



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

Filing Fee: \$400.00*

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

OFFICIAL USE ONLY

YRCAA NSR No: NSRP-12-YCHI-25 Date Fee Paid: \$400.00 12/29/25

Received by: Recher Filing Fee: \$400.00

YRCAA is the lead agency for the SEPA process. Processing Fee \$400.00

Review of the application will not begin, until the application filling 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

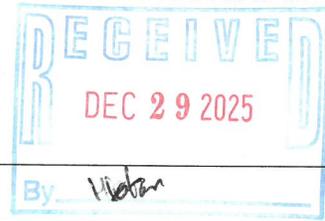
Stationary/Permanent Source

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 Chief Hops Inc.

NATURE OF BUSINESS Hops Processing

MAILING ADDRESS 306 Division Street, Yakima, WA 98902

FACILITY ADDRESS (if different): 555 West South Hill Rd. , Sunnyside, WA 98944

PHONE and FAX NUMBERS (509) 457-3200 Email: art.ortega@yakimachief.com

TYPE OF PROCESS, EQUIPMENT, OR APPARATUS: Extraction Vessels for Extraction Process

LIST OF AIR CONTAMINANT(S) WHICH WILL BE PRODUCED AND/OR CONTROLLED CO2 gas (as a solvent)

Hops dust, Natural Gas Heater,

ESTIMATED STARTING DATE: 11/1/2025 (Installation Date)

ESTIMATED COMPLETION DATE: 2/1/2026 (Projected Completion Date of the Project)

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:

12-23-25 by Cory Taylor City of Sunnyside
 Date Government Agency

Previous NSR/Air Permits Number issued by YRCAA for the Facility, if any NSRP-22-YCH-21

Describe Input to Output Process (Attach drawings, schematics, prints, or block diagrams): Hops Pellets input to Extractor, Output is Hops Extract Products

ESTIMATED COSTS: OF BASIC SOURCE EQUIPMENT \$ 839,000
 OF CONTAMINANT CONTROL APPARATUS \$ 0

Process: Production Output per Year (tons, pounds, etc) 140,000 lbs. (90% of theoretical max)
 Maximum Output per Hour (tons, pounds, etc) 156,000 lbs.
 Percentage of Production (%)
 Dec - Feb 23 Mar - May 27.5
 Jun - Aug 22 Sep - Nov 27.5

Operating Schedule: Hrs/Day 24 Days/Wk 7 Wks/Yr 48

II. Emissