COPY

WEST VIRGINIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
Beverly D. McKeone, P.E.
NSR Program Manager
601 57th Street, SE
Charleston, WV 25304

Eagle Manufacturing
Wellsburg
009-00008
13-0435A
Lee Martin

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

APPLICATION FOR NSR PERMIT AND TITLE V PERMIT REVISION (OPTIONAL)

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

☐ **CONSTRUCTION** ☒ **MODIFICATION** ☐ **RELOCATION**
☐ **CLASS I ADMINISTRATIVE UPDATE** ☐ **TEMPORARY**
☐ **CLASS II ADMINISTRATIVE UPDATE** ☐ **AFTER-THE-FACT**

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

☐ **ADMINISTRATIVE AMENDMENT** ☐ **MINOR MODIFICATION**
☐ **SIGNIFICANT MODIFICATION**

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant *(as registered with the WV Secretary of State's Office):*
Eagle Manufacturing Company

2. Federal Employer ID No. ***(FEIN):***
550161480

3. Name of facility *(if different from above):*

4. The applicant is the:
☐ **OWNER** ☐ **OPERATOR** ☒ **BOTH**

5A. Applicant's mailing address:
2400 Charles Street
Wellsburg, WV 26070

5B. Facility's present physical address:
2400 Charles Street
Wellsburg, WV 26070

6. **West Virginia Business Registration.** Is the applicant a resident of the State of West Virginia? ☒ **YES** ☐ **NO**
- If **YES,** provide a copy of the **Certificate of Incorporation/Organization/Limited Partnership** (one page) including any name change amendments or other Business Registration Certificate as **Attachment A.**
- If **NO,** provide a copy of the **Certificate of Authority/Authority of L.L.C./Registration** (one page) including any name change amendments or other Business Certificate as **Attachment A.**

7. If applicant is a subsidiary corporation, please provide the name of parent corporation:

8. Does the applicant own, lease, have an option to buy or otherwise have control of the *proposed site?* ☒ **YES** ☐ **NO**
- If **YES,** please explain: Own and control the site.
- If **NO,** you are not eligible for a permit for this source.

9. Type of plant or facility (stationary source) to be **constructed, modified, relocated, administratively updated** or **temporarily permitted** (e.g., coal preparation plant, primary crusher, etc.): boiler addition

10. North American Industry Classification System **(NAICS)** code for the facility:
332431

11A. DAQ Plant ID No. (for existing facilities only):
009–00008

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
13-435

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits,** please provide directions to the *proposed new site location* from the nearest state road. ***Include a MAP as Attachment B.***

Travel south on Route 2 into Wellsburg, WV turn right at 22nd Street and then turn right at next stop onto Charles Street drive 2 blocks to 2400 Charles Street. Eagle building on the right corner.
Travel north on Route 2 into Wellsburg, WV turn left at 22nd Street and then turn right at next stop onto Charles Street drive 2 blocks to 2400 Charles Street. Eagle building on the right corner.

12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:
NA	NA	Brooke
12.E. UTM Northing (KM): 449657.07	12F. UTM Easting (KM): 533098.89	12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:
Addition of 1980's vintage boiler for heat generation only for plant.

14A. *Provide the date of anticipated installation or change:* / / – If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: /July/2014	14B. Date of anticipated Start-Up if a permit is granted: / /

14C. Provide a **Schedule** of the planned **Installation** of/**Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:
Hours Per Day 24 Days Per Week 5 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? ☐ **YES** ☒ **NO**

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process *(if known)*. A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance *(if known)*. Provide this information as **Attachment D.**

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan,** e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to ***Plot Plan Guidance***) .
– Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F.**

23. Provide a **Process Description** as **Attachment G.**
– Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H.**

– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I.**

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J.**

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K.**

28. Check all applicable **Emissions Unit Data Sheets** listed below:

☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage Facilities
☐ Concrete Batch Plant	☐ Incinerator	
☐ Grey Iron and Steel Foundry	☒ Indirect Heat Exchanger	☐ Storage Tanks

☒ General Emission Unit, specify Extruder and Powder Coating Oven

*Fill out and provide the **Emissions Unit Data Sheet(s) as Attachment L.***

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

☐ Absorption Systems	☐ Baghouse	☐ Flare
☐ Adsorption Systems	☐ Condenser	☐ Mechanical Collector
☐ Afterburner	☐ Electrostatic Precipitator	☐ Wet Collecting System

☐ Other Collectors, specify

Fill out and provide the **Air Pollution Control Device Sheet(s) as Attachment M.**

30. Provide all **Supporting Emissions Calculations as Attachment N,** or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O.**

➢ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. *Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.*

