

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director



NORTH CAROLINA
Environmental Quality

March 11, 2020

Mr. Roland Burnett
Plant Expansion Manager
Enviva Pellets Northampton, LLC
309 Enviva Boulevard
Garysburg, North Carolina 27831

SUBJECT: Construction Prior to Receipt of Air Permit
Enviva Pellets Northampton, LLC
Facility ID: 6600167, Garysburg, Northampton County
Tracking Number 6600167.20B

Dear Mr. Burnett,

The Division of Air Quality has considered your "Notice of Intent to Construct" application (6600167.20B) received on February 25, 2020 and updated information received on March 9, 2020. The application request was to construct equipment prior to receipt of an air permit as allowed in N.C.G.S. 143-215.108A(b). The proposed project involves the recirculation of a portion of the air flow from the dry hammermills (DHM) and dry shavings hammermills (DSHM) back into each dry hammermill. The remaining portion of the modified recirculated air will be directed through baghouses, a proposed quench duct followed by the dryer furnace, wet electrostatic precipitator (WESP), and the dryer regenerative thermal oxidizer (RTO) or the WESP and dryer RTO, or both.

Based on the information submitted in your application and in accordance with N.C.G.S 143-215.108A(c), the Division of Air Quality grants permission for the construction, alteration or expansion of the equipment listed above. You may commence construction no sooner than March 11, 2020, which is at least fifteen (15) days following publication of the Notice of Intent in the Roanoke-Chowan Herald on February 15, 2020. **Please be aware that you are not allowed to operate the equipment prior to receipt of your revised air permit.** Also, there may be other state, federal or local regulations applicable to your construction plans. This permission to construct prior to receipt of an air permit does not supersede any applicable zoning ordinances.

Should you have any questions concerning this determination, please contact Richard R. Simpson, at (919) 707-8476 or Richard.Simpson@ncdenr.gov

Sincerely,

A handwritten signature in blue ink that reads "William D. Willets".

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

c: Ray Stewart, Supervisor, Raleigh Regional Office
Central Files
Connie Horne (Cover letter only)



North Carolina Department of Environmental Quality | Division of Air Quality
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641
919.707.8400

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Region: Raleigh Regional Office
County: Northampton
NC Facility ID: 6600167
Inspector's Name: Dawn Reddix
Date of Last Inspection: 04/30/2019
Compliance Code: 3 / Compliance - inspection

Review of Notice of Intent (NOI) to Construct Approval

Facility Data	Permit Applicability (this application only)
<p>Applicant (Facility's Name): Enviva Pellets Northampton, LLC</p> <p>Facility Address: Enviva Pellets Northampton, LLC 309 Enviva Boulevard Garysburg, NC 27831</p> <p>SIC: 2499 / Wood Products, Nec NAICS: 321999 / All Other Miscellaneous Wood Product Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p>SIP: N/A NSPS: N/A NESHAP: N/A PSD: N/A PSD Avoid.: N/A NC Toxics: N/A 112(r): N/A Other: NOI</p>

Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 6600167.20B Date Received: 02/25/2020 Application Type: Construction Notice Application Schedule: Construction Notice Existing Permit Data Existing Permit Number: 10203/R06 Existing Permit Issue Date: 10/30/2019 Existing Permit Expiration Date: 02/28/2025</p>
Joe Harrell Corporate EHS Manager (252) 209-0032 142 NC Route 561 East Ahoskie, NC 27910	Royal Smith Executive VP-Operations (240) 482-3770 7200 Wisconsin Avenue, Suite 1000 Bethesda, MD 20814	Joe Harrell Corporate EHS Manager (252) 209-0032 142 NC Route 561 East Ahoskie, NC 27910	

