



# Yakima Regional Clean Air Agency

## INSTRUCTIONS FOR PERMIT APPLICATION

Use this sheet as a checklist to determine when your application is substantially complete.

- Each PERMIT APPLICATION for the construction, installation or establishment of a new air contaminant source, or modification of existing air pollution source or control equipment or permit, needs to be accompanied by the following information to be considered complete:

Included N/A

- Process flow sheets and equipment layout diagrams.
- Control equipment manufacturer, model number, size, serial numbers (for each piece of control equipment).
- Quantify average and maximum hourly throughput values, average yearly totals, and maximum concentrations for each pollutant.
- Applicant's calculation of the kinds and amounts of emissions for each emission point, materials handling operation or fugitive category (both controlled and uncontrolled).
- Plot plan including identification of proposed emission points to the atmosphere, distance to property boundaries, height of buildings and stack height above ground level.
- Identification of raw materials and/or product specifications (physical and chemical properties) and typical ranges of operating conditions as related to each emission point (toxic air contaminants require a separate summary); Material Safety Data Sheets (MSDS) should be included in the PERMIT APPLICATION for all compounds used.
- Identification of the methods/equipment proposed for prevention/control of emissions to the atmosphere.
- Information sufficient to demonstrate the ability of the emission controls proposed as being consistent with those provided in the applicable regulations (BACT/NSPS/RACT/NESHAPS/LAER analysis). See attached worksheet for typical layout of BACT analysis information.
- The kinds and amounts of emission offset credits proposed for assignment when operations are within a non-attainment boundary (see WAC 173-400-120 and 131).
- Estimates of the proposed project ambient impact under average and least favorable conditions where pertinent to PSD (WAC 173-400-720) or Toxic Air Pollutants (WAC 173-460) requirements.
- Additional information, evidence, or documentation as required by the Board of Directors, or the Control Officer, to show that the proposed project will meet federal, state and local air pollution control regulations.
- For applications that include equipment that has previously been approved, authorized or registered, a lapse is considered to have occurred if the registration fees are delinquent for more than one calendar year or the source has not operated within five years prior to the receipt of any required PERMIT APPLICATION (WAC 173-400-110).
- Applications that include previously approved or authorized equipment require that additional information regarding previous owners or approvals be provided so that YRCAA records can be updated. Equipment registered and/or approved for a given company cannot be authorized without a legal name change, purchase of company or equipment, or a legal contract or subcontract to do business with or for the approved source. Responsibility for operation of authorized equipment rests with the registered source.
- All applications need to be accompanied with a completed SEPA checklist or SEPA determination. YRCAA may process the SEPA determination, if no other agency has done it. In this case a SEPA checklist with the proper fees must be submitted with the NSR application.

- The application transmittal shall conform to YRCAA review requirements wherever possible as detailed in the General Regulations for Air Pollution Sources (WAC 173-400).

- Each drawing, document, or other form of transmittal considered by the applicant to be proprietary and confidential must be suitably identified as confidential in red ink, and signed and dated by the applicant or its agent. Be aware that YRCAA follows the requirements in 40 CFR 2 for determination of confidentiality. YRCAA may not process company sensitive information as confidential.

- Orders of Approval (to construct, modify, or install) are issued for specific equipment or processes described in the application. Changes to the processes or control equipment are not allowed without new source review (Permit Application and Permit) if these changes result in an emission of a different type or an increase in emissions (WAC 173-400-110). Process equipment changes that result in decreased emissions require notification to YRCAA.

- The SIC code is identified as the four digit major group classification in the 1987 Standard Industrial Code Classification Manual listing of SIC codes can be obtained for free from the internet.

- Mail or deliver in person the completed application package to:  
Yakima Regional Clean Air Agency  
186 Iron Horse Court, Suite 101  
Yakima, WA 98901-2303

- Application fees must accompany application for the application to be considered complete. An invoice will be sent out for the Engineering review after final decision on the application. Make checks payable to "Yakima Regional Clean Air Agency" or "YRCAA".

- The PERMIT APPLICATION package submitted must be complete. All applications are screened for completeness before processing. Applicants submitting incomplete application packages will be notified of their incomplete status and may result in a delay in processing the application.