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and ***Example Legal Advertisement*** for details). Please submit the **Affidavit of Publication as Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

☐ **YES** ☒ **NO**

➢ If **YES,** identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's ***"Precautionary Notice – Claims of Confidentiality"*** guidance found in the ***General Instructions*** as **Attachment Q.**

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

☒ Authority of Corporation or Other Business Entity	☐ Authority of Partnership
☐ Authority of Governmental Agency	☐ Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R.**

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned ☒ **Responsible Official** / ☐ **Authorized Representative,** hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE Joe C. Eddy *(Please use blue ink)* DATE: 9/11/15 *(Please use blue ink)*

35B. Printed name of signee: Joseph C. Eddy		35C. Title: President/CEO
35D. E-mail: ice@eagle-mfg.com	36E. Phone: 304-737-3171 x 139	36F. FAX: 304-737-1752
36A. Printed name of contact person (if different from above): Scott Trimmer		36B. Title: Operations Engineer
36C. E-mail: strimmer@eagle-mfg.com	36D. Phone: 304-737-3171 x 124	36E. FAX: 304-737-1752

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- ☒ **Attachment A: Business Certificate**
- ☒ **Attachment B: Map(s)**
- ☐ **Attachment C: Installation and Start Up Schedule**
- ☐ **Attachment D: Regulatory Discussion**
- ☒ **Attachment E: Plot Plan**
- ☒ **Attachment F: Detailed Process Flow Diagram(s)**
- ☒ **Attachment G: Process Description**
- ☐ **Attachment H: Material Safety Data Sheets (MSDS)**
- ☒ **Attachment I: Emission Units Table**
- ☒ **Attachment J: Emission Points Data Summary Sheet**
- ☐ **Attachment K: Fugitive Emissions Data Summary Sheet**
- ☒ **Attachment L: Emissions Unit Data Sheet(s)**
- ☐ **Attachment M: Air Pollution Control Device Sheet(s)**
- ☒ **Attachment N: Supporting Emissions Calculations**
- ☐ **Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans**
- ☒ **Attachment P: Public Notice**
- ☐ **Attachment Q: Business Confidential Claims**
- ☒ **Attachment R: Authority Forms**
- ☐ **Attachment S: Title V Permit Revision Information**
- ☒ **Application Fee**

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- ☐ ***Forward 1 copy of the application to the Title V Permitting Group and:***
- ☐ ***For Title V Administrative Amendments:***
  - ☐ ***NSR permit writer should notify Title V permit writer of draft permit,***
- ☐ ***For Title V Minor Modifications:***
  - ☐ ***Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,***
  - ☐ ***NSR permit writer should notify Title V permit writer of draft permit.***
- ☐ ***For Title V Significant Modifications processed in parallel with NSR Permit revision:***
  - ☐ ***NSR permit writer should notify a Title V permit writer of draft permit,***
  - ☐ ***Public notice should reference both 45CSR13 and Title V permits,***
  - ☐ ***EPA has 45 day review period of a draft permit.***

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
EAGLE MANUFACTURING COMPANY
2400 CHARLES ST
WELLSBURG, WV 26070-1000

BUSINESS REGISTRATION ACCOUNT NUMBER: **1033-9996**

This certificate is issued on: **06/2/2010**

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with W.Va. Code § 11-12.

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.1
L2013928192

Attachment A

This document was too large to scan. If interested in viewing please contact: depfoia@wv.gov or

West Virginia Department of Environmental Protection Public Information Office

FOIA Request

601 57th St. S.E.

Charleston, WV 25304.

The fax number is 304-926-0447.

Thank you.

west virginia department of environmental protection

ATTACHMENT G

Process Description

1S HDPE Extruder process plastic resin in pellet form delivered in raw material form in railcars and then drawn through vacuum tubes to the Extruder machine and melted into the extruder plastic machine into molds that form plastic products. Different molds create different products in various sizes and weights.

2S Dryer oven for Powder Coating dries powder coat pellets delivered in boxes and vacuum drawn into the paint booth and heated into liquid vapor form that is sprayed onto metal safety cans and then the dryer oven dries the powder coat material to the surface of the metal safety can to create a protective layer in a shiny finish on the product.

3S Boiler was added to the facility for primary use and back up to two existing boilers to provide heating only to the facility in the winter season as needed for heating. Boiler generates steam that is draft forced into the facility to regulate the temperature in the various sections of the building. Boiler is in rotation with two other boilers that run one at a time to generate steam for heating to the facility.