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2018	17.76	130.23	384.44	63.27	72.17	28.03	11.68 [Methanol (methyl alcohol)]
2017	19.14	130.68	382.86	63.50	72.82	25.25	10.73 [Methanol (methyl alcohol)]
2016	18.00	130.36	381.42	63.35	72.92	21.90	9.63 [Methanol (methyl alcohol)]
2015	17.68	126.53	337.00	61.47	71.52	18.61	8.43 [Methanol (methyl alcohol)]
2014	19.20	107.54	213.08	52.23	89.86	17.22	7.33 [Methanol (methyl alcohol)]

<p>Review Engineer: Richard Simpson</p> <p>Review Engineer's Signature: </p> <p>Date: March 11, 2020</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p><u>Approval of NOI issued on March 11, 2020</u></p>
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1. Purpose of NOI

Enviva Pellets Northampton, LLC (referred to as EnvivaNOR throughout this document) currently holds Air Permit No. 10203R06 with an expiration date of February 28, 2025 for a wood pellets manufacturing plant in Garysburg, Northampton County, North Carolina. EnvivaNOR submitted a Notice of Intent to Construct (NOI) application that was received on February 25, 2020 and updated information submitted on March 9, 2020 to begin construction prior to the receipt of an operating air permit pursuant to North Carolina General Statute 143-215.108(A).

2. Project Description and Emissions

EnvivaNOR produces wood pellets from raw hardwood and softwood. The NOI was submitted to allow the construction for a recirculation project of air flow from the dry hammermills (DH) and the dry shavings hammermills (DSHM) to reduce the amount of air emitted to the atmosphere and the amount of make-up air required. This NOI project is referred to throughout this document as “the recirculation project”.

The recirculation project involves reducing and controlling volatile organic compound (VOC) emissions from the DHMs and DSHMs. A portion of the air flow from each DHM and DSHM will be recirculated within each dry hammermill. Emissions from the recirculation project will be directed to DHM baghouses, a proposed DSHM baghouse, a proposed quench duct, followed by the Dryer Furnace, the wet electrostatic precipitator (WESP), and the Dryer regenerative thermal oxidizer (RTO), or the WESP and Dryer RTO, or both.

The proposed pre-permit construction involves installing piping, ductwork, and connections associated with redirecting the DHM and DSHM airflows, as well as installing the duct work for the DHM, DSHM, and the rotary drum dryer RTO. No final connections that would allow operation of the recirculation process or operation of the associated DHM and DSHM controls will be made prior to the receipt of a permit from NCDAQ.

Dry hammermills are used to reduce the size of wood chips to be dried in the rotary drum dryer using rotating steel hammers. Dry shavings hammermills reduce the size of predried shavings that are brought to the facility from offsite. Properly sized and dried fiber is transferred to the pellet presses, where the fiber is compressed into wood pellets.

Current operations have emissions from the DHMs that are routed through the baghouses, then to the atmosphere. The recirculation project will allow the redirection of a portion of the airflow within each DHM and DSHM, followed by control of DHM and DSHM emissions by the furnace, WESP, and the dryer RTO; the WESP and RTO, or both. The Dryer RTO will reduce VOC and HAP emissions from the DHMs and DSHMs. Total emissions along with the net change in emissions associated with the recirculation project are presented below:

Estimate Emissions Scenario	CO	NO _x	TSP	PM-10	PM-2.5	SO ₂	Total VOC	CO _{2e}	Total HAP
	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Current R06 Permit Facility PTE Emissions (including fugitives)	177.1	239.2	202.1	131.4	78.3	39.1	137.3	396,047	18.9
Proposed Facility PTE Emissions Option 2 (including fugitives)	173.8	227.5	182.1	111.3	77.2	39.1	129.2	388,908	18.3
Change in PTE Emissions	-3.3	-11.8	-19.9	-20.1	-1.2	0.0	-8.2	-7,139	-0.6

EnvivaNOR previously submitted air modeling in support of the current permit (Air Permit No. 10203R06). Air dispersion modeling was required for 13 Toxic Air Pollutants (TAPs) with emissions in excess of the TPER thresholds in 15A NCAC 02Q .0711 to demonstrate compliance with the Acceptable Ambient Levels (AALs) in 15A NCAC 02D .1100. DAQ Air Quality Analysis Branch (AQAB) meteorologist Nancy Jones and supervisor Tom Anderson reviewed Enviva's modeling. Enviva's modeling was approved on June 3, 2019. Below is a summary of AQAB Enviva modeling results.