# Yakima Regional Clean Air Agency

## PERMIT APPLICATION / NEW SOURCE REVIEW

### BACT ANALYSIS WORKSHEET

Facility Name: Yakima Container Plant

Date: 9/6/2022

CONTROL ALTERNATIVE	EMISSIONS [tsh/yr] & [tons/yr]	EMISSIONS REDUCTION (8) [tons/yr]	INSTALLED CAPITAL COST (9) [\$]	TOTAL ANNUALIZED COST (10) [\$]	AVERAGE COST EFFECTIVENESS OVER BASELINE (4) [\$/ton]	INCREMENTAL COST EFFECTIVENESS (9) [\$/ton]	ENERGY INCREASE OVER BASELINE (1) [mmbtu/yr]	TOXICS IMPACT [Yes/No]	ADVERSE ENVIRONMENTAL IMPACT [Yes/No]
1)									
2)									
3)									
4)									
5) Uncontrolled Baseline (worst case - no controls)									

- (a) Emissions reduction over baseline control level.
- (b) Installed capital cost relative to baseline.
- (c) Total annualized cost (capital, direct, and indirect) of purchasing, installing, and operating the proposed control alternative. A capital recovery factor approach using a real interest rate (i.e., absent inflation) is used to express capital costs in present-day annual costs.
- (d) Average cost effectiveness over baseline is equal to total annualized cost for the control option divided by the emissions reductions resulting from the uncontrolled baseline.
- (e) The optional incremental cost effectiveness criterion is the same as the average cost effectiveness criteria except that the control alternative is considered relative to the next most stringent alternative rather than the baseline control alternative.
- (f) Energy impacts are the difference in total project energy requirements with the control alternative uncontrolled baseline expressed in equivalent millions of Btus per year.
- (g) Assumptions made on catalyst life may have a substantial affect upon cost effectiveness.

**Notes:**

The number of alternatives to be evaluated will vary depending on application. Values for each variable should be provided as they are applicable. Use N/A if not applicable. Emission rates are the expected or predicted emission rates. Calculations should provide for a range of alternatives. Emissions reduction should use estimated efficiency if actual efficiency is unknown - should so state. Attach worksheets as necessary to substantiate above values.



186 Iron Horse Court, Suite 101, Yakima, WA 98901  
Phone: (509) 834-2050 Fax: (509) 834-2060  
Website: http://www.yakimacleanair.org

RECEIVED  
JAN 22 2024  
via email to HT

Filing Fee: \$400.00\*

\*Pursuant to WAC 173-400-111(1) (e)-an application is not complete until the permit application filing fee required by YRCAA has been paid.

OFFICIAL USE ONLY

YRCAA NSR No: NSRP-13-IP-2023 Date Fee Paid: in 2025 this  
Received by: HT via email Filing Fee: \$400.00 *application is submitted as part of the additional requested information. HT 1/24/2024*  
 YRCAA is the lead agency for the SEPA process. Processing Fee \$400.00

Review of the application will not begin, until the application filing fee is paid. A surcharge fee for the time required for preparing and processing the application for approval will be invoiced after the permit to operate is issued.

# New Source Review (NSR) Application General

Stationary/Permanent Source

## INSTALLATION OR ESTABLISHMENT OF NEW AIR CONTAMINANT SOURCES

NSR Application is Required for Construction, Installation or Establishment of an Air Pollution Source  
Or

Replacement or Substantial Alteration of Emission Control Technology on an Air Pollution Source or Equipment

### I. General Information:

BUSINESS NAME Yakima Container Plant

NATURE OF BUSINESS Manufacture of corrugated sheets and containers

MAILING ADDRESS 600 W Ahtanum Road, Union Gap WA 98903

FACILITY ADDRESS (if different): Same

PHONE and FAX NUMBERS (509) 576-3122 Email: jose.ibarra@ipaper.com

TYPE OF PROCESS, EQUIPMENT, OR APPARATUS Cyclone, Baghouse Andrew.Lange@ipaper.com

LIST OF AIR CONTAMINANT(S) WHICH WILL BE PRODUCED AND/OR CONTROLLED TSP, PM10, PM2.5

ESTIMATED STARTING DATE: MARCH 1 2024 Revised to June 1 2024

ESTIMATED COMPLETION DATE: MARCH 14 2024 Revised to June 14 2024  
+ Requesting

Compliance with SEPA (State Environmental Policy Act) - Check One of the Options Below:

- A DNS or EIS has been Issued by Another Agency for this Project and a Copy is Attached.
- If no DNS or EIS Exists for this Project, a Completed Checklist for this Project and the SEPA Processing Fee are Attached. *YRCAA SEPA checklist is available by phone, or by our website.*
- The city/county has established an exemption for this project.
- I certify that the SEPA has been satisfied or this project is exempt:

11/29/2023 by [Signature] BUILDING OFFICIAL CITY OF UNION  
Date Government Agency g,pp

Previous NSR/Air Permits Number issued by YRCAA for the Facility, if any NSR-10-IP-16

Describe Input to Output Process (Attach drawings, schematics, prints, or block diagrams) See attached support document

ESTIMATED COSTS: OF BASIC SOURCE EQUIPMENT \$ 100,000  
OF CONTAMINANT CONTROL APPARATUS \$ 100,000

Process: Production Output per Year (tons, pounds, etc) 7,138,560 lbs/yr

Maximum Output per Hour (tons, pounds, etc) 1,716 lbs/hr

Percentage of Production (%)

Dec - Feb 25%

Mar - May 25%

Jun - Aug 25%

Sep - Nov 25%

Operating Schedule: Hrs/Day 16

Days/Wk 5

Wks/Yr 52

## II. Emissions Estimations and Calculations:

### 1. Criteria Pollutants (gr/dscf, tons/yr, lbs/hr., ppm, etc.)

Particulate (PM<sub>10</sub>, PM<sub>2.5</sub>) PM10: 0.02 tons/year, PM2.5: 0.00 tons/year

Volatile Organic Compounds \_\_\_\_\_

Nitrogen Oxides \_\_\_\_\_

Sulfur Oxides \_\_\_\_\_

Carbon Monoxide \_\_\_\_\_

Lead \_\_\_\_\_

### 2. Toxic Air Pollutants (Name) Quantity (in gr/dscf, tons/yr, lbs/hr. ppm, etc.)

_____	_____
_____	_____
_____	_____
_____	_____

3. Fugitive Pollutants (Source) \_\_\_\_\_ Quantity (in gr/dscf, tons/yr, lbs/hr, ppm, etc.) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Air Pollution Modeling

Results Performed by YCLAA

Computer Printout Attached?  Yes  No

### III. Emission Data:

1. Stack Height (Feet) No Change Inside Diameter (feet) \_\_\_\_\_

Gas Exit Temp (degrees F) \_\_\_\_\_ Gas Exit Velocity (ft/min) \_\_\_\_\_

Flow Rate (cfm) \_\_\_\_\_

Shared Stack? If a shared stack, identify process (es) or point(s) which share the stack.

Distance from Stack to Property Line \_\_\_\_\_

2. Discharge Point or points (if no stack or other than stack)

Height (feet) 10 ft Inside Diameter (feet) 66"

Gas Exit Temp (degrees F) Ambient Gas Exit Velocity (ft/min) \_\_\_\_\_

Flow Rate (cfm) 62,634

Shared discharge point? If a shared discharge point, identify process (es) or point(s) which share the discharge point. NO discharge, Bayhouse captures

cyclone discharge, return air plumbed into 2464

Distance from discharge point to Property Line East 160m South 260m West 150m  
North 135m

3. Fuel Type \_\_\_\_\_ % Sulfur \_\_\_\_\_

% Ash \_\_\_\_\_ Unit of Measure (gal./cu.ft./etc.) \_\_\_\_\_

BTU per Unit of Measure \_\_\_\_\_ Consumption Units per Year \_\_\_\_\_

Maximum Consumption Units per Hour \_\_\_\_\_

4. Building Dimensions

Height (feet) 40' max Length (feet) 580' Width (feet) 560'

#### IV. Air Pollution Control Equipment:

**Baghouse**

Type No change Model #, Serial # ALL Classifier  
 Efficiency 99.97 PM<sub>2.5</sub>: ∅ (closed system) and PM<sub>10</sub>: ∅ (closed system)  
 Bag Height (feet) 127" Bag Diameter (feet) 57.8"  
 Filter Area (feet squared) 471 sq ft Blower Flow Rate (cfm) N/A  
 Filter Media Polyester felt screen, plug Dimensions (feet) 20' x 40' x 10'  
 Discharge Area Dimensions (feet) Return system  
 Cleaning Mechanism (shake) (air psi) 90-100 psi Air pulse  
 Other Data 52φ bags

**Scrubber**

Type \_\_\_\_\_ Model #, Serial # \_\_\_\_\_  
 Efficiency \_\_\_\_\_  
 Gas Differential Pressure (psi) \_\_\_\_\_ Liquor Differential Pressure (psi) \_\_\_\_\_  
 Liquor Flow (gpm) \_\_\_\_\_ Discharge Area Dimensions (feet<sup>2</sup>) \_\_\_\_\_  
 Gas Flow (cfm) \_\_\_\_\_ Other Data \_\_\_\_\_

**Cyclone**

Type No change Model #, Serial # CY1812 (1977)  
 Efficiency N/A PM<sub>2.5</sub>: Baghouse ∅ 90 and PM<sub>10</sub>: Baghouse ∅ 90  
 Gas Flow (cfm) ∅ Discharge Area Dimensions (feet<sup>2</sup>) 6' to baghouse  
 Other Data Trim collection, no fuel just air velocity

**Precipitator**

Type \_\_\_\_\_ Model #, Serial # \_\_\_\_\_  
 Efficiency \_\_\_\_\_  
 Gas Flow (cfm) \_\_\_\_\_ Gas Velocity (ft/sec) \_\_\_\_\_  
 Residence Time \_\_\_\_\_ Gas Differential Pressure (psi) \_\_\_\_\_  
 Precipitation Rate (ft/sec) \_\_\_\_\_ Discharge Area Dimensions (feet<sup>2</sup>) \_\_\_\_\_  
 Other Data \_\_\_\_\_

**Ad/Absorp**

Type \_\_\_\_\_ Model #, Serial # \_\_\_\_\_  
 Efficiency \_\_\_\_\_  
 Gas Flow \_\_\_\_\_ Gas Velocity (ft/sec) \_\_\_\_\_  
 Gas Temp (degree F) \_\_\_\_\_ Bed Volume (ft<sup>3</sup>) \_\_\_\_\_  
 Bed Dimensions (feet) \_\_\_\_\_ Capacity (hours) \_\_\_\_\_  
 Contaminant (lb/day) \_\_\_\_\_ Regeneration time (hours) \_\_\_\_\_

Other Type \_\_\_\_\_ Model #, Serial # \_\_\_\_\_  
Efficiency \_\_\_\_\_  
Gas Flow (cfm) \_\_\_\_\_ Discharge Area Dimensions (feet) \_\_\_\_\_  
Other Data \_\_\_\_\_

**V. Additional Information:**

1. Attach Related Information on Chemicals or Materials that will be emitted. (MSDS Sheets, Company Information, etc.)

Note: Indicate how much quantity are used per MSDSs.

Yes  No, if not why? No change

2. Fugitive Dust Control Plan (Attach if Necessary)
3. Attach Operation and Maintenance Manual of Pollution Control Equipment.

Yes  No, if not, why? No change

4. Attach Vendor Information or Manufacturer's Instructions on Pollution Control Equipment.

Yes  No, if not, why? No change

**APPLICANT:** I hereby certify that the information contained in this application, including supplemental forms and data, when required, is, to the best of my knowledge, complete and correct. I also agree to all fees for processing this permit and grant permission for YRCAA staff to enter the premises for inspection.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Title Eric Lubrano, Site Manager \_\_\_\_\_ Date \_\_\_\_\_

Name and Title of Individual Filling out Form:

Name (print) ~~Jose Barta, EHS Manager~~ Andrew Lange EHS Manager

Signature \_\_\_\_\_ Date 1/15/24

Name and Title of Contact Person, if Different than Above:

Name \_\_\_\_\_

Title \_\_\_\_\_

Name and Title of the Responsible Official for the permit, if Different than Above:

Name Eric Lubrano

Title Site Manager

# Support Document and Rule Evaluation

## Background Information

International Paper owns and operates a facility in Yakima, Washington. The Facility is primarily classified under Standard Industrial Classification (SIC) Code 2653 and North American Industry Classification System (NAICS) Code 322211 – Corrugated and Solid Fiber Boxes.