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)

Emission Unit ID[1]	Emission Point ID[2]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type[3] and Date of Change	Control Device[4]
1S	1E	HDPE Extruder	1987	25 HP	Existing	NA
2S	2E	Powder Coat Dryer	1971	1MBtu/MCF	Existing	NA
3S	3E	Natural Gas Boiler	2014	12.5MBtu/hr	New	NA

[1] For Emission Units (or Sources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation.
[2] For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.
[3] New, modification, removal
[4] For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data

Emission Point ID No. *(Must match Emission Units Table & Plot Plan)*	Emission Point Type[1]	Emission Unit Vented Through This Point *(Must match Emission Units Table & Plot Plan)*		Air Pollution Control Device *(Must match Emission Units Table & Plot Plan)*		Vent Time for Emission Unit *(chemical processes only)*		All Regulated Pollutants - Chemical Name/CAS[3] *(Speciate VOCs & HAPS)*	Maximum Potential Uncontrolled Emissions[4]		Maximum Potential Controlled Emissions[5]		Emission Form or Phase *(At exit conditions, Solid, Liquid or Gas/Vapor)*	Est. Method Used[6]	Emission Concentration[7] (ppmv or mg/m^4)
		ID No.	Source	ID No.	Device Type	Short Term[2]	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
1E	Ambient	1S	Extruder	NA	NA	NA	NA	VOC	0.12	0.43	0.12	0.43	Gas	EE	NA (7,488 hrs/yr)
								PM	0.10	0.36	0.10	0.36	Solid	EE	
								PM10	0.05	0.17	0.05	0.17	Solid	EE	
2E	Stack	2S	Dryer Powder Coat	NA	NA	NA	NA	NOX	0.80	0.82	0.80	0.82	Gas	EE	NA (2080 hrs/yr)
								CO	0.70	0.70	0.70	0.70	Gas	EE	
								PM	0.06	0.062	.06	0.062	Solid	EE	
								PM10	0.05	0.05	0.05	0.05	Solid	EE	
3E	Stack	3S	Natural Gas Boiler	NA	NA	NA	NA	NOX	1.08	4.72	1.08	4.72	Gas	EE	NA (8760 hrs/yr)
								CO	0.91	3.97	0.91	3.97	Gas	EE	
								PM	0.082	0.36	0.082	0.36	Solid	EE	
								PM10	0.06	0.27	0.06	0.27	Solid	EE	

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

[1] Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

[2] Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (i.e., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

[3] List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS_2, VOCs, H_2S, Inorganics, Lead, Organics, O_3, NO, NO_2, SO_2, SO_3, all applicable Greenhouse Gases (including CO_2 and methane), etc. **DO NOT LIST** H_2, H_2O, N_2, O_2, and Noble Gases.

[4] Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[5] Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[6] Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

[7] Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m^3) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO_2, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 2: Release Parameter Data

Emission Point ID No. *(Must match Emission Units Table)*	Inner Diameter (ft.)	Exit Gas			Emission Point Elevation (ft)		UTM Coordinates (km)	
		Temp. (°F)	Volumetric Flow [1] (acfm) *at operating conditions*	Velocity (fps)	Ground Level *(Height above mean sea level)*	Stack Height [2] *(Release height of emissions above ground level)*	Northing	Easting
1E	2	400	20	---	660	30	4459657.07	533098.89
2E	1	800	10	---	660	20	4459657.07	533098.89
3E	2	400	50	---	660	20	4459657.07	533098.89

[1] Give at operating conditions. Include inerts.
[2] Release height of emissions above ground level.

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

1. Name or type and model of proposed affected source:

   1S - HDPE Extruder

2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

   High Density Polyethylene Resin in raw material pellet form processed 96 lbs per hour.

4. Name(s) and maximum amount of proposed material(s) produced per hour:

   High Density Polyethylene Resin in raw material pellet form processed 120 lbs per hour.

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

   NA

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):

(a) Type and amount in appropriate units of fuel(s) to be burned:

NA

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

NA

(c) Theoretical combustion air requirement (ACF/unit of fuel):

@ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

NA

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

NA

(g) Proposed maximum design heat input: $\times 10^6$ BTU/hr.

7. Projected operating schedule:

Hours/Day	24	Days/Week	6	Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@ °F and psia

a. NO_X	0	lb/hr		grains/ACF
b. SO_2	0	lb/hr		grains/ACF
c. CO	0	lb/hr		grains/ACF
d. PM_{10}	0.05	lb/hr	.017 TPY	grains/ACF
e. Hydrocarbons	0	lb/hr		grains/ACF
f. VOCs	.12	lb/hr	0.43 TPY	grains/ACF
g. Pb	0	lb/hr		grains/ACF
h. Specify other(s)				
PM	0.10	lb/hr		grains/ACF
		lb/hr		grains/ACF
		lb/hr		grains/ACF
		lb/hr		grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing
Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING	RECORDKEEPING
REPORTING	TESTING

MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.

RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

EAGLE MANUFACTURING
HDPE EXTRUDER
PAGE 1 OF 1

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.
Identification Number (as assigned on *Equipment List Form*):

1. Name or type and model of proposed affected source:

2S-Dryer oven for Powder Coating of safety cans. (Maximum weight of item being painted is 15 lbs.)

2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

Powder Coat Paint = 45 lb/hr

4. Name(s) and maximum amount of proposed material(s) produced per hour:

Powder Coat Paint = 50 lb/hr

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

NA

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):

(a) Type and amount in appropriate units of fuel(s) to be burned:

Natural Gas in BTU

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

NA

(c) Theoretical combustion air requirement (ACF/unit of fuel):

@ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

NA

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

NA

(g) Proposed maximum design heat input: $\times 10^6$ BTU/hr.

7. Projected operating schedule:

Hours/Day	8	Days/Week	5	Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@ °F and psia

a. NO_X	0.80	lb/hr	0.82 TPY	grains/ACF
b. SO_2		lb/hr		grains/ACF
c. CO	0.70	lb/hr	0.70 TPY	grains/ACF
d. PM_{10}	0.05	lb/hr	0.05 TPY	grains/ACF
e. Hydrocarbons		lb/hr		grains/ACF
f. VOCs		lb/hr		grains/ACF
g. Pb		lb/hr		grains/ACF
h. Specify other(s)				
PM	0.06	lb/hr		grains/ACF
		lb/hr		grains/ACF
		lb/hr		grains/ACF
		lb/hr		grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing
Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING	RECORDKEEPING
REPORTING	TESTING

MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.

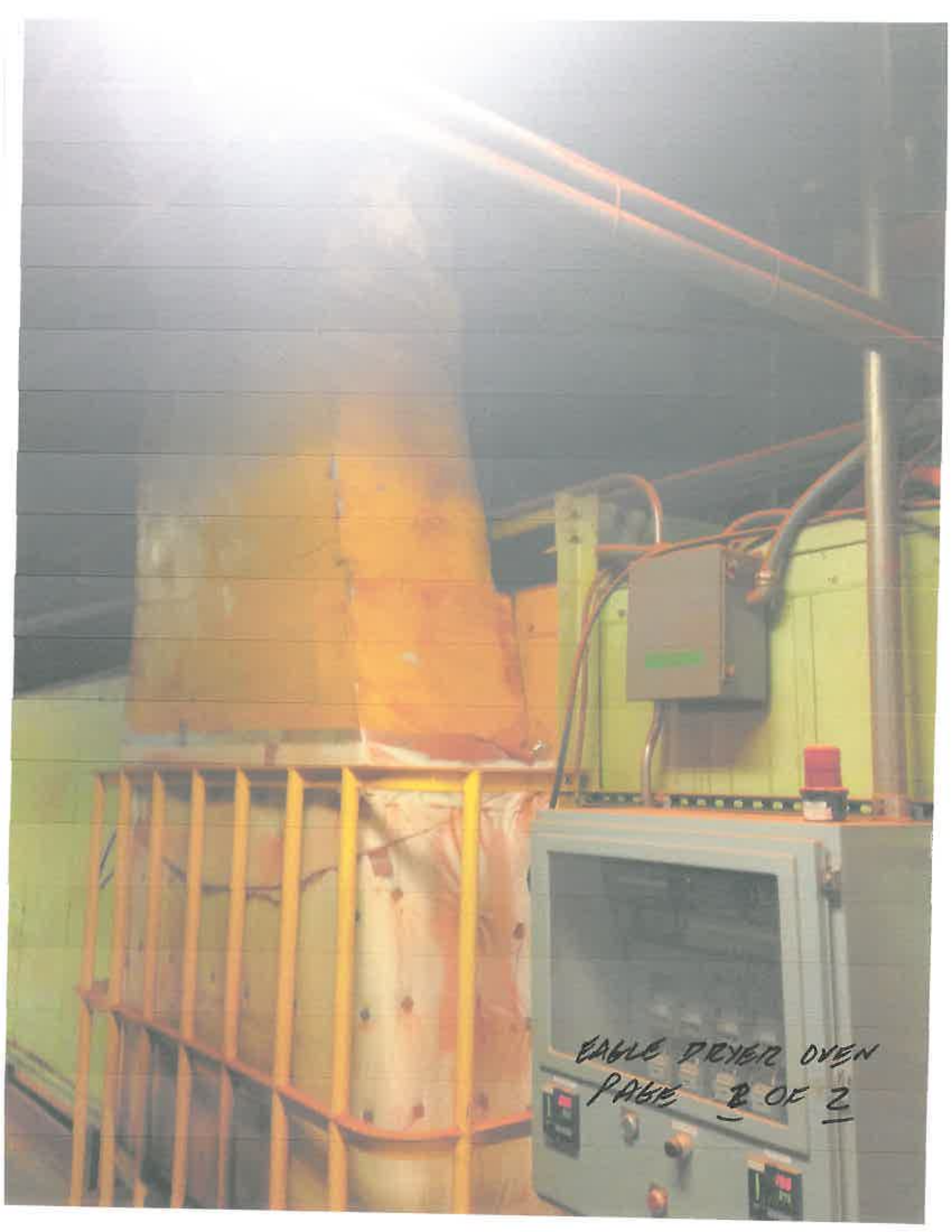
RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

EAGLE MANUFACTURING
DRYER OVEN
PAGE 1 OF 2


EAGLE DRYER OVEN
PAGE 8 OF 2

Attachment L
Emission Unit Data Sheet
(INDIRECT HEAT EXCHANGER)

Control Device ID No. (must match List Form): 3S

Equipment Information

1. Manufacturer: Cleaver Brooks	2. Model No. CB655-300 Serial No. L-48404
3. Number of units: 1	4. Use - Plant Heating Only During Winter Months
5. Rated Boiler Horsepower: 300 hp	6. Boiler Serial No.: L-48404
7. Date constructed: 8/4/1969	8. Date of last modification and explain: NA
9. Maximum design heat input per unit: 12.554 $\times 10^6$ BTU/hr	10. Peak heat input per unit: 12.554 $\times 10^6$ BTU/hr
11. Steam produced at maximum design output: 34.5 LB/hr 11 psig	12. Projected Operating Schedule: Hours/Day Winter when necessary Days/Week Weeks/Year
13. Type of firing equipment to be used: ☐ Pulverized coal ☐ Spreader stoker ☐ Oil burners ☒ Natural Gas Burner ☐ Others, specify	14. Proposed type of burners and orientation: ☐ Vertical ☒ Front Wall ☐ Opposed ☐ Tangential ☐ Others, specify
15. Type of draft: ☒ Forced ☐ Induced	16. Percent of ash retained in furnace: NA %
17. Will flyash be reinjected? ☐ Yes ☒ No	18. Percent of carbon in flyash: NA %

Stack or Vent Data

19. Inside diameter or dimensions: 2 ft.	20. Gas exit temperature: 275 °F
21. Height: 25 ft.	22. Stack serves: ☒ This equipment only ☐ Other equipment also (submit type and rating of all other equipment exhausted through this stack or vent)
23. Gas flow rate: NA ft^3/min	
24. Estimated percent of moisture: NA %	

Fuel Requirements

25. Type	Fuel Oil No.	Natural Gas	Gas (other, specify)	Coal, Type:	Other:
Quantity (at Design Output)	gph@60°F	ft^3/hr	ft^3/hr	TPH	
Annually	$\times 10^3$ gal	$\times 10^6$ ft^3/hr	$\times 10^6$ ft^3/hr	tons	
Sulfur	Maximum: wt. % Average: wt. %	gr/100 ft^3	gr/100 ft^3	Maximum: wt. %	
Ash (%)				Maximum	
BTU Content	BTU/Gal. Lbs/Gal.@60°F	BTU/ft^3	BTU/ft^3	BTU/lb	
Source					
Supplier					
Halogens (Yes/No)					
List and Identify Metals					

26. Gas burner mode of control:
☐ Manual ☐ Automatic hi-low
☐ Automatic full modulation ☐ Automatic on-off

27. Gas burner manufacture:

28. Oil burner manufacture:

29. If fuel oil is used, how is it atomized? ☐ Oil Pressure ☐ Steam Pressure ☐ Compressed Air ☐ Rotary Cup ☐ Other, specify

30. Fuel oil preheated: ☐ Yes ☐ No

31. If yes, indicate temperature: °F

32. Specify the calculated theoretical air requirements for combustion of the fuel or mixture of fuels described above actual cubic feet (ACF) per unit of fuel:
@ °F, PSIA, % moisture

33. Emission rate at rated capacity: lb/hr

34. Percent excess air actually required for combustion of the fuel described: %

Coal Characteristics

35. Seams:

36. Proximate analysis (dry basis): % of Fixed Carbon: % of Sulfur:
% of Moisture: % of Volatile Matter:
% of Ash:

Emissions Stream

37. What quantities of pollutants will be emitted from the boiler before controls?

Pollutant	Pounds per Hour lb/hr	grain/ACF	@ °F	PSIA
CO	0.91			
Hydrocarbons				
NO_x	1.08			
Pb				
PM_{10}	0.06			
SO_2				
VOCs				
Other (specify)				

38. What quantities of pollutants will be emitted from the boiler after controls?

Pollutant	Pounds per Hour lb/hr	grain/ACF	@ °F	PSIA
CO	0.91			
Hydrocarbons				
NO_x	1.08			
Pb				
PM_{10}	0.06			
SO_2				
VOCs				
Other (specify)				
PM	0.082			

39. How will waste material from the process and control equipment be disposed of?

40. Have you completed an ***Air Pollution Control Device Sheet(s)*** for the control(s) used on this Emission Unit. NO

41. Have you included the ***air pollution rates*** on the Emissions Points Data Summary Sheet? YES

42. **Proposed Monitoring, Recordkeeping, Reporting, and Testing**
Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING PLAN: Please list (1) describe the process parameters and how they were chosen (2) the ranges and how they were established for monitoring to demonstrate compliance with the operation of this process equipment operation or air pollution control device.

TESTING PLAN: Please describe any proposed emissions testing for this process equipment or air pollution control device.

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

REPORTING: Please describe the proposed frequency of reporting of the recordkeeping.

43. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.


EAGLE
BOILER
PAGE
1 OF 1

ATTACHMENT N

We plan to use the natural gas emissions submitted as a surrogate for the dryer used to bake the powder coating, so taking the 2014 yearly total of 16,302,000 cubic feet of gas, emissions for this source can be calculated using U.S. EPA's AP-42, a "Compilation of Air Pollutant Emission Factors," 5th edition, where Chapter 1 outlines factors for "External Combustion Sources," which can be viewed at: www.epa.gov/ttn/chief/ap42/ch01/final/c01s04.pdf. It is, however, important to realize that the emissions calculated via these factors can be disproportionally larger than if specific information is used. Specifically, Section 1.4 for "Natural Gas Combustion" lists the factors we'll have to use which are actually for Small Boilers (<100 MMBtu – Uncontrolled), and the emission factor for the largest pollutant is NOx at 100 lb/10^6 scf, where the units are in pounds of pollutant per million standard cubic feet of natural gas fired. To calculate emissions, this would be a straight calculation of 100 PPH NOx multiplied by 16.3 (which is the 10^6 scf amount of NG), which would equal **1,630 pounds of NOx emitted per year (0.82 TPY)**. Similarly CO, with an emission factor of 84 lb/10^6 scf would have a **yearly rate of 1,370 pounds (0.69 TPY).**

Therefore, your Division of Air Quality (DAQ) inspector, Al Carducci is correct, these emissions would need to be submitted as an Class II Administrative Update to your existing Rule 13 permit (R13-435). At the same time you could add the extruder emissions for the high-density polyethylene (HDPE), for which you provided the SBAP usage amounts and emission factors, even though the emission amounts are extremely low. These emission factors are applied to the 11,349,940 lbs of HDPE purchased by Eagle Manufacturing in 2014. The following is taken from the emission factor document (see attached) provided to Eagle by INEOS O&P USA.

"The information shown below is derived from the published study referenced above. It applies to HDPE extruded at temperature ranges typical of the blow molding process. The particulate matter and volatile organic compounds (VOC's) for HDPE have been described by the following formulas:

HDPE (processed @ 380 - 430°F)

lbs VOC's/MM lb processed = (0.19 x T) -52

(Example @ 400° = 24 lb VOC's)

lbs Particulates/MM lb processed = (0.14 X T) -34

(Example @ 400° = 22 lb Particulate)

T = Processing Temperature °F"

Eagle's VOCs: (0.19 * 500° F) – 52 = 43 lbs VOCs per MMlb processed

43 lbs * 11.35 = **488.05 lbs/year VOCs**

Eagle's PM: (0.14 * 500° F) – 34 = 36 lbs PM per MMlb processed

36 lbs * 11.35 = **408.6 lbs/year PM**

I would of course round these up. If you used 20,000,000 lbs of HDPE as the amount to allow for growth, the amounts would be **860 PPY VOCs and 720 PPY PM**, or **0.43 TPY VOCs and 0.36 TPY PM** respectively. PM_{10} can be derived by dividing the PM amount by 2.1.

Lastly, you will need to add your 11 MMBtu/hr NG-fired boiler installation to the application. This can be done using the same section of AP-42 as listed above. In order to calculate emissions, you must calculate the natural gas usage using the natural gas higher heating value of 1,020 Btu per cubic foot. For example, Eagle's boiler with a heat input rating of 11 MMBtu/hr would use 10,784 (which per 10^6 scf NG would be 0.01078) cubic feet of gas per hour. This 0.01078 figure, multiplied by 100 pounds of NOx would equal **1.08 pounds of NOx** per hour, which multiplied by 8,760 hr/yr would equal 9,443.28 lbs/yr or **4.72 TPY NOx**. Similarly CO, with an emission factor of 84 lb/10^6 scf would have an **hourly rate of 0.9055 PPH CO and a yearly one of 3.97 TPY CO**.

The hourly amounts are all below the Rule 13 construction/modification threshold of 6 PPH and 10 TPY, therefore, they can be handled in a Class II Administrative Update, as previously stated. The sections of the application are essentially the same for this as a typical construction permit, but the fee is only $300.00. The sections you need to download can be found at: http://www.dep.wv.gov/daq/permitting/Pages/nsr-forms.aspx and are as follows:

General Instructions
Authority of Corporation Form
Application for NSR Permits and Title V Operating Permit
Attachment I - Emissions Units Table
Attachment J – Emissions Points Data Summary Sheet
Example Legal Advertisement
Plot Plan – Guidelines
Attachment L - Indirect Heat Exchange Emissions Unit Data sheet
Attachment L – General EUDS (for the extruder)
Attachment L – General EUDS (for the gas usage)
This e-mail should serve as the calculations to be codified in Attachment N.

INEOS Olefins & Polymers USA

INEOS O&P USA
Marina View Building
2600 South Shore Blvd.
Suite 500
League City, TX 77573

Tel 281 535-6729
Fax 281-535-6760

www.ineos-op.com

March 17, 2015

Scott Trimmer
Operations Engineer
Eagle Manufacturing Company
2400 Charles Street
Wellsburg, WV 26070

Via e-mail strimmer@eagle-mfg.com

RE: Air emissions during PE processing

Dear Mr. Trimmer:

This letter is in response to your request for information concerning emissions during processing of polyethylene. The following information on High Density Polyethylene (HDPE) emissions was provided by our Technical Service group.

Several years ago, researchers and suppliers of polyethylene resins participated in an industry study conducted by Battelle, in Columbus, OH, to investigate the composition and quantity of fumes emitted during processing of polyethylene resins. The results of this published study may be used to estimate the potential emissions from thermal processing of the polyethylene resins.

In this study, a composite of HDPE resins from several suppliers was extruded under typical thermal processing conditions. The fumes evolved during processing were captured using a specially designed stainless steel enclosure surrounding the die head. The total fume from the extruder was collected and analyzed for the expected components. The results were reported in micrograms of the component per gram of polyethylene processed, which is equivalent to pounds of component per million pounds of polyethylene processed.

The results were published in *J. Air & Waste Manage. Assoc.* 46:569-580 (1996). The results of this study may overestimate or underestimate emissions from a particular process. Parameters that may affect the nature of the emissions during processing, include but are not limited to the following:

- Extruder size and type
- Melt temperature and rate;
- Air-exposed surface to volume ratio of the extrudate;
- Shear effect from the extruder screw;
- Resin type, age, additive package;
- Any additional materials added to the resin prior to extrusion (e.g. dyes);

If using recycled materials, thermal history may also affect emissions.

Under normal processing conditions some level of emissions will be generated during extrusion. At these processing conditions the emissions could contain some volatile low molecular weight waxes found in polyethylene resins. Good engineering practices, such as local exhaust ventilation are generally able to maintain employee exposures below any regulatory levels for employee exposure.

The information shown below is derived from the published study referenced above. It applies to HDPE extruded at temperature ranges typical of the blow molding process. The particulate matter and volatile organic compounds (VOC's) for HDPE have been described by the following formulas:

HDPE (processed @ 380 - 430°F)

lbs VOC's/MM lb processed = (0.19 x T) -52
(Example @ 400° = 24 lb VOC's)

lbs Particulates/MM lb processed = (0.14 X T) -34
(Example @ 400° = 22 lb Particulate)

T = Processing Temperature °F

As you can see the VOC's are quite low at 24 ppm and the particulates (such as waxes) are 22 ppm. Particulate or waxes from INEOS HDPE resins are not considered hazardous material under the OSHA Hazard Communication Standard, however, there are worker exposure limits (OSHA Permissible Exposure Limits and ACGIH Threshold Limit Values) for non-hazardous particulate that depend on particle size. If you anticipate or recognize employee exposures, you should consult a Certified Industrial Hygienist. Certified Industrial Hygienists are trained to anticipate, recognize, evaluate and control employee exposures in the workplace.

The information in Table I below was also generated in the Battelle Study and lists levels of specific emissions from HDPE processing.