TAP	Averaging Period	Scenario	Max. Conc. ($\mu\text{g}/\text{m}^3$)	AAL ($\mu\text{g}/\text{m}^3$)	% of AAL
Acetaldehyde	1-hour	NORM	0.54	27,000	<1 %
Acrolein	1-hour	FBYP2	1.36	80	2 %
Arsenic	Annual	FBYP1	1.9e-4	0.0021	9 %
Benzene	Annual	NORM	0.028	0.12	24 %
Beryllium	Annual	FBYP1	9.7e-6	0.0041	<1 %
Cadmium	Annual	FBYP1	4e-5	0.0055	1 %
Chlorine	1-hour	FBYP2	6.45	900	1 %
	24-hour	FBYP2	2.23	37.5	6 %
Formaldehyde	1-hour	FBYP1	8	150	5 %
HCl	1-hour	FBYP2	6.45	700	1 %
Manganese	24-hour	FBYP2	0.19	31	1 %
Mercury	24-hour	FBYP2	4.2E-4	0.6	<1 %
Nickel	24-hour	FBYP2	3.9E-3	6	<1 %
Phenol	1-hour	NORM	0.22	95	<1 %

This compliance demonstration assumes the source parameters and pollutant emission rates used in the analysis are correct. The modeling adequately demonstrates compliance, on a source-by-source basis, for all toxics modeled. The toxics emissions limitations and requirements located in permit Section 2.2 A.5, and approved in the AAL Table above shall become effective after all of the requirements from permit Section 2.3 A. have been met. Based on the margin of compliance for these TAPs and a reduction in most emissions, the facility is expected to be in compliance with NC Air Toxics after the recirculation project.

3. Review of the NOI

The DAQ has reviewed the NOI and recommends that the NOI be approved based on the findings listed below:

1. The most recent inspection was conducted on April 30, 2019 by Ray Stewart and Dawn Reddix of RRO. According the RRO compliance databases, no Notices of Violation (NOVs) have been issued to this facility.
2. The recirculation project will not substantively change current permit conditions.
3. The recirculation project will not result in a disproportionate increase in the size of the facility as it is currently permitted.
4. The recirculation project will result in lower, the same, or substantially similar emissions as permitted.
5. The recirculation project is not anticipated to have a significant effect on air quality. Emissions from the modification do not exceed PSD avoidance conditions and the facility is expected to be in compliance with NC Air Toxics after implementing the recirculation project.

6. The Commission is likely to issue the permit modification once received.
7. The modification is not applicable to the following air quality regulations, except as discussed below, and is therefore eligible to use the NOI pursuant to GS 143-215.108(A):
 - 15A NCAC 2D .0530, Prevention of Significant Deterioration
 - 15A NCAC 2D .0531, Sources in Nonattainment Areas
 - 15A NCAC 2D .0532, Sources Contributing to an Ambient Violation.
 - 15A NCAC 2D .0952, Petition for Alternative [VOC] Controls
 - 15A NCAC 2D .0959, Petition for Superior Alternative [VOC] Controls
 - 15A NCAC 2D .1100, Control of Toxic Air Pollutants – See the above discussion for TAPs.
 - 15A NCAC 2D .1109, 112(j) Case-by-Case Maximum Achievable Control Technology.
 - 15A NCAC 2D .1112, 112(g) Case-by-Case Maximum Achievable Control.
 - 15A NCAC 2D .1412, Petition for Alternative [NO_x] Limitations.
8. The NOI is complete. All required project information, proof of publication (i.e., legal notice published in the Roanoke-Chowan News-Herald on February 15, 2020), and the required \$200 processing fee were received by the DAQ on February 25, 2020.
9. EnvivaNOR may commence construction no sooner than March 11, 2020, which is at least fifteen (15) days following publication of the Notice of Intent in the Roanoke-Chowan News-Herald on February 15, 2020.

NOTE: The “Construction Prior to Receipt of the Air Permit” letter does not authorize the Permittee to operate the new or modified equipment prior to receipt of a revised air permit. Also, there may be other state, federal or local regulations applicable to the construction plans. This permission to construct prior to receipt of an air permit does not supersede any applicable zoning ordinances. The Affidavit of Publication and Zoning Consistency Determination are in Attachment 1.

ATTACHMENT 1

AFFIDAVIT OF PUBLICATION

This is not an invoice

Roanoke-Chowan News-Herald

Post Office Box 1325
Ahoskie, North Carolina 27910

Received

FEB 25 2020

Air Permits Sectic

IN ACCOUNT WITH

Enviva
4242 Six Forks Road
Raleigh, NC 27609

Date	Description	Issues	Rate
2/17/20	Notice of Construction Prior to Receipt of Air Permit Enviva Polls Northampton, LLC	3x12	Open

Attorneys placing legal advertising are held responsible for payment. All statements payable 10 days after billing.
Additional copies of this notice will be furnished except upon payment of fee of \$20.00.

**NORTH CAROLINA
NORTHAMPTON COUNTY**

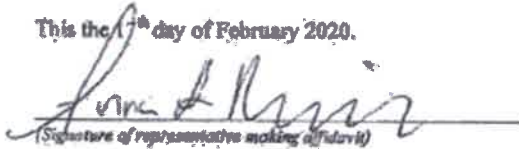
AFFIDAVIT OF PUBLICATION

Before the undersigned, a Notary Public, duly commissioned, qualified, and authorized by law to administer oaths, personally appeared the undersigned representative who being duly sworn, deposes and says that he (she) is an employee or other officer authorized to make this affidavit of Roanoke-Chowan Publications, LLC, engaged in the publication of a newspaper known as the Roanoke-Chowan News Herald, issued and entered its second class mailing in the Town Ahoskie, N.C., in said county and state; that he (she) is authorized to make this affidavit and sworn statement; and the notice or other legal advertisement, a true copy of which is attached hereto, was published in the Roanoke-Chowan News-Herald on the following date

February 15, 2020

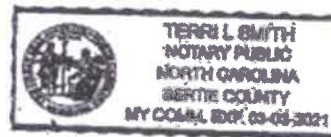
And that the said newspaper in which such notice, paper, document or legal advertisement was published was at the time of each and every such publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina.

This the 17th day of February 2020.


(Signature of representative making affidavit)

Sworn to and subscribed before to me this 17th day of February 2020.


(Notary Public)



Zoning Consistency Determination

Facility Name	Enviva Pellets Northampton, LLC	Received
Facility Street Address	309 Enviva Blvd.	FEB 25 2020
Facility City	Garysburg	Air Permits Section
Description of Process	Wood pellet manufacturing facility	
SIC/NAICS Code	2499	
Facility Contact	Steven P. Van Ooteghem, Air Quality Engineer	
Phone Number	984-368-0002	
Mailing Address	4242 Six Forks Road, Suite 1050	
Mailing City, State Zip	Raleigh, NC 27609	

Based on the information given above:

- I have received a copy of the air permit application (draft or final) AND...
- There are no applicable zoning ordinances for this facility at this time
- The proposed operation IS consistent with applicable zoning ordinances
- The proposed operation IS NOT consistent with applicable zoning ordinances
(please include a copy of the rules in the package sent to the air quality office)
- The determination is pending further information and can not be made at this time
- Other:

Agency NORTHAMPTON COUNTY CODE ENFORCEMENT

Name of Designated Official WILLIAM E. FLYNN, JR.

Title of Designated Official CODE ENFORCEMENT DIRECTOR

Signature William E. Flynn Jr.

Date 2-6-2020

Please forward to the facility mailing address listed above and the air quality office at the appropriate address as checked on the back of this form.