### *Facility Information:*

International Paper, Yakima Facility  
600 Ahtanum Road  
Union Gap, WA 98903

Contacts: Andrew Lange, EHS Manager, (509) 645-0332 [andrew.lange@ipaper.com](mailto:andrew.lange@ipaper.com)  
Eric Lubrano, Site Manager, (509) 576-3164, [eric.lubrano@ipaper.com](mailto:eric.lubrano@ipaper.com)

## Summary of Permitting Actions

The facility operates a cyclone and baghouse system to control PM emissions from corrugators, flexographic lines, shredders, and die cutters at the facility (New Source Review number NSRP-10-IP-16). The facility proposes to temporarily remove the baghouse from service to allow the installation of emergency explosion proof abort gates into the baghouse ducting. See **Attachment 1** for an equipment drawing that shows where the new bypass gate will be installed. Upon completion of the installation, the baghouse will be re-connected to the exhaust of the cyclone.

There will be no physical changes to the cyclone or the baghouse and the emergency explosion proof abort gates will not change the operation of the cyclone or the baghouse during normal operations. The abort gates are closed during normal operation and are designed to only open during an emergency such as a fire or explosion. The purpose of the abort gates is to protect personnel and equipment in the event of a fire or explosion.

During the approximately two-week period necessary to install the emergency explosion proof abort gates the cyclone will exhaust directly to the atmosphere without venting through the baghouse. During this period PM emissions will still be controlled by the cyclone but will not be controlled by the baghouse. Once the emergency explosion proof abort gates are installed, the baghouse will be re-connected and all emissions will once again be controlled by both the cyclone and the baghouse.



## Regulatory Analysis

### Rule Compliance Evaluation

#### **WAC 173-400-040 GENERAL STANDARDS FOR MAXIMUM EMISSIONS**

All sources and emissions units are required to meet the emission standards of this chapter.

Visible Emissions cannot exceed twenty percent opacity for more than three minutes in any one hour. Emissions from the corrugators, flexographic lines, shredders, and die cutters are not expected to exceed this threshold after control from the cyclones. The current permit specifies a zero percent opacity limit from the baghouse. For the duration of the temporary project, International Paper proposes a visible emissions limit of twenty percent opacity.

Fallout may not be deposited beyond the property. The facility will continue to comply with this requirement for the duration of the project.

The facility will continue to comply with the requirements applicable to fugitive emissions, odors, emissions detrimental to persons or property, sulfur dioxide, concealment and masking, and fugitive dust for the duration of the project.

#### **WAC 173-400-070 EMISSION STANDARDS FOR CERTAIN SOURCE CATEGORIES**

None of the standards in this section apply to corrugators, flexographic lines, shredders, and die cutters, cyclones, or baghouses.

#### **WAC 173-400-110 NEW SOURCE REVIEW (NSR) FOR SOURCES AND PORTABLE SOURCES**

This regulation applies to new and modified sources. The current operation of the cyclone and baghouse system is approved with conditions enforcing compliance with this regulation. The modification of the system by operating without the use of the baghouse is subject to this regulation, unless the modification qualifies for an exemption under Section 110(5).

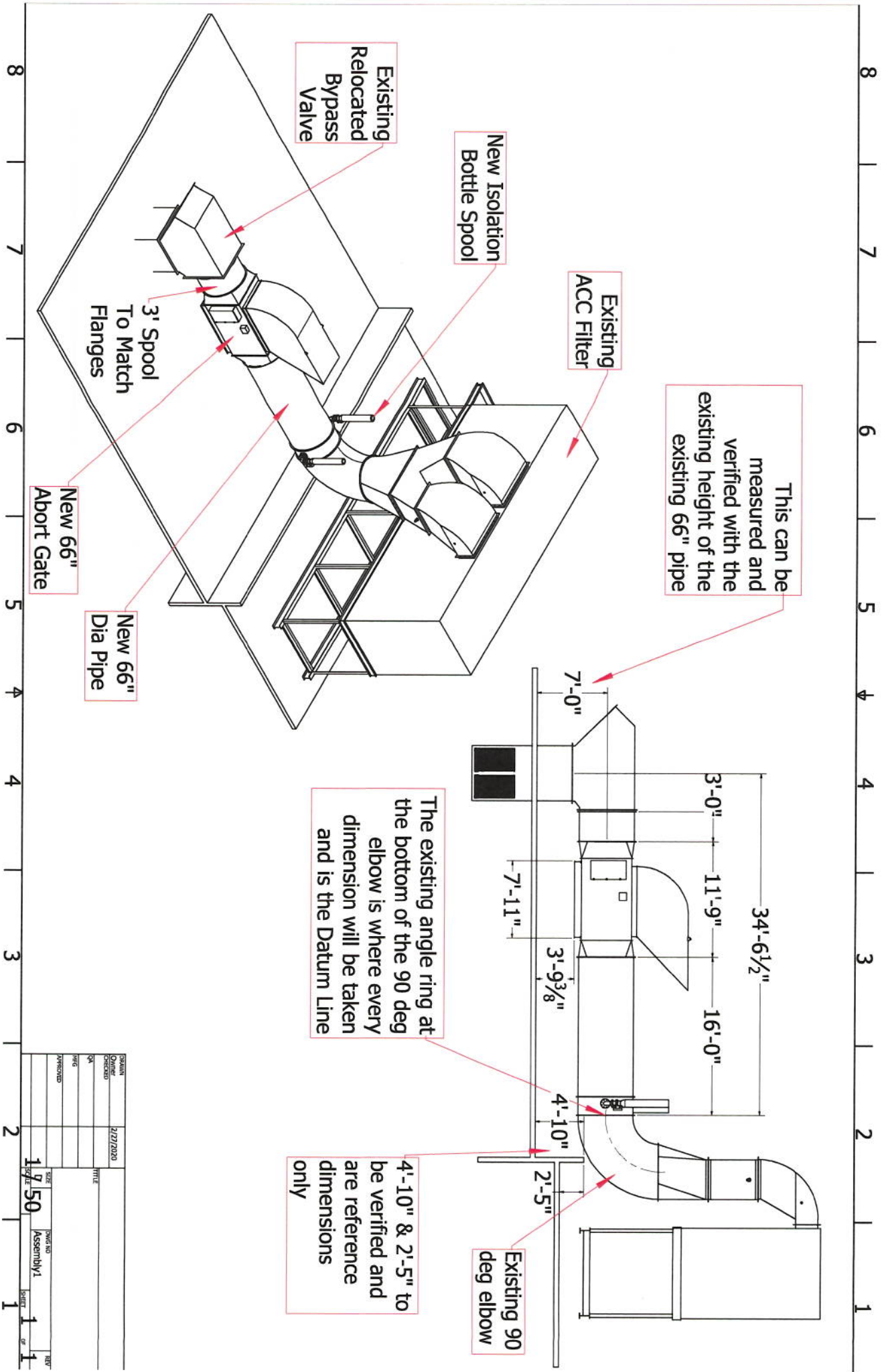
Table 110(5) exempts modifications of existing emission units from NSR provided the actual emission increases are less than the specified thresholds, as shown below:

<b>Pollutant</b>	<b>Exemption Level (tons/year)</b>	<b>Project Emissions (tons/year)</b>	<b>Exempt?</b>
TSP	1.25	0.14	Yes
PM10	0.75	0.02	Yes
PM2.5	0.25	0.00	Yes

Emissions from this project are below exemption thresholds and NSR does not apply.

