by ITD or NCDAQ, we based our parameters on the limited information which was provided in the ITD air application and by using air modeling from the Biochar Now, a similar facility, in Colorado.

Our air modeling results indicate that the ITD facility has a high probability of exceeding the NAAQS ambient air quality 1-hr standard for NO₂ – especially when adding the background concentration. Without some specific parameters, we based on our air modeling on some Biochar Now averages. The precise ITD parameters may result in modeled concentrations either higher or lower than ours. However, our results are why we are adamant about our request for air dispersion modeling.

Background Concentration / Nearby Sources

For facilities in Caswell County, NCDAQ said the background for NO₂ was around 60 ug/m³. That background concentration may be slightly higher for Richmond County. North Carolina has four NO₂ monitoring sites located in Mecklenburg, Forsyth, Wake and Northampton counties. The 2017-2019 Design Values (used for EPA NAAQS attainment) for these monitors are Mecklenburg (37 ppb), Forsyth (36 ppb), Wake (35 ppb) and Northampton (13 ppb) counties⁷. Converted to ug/m³ as follows: Mecklenburg (69.62 ug/m³), Forsyth (67.74 ug/m³), Wake (65.86 ug/m³) and Northampton (24.46 ug/m³).⁸ The Mecklenburg NO₂ monitor, which is closest to Richmond County, measured the highest NO₂ Design Value – average for 2017 – 2019.

Nearby sources such as the new Enviva Pellet facility (236 tpy NO_x emissions⁹) and the railroad

⁷ <https://deq.nc.gov/about/divisions/air-quality/air-quality-monitoring/historical-data-summaries/design-value-2#2017---2019>

⁸ https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.files/fileid/14285

⁹ Application for Permit Modification for Classification as a PSD minor source, Enviva Pellets Hamlet, LLC, May 2018, Table 4.1, p. 16

https://files.nc.gov/ncdeq/Air+Quality/permits/2018_Public_Notice_Documents/20181002_EnvivaHamlet_PermitA

would add to the area NO₂ pollution. The proposed ITD facility will release 97.84 tpy of NO_x.¹⁰

During the NCDAQ February 22, 2021 informational meeting, NCDAQ personnel said that air modeling was completed for the Enviva facility and that indicated no modeled exceedances of ambient air quality. Despite that, ITD is a different type facility. For example, ITD smokestack emissions will be just a few feet from ground level. NCDAQ must conduct air dispersion modeling for ITD and not use Enviva air dispersion modeling as proof that ITD will not pose a health risk to the ambient air.

NCDAQ should not value Caswell County residents' health more than Richmond County residents. NCDAQ must be consistent in using all tools to ensure federal health standards will not be exceeded.

Draft Air Permit

The Draft Air Permit Application indicated the facility will operate 9 hours a day¹¹. The Draft Air Permit Review by DEQ states the facility will operate 24 hours a day. Did this change from the application?

The permitting agency in Colorado required monthly emission limits for the first year of operation for the similar Biochar Now facility. A monthly limit would ensure an ongoing review of this unique facility for the first year of operation. Would NCDAQ consider monthly limits during the first year?

Condition 15 (Limitation to Avoid 15A NCAC 2Q .0501) is not clear as to what happens if this facility exceeds the limits. Will the facility have to apply for a Title V permit? Would they be subjected to additional conditions and limits?

In Conclusion

We respectfully request that this draft air permit be denied because this facility will significantly impact the ambient air quality of the surrounding community affecting public health. The permitting process should be put on hold until air dispersion modeling has been completed, evaluated and shared with the impacted community.

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¹⁰ Air Quality Construction Permit Application, International Tie Disposal, LLC, Hamlet, NC Site, Trinity Consultants, August 2020

¹¹ Ibid. p. 20 Form B, p. 32

Respectfully submitted,

A handwritten signature in black ink that reads "Mark E. Barker". The signature is written in a cursive, slightly slanted style.

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