Table I - High Density Polyethylene Emissions
(micrograms/gram of polyethylene processed, µg/g)

Die Melt Temperature (°F)	**380**	**430**
Particulate Matter	19.6	26.6
Total Hydrocarbons	21.1	30.7
Heavy Hydrocarbons	25.0	38.5
Ethane	0.02	0.02
Ethylene	0.02	0.01
Propylene	0.01	< 0.01
Formaldehyde	0.06	0.06
Acrolein	< 0.02	< 0.02
Acetaldehyde	0.04	0.05
Propionaldehyde	< 0.02	< 0.02
Acetone	0.02	0.03
Methyl Ethyl Ketone**	0.05	0.02
Formic Acid	< 0.17	< 0.17
Acetic Acid	< 0.17	< 0.17
Acrylic Acid	< 0.02	< 0.02

**Methyl Ethyl Ketone is indistinguishable from butyraldehyde in HPLC analysis; therefore, any mass reported may be due to the presence of either or both substances.

Professional judgment should be exercised when using the results of studies such as this for estimating emissions and keep in mind that the results of this study should not be used for industrial hygiene applications.

We hope that this information is useful to you. If you have additional questions, you may contact me directly, email julie.clifford@ineos.com or by phone, 281-535-6729.

Sincerely, as agent for
INEOS Olefins and Polymers USA

Julie T. Clifford
Advisor, Product Stewardship

Cc: Mark Heitker, INEOS O&P USA

EXAMPLE LEGAL ADVERTISEMENT

Publication of a proper Class I legal advertisement is a requirement of the application process. In the event the applicant's legal advertisement fails to follow the requirements of 45CSR 13 (45-13-8) or the requirements of Chapter 59, Article 3, of the West Virginia Code, the application will be considered incomplete and no further review of the application will occur.

The applicant, utilizing the format for the Class I legal advertisement appearing below, shall cause such legal advertisement to appear a minimum of one (1) day in the newspaper most commonly read in the area where the facility exists or will be constructed. The notice must be published no earlier than five (5) working days of receipt by this office of your application. The original affidavit of publication must be received by this office no later than the last day of the public comment period.

The advertisement shall contain, at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

The location of the source should be as specific as possible starting with: 1.) the street address of the source; 2.) the nearest street or road; 3.) the nearest town or unincorporated area, 4.) the county, and 5.) latitude and longitude coordinates.

Types and amounts of pollutants discharged must include all regulated pollutants (PM, PM_{10}, VOC, SO_2, Xylene, etc.) and their potential to emit or the permit level being sought in units of tons per year (including fugitive emissions).

In the event the 30th day is a Saturday, Sunday, or legal holiday, the comment period will be extended until 5:00 p.m. on the following regularly scheduled business day.

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Eagle Manufacturing Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a **Modification,** for a Boiler Addition located on 2400 Charles Street, Wellsburg, in Brooke County, West Virginia. The latitude and longitude coordinates are: 40.286749 and -80.610609

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: **1 TPY VOC, 6 TPY NOx, 5 TPY CO, 1 TPY PM AND 1 TPY PM10.**

Startup of operation began on or about the 17th day of July, 2014. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.
Dated this the 10th day of September, 2015.

By: Eagle Manufacturing Company
Joseph C Eddy
Operations Engineer
2400 Charles Street
Wellsburg, WV 26070

Attachment R
AUTHORITY OF CORPORATION
OR OTHER BUSINESS ENTITY (DOMESTIC OR FOREIGN)

TO: The West Virginia Department of Environmental Protection, Division of Air Quality

DATE: September 11th , 2015

ATTN.: Director

Corporation's / other business entity's Federal Employer I.D. Number 55-0161480

The undersigned hereby files with the West Virginia Department of Environmental Protection, Division of Air Quality, a permit application and hereby certifies that the said name is a trade name which is used in the conduct of an incorporated business or other business entity.

Further, the corporation or the business entity certifies as follows:

(1) Scott Trimmer (is/are) the authorized representative(s) and in that capacity may represent the interest of the corporation or the business entity and may obligate and legally bind the corporation or the business entity.

(2) The corporation or the business entity is authorized to do business in the State of West Virginia.

(3) If the corporation or the business entity changes its authorized representative(s), the corporation or the business entity shall notify the Director of the West Virginia Department of Environmental Protection, Division of Air Quality, immediately upon such change.

Joseph C. Eddy

President or Other Authorized Officer
(Vice President, Secretary, Treasurer or other official in charge of a principal business function of the corporation or the business entity)

(If not the President, then the corporation or the business entity must submit certified minutes or bylaws stating legal authority of other authorized officer to bind the corporation or the business entity).

Secretary

Eagle Manufacturing Company
Name of Corporation or business entity

ATTACHMENT X

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