**Attachment 1**

Equipment Drawing

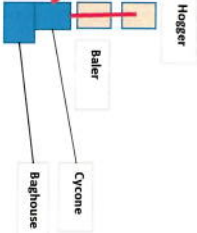
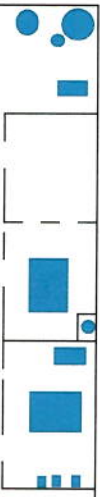
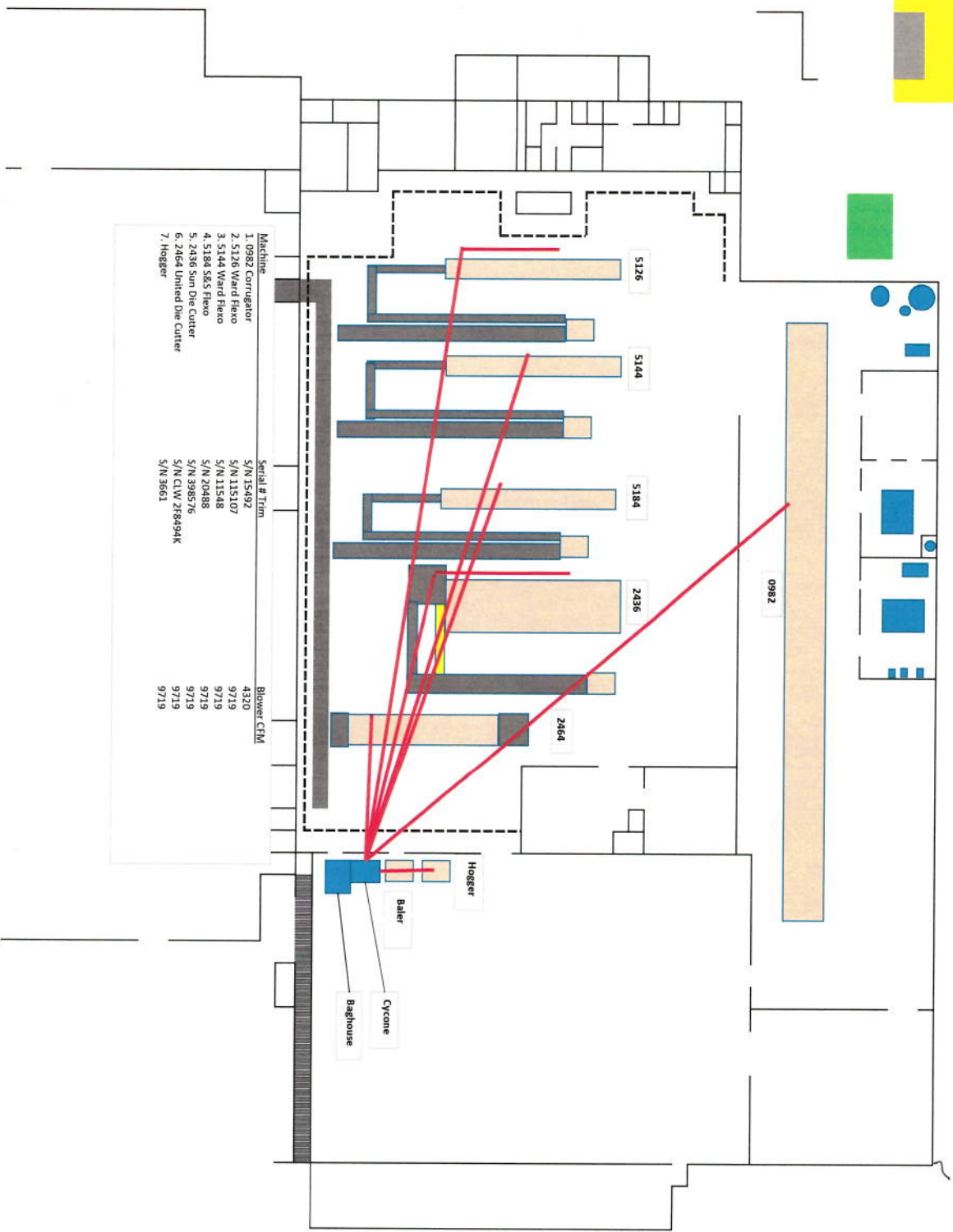


This can be measured and verified with the existing height of the existing 66" pipe

The existing angle ring at the bottom of the 90 deg elbow is where every dimension will be taken and is the Datum Line

4'-10" & 2'-5" to be verified and are reference dimensions only

DATE	2/27/2020	PROJECT	Assembly1
DRAWN			
CHECKED			
QA			
DATE			
APPROVED			
1/7/50			



Yakima Regional Clean Air Agency  
Attn: Dr. Hasan Tahat ; Wade Porter  
186 Iron Horse Court, Suite 101  
Yakima, WA 98901

RE: International Paper, Yakima Facility  
Baghouse Emergency Abort Gates

Dear Hasan,

Please review the attached application to install emergency abort gates on the baghouse ducting. These emergency abort gates are being installed to protect personnel and equipment in the event of a fire or explosion. To complete this project, International Paper must disconnect the baghouse from the cyclone for approximately two weeks. Once the project is complete, the baghouse will be re-connected to the cyclone. Emissions during the project will be below all NSR thresholds.

This application package includes the following:

- NSR Application Form
- Application support document

Should you have any questions or comments, please contact myself

EHS Manager Andrew Lange [andrew.lange@ipaper.com](mailto:andrew.lange@ipaper.com) (509-654-0332) or

Plant Manager, Eric Lubrano; [eric.lubrano@ipaper.com](mailto:eric.lubrano@ipaper.com) (509-576-3124).

Respectfully,

Andrew Lange

EHS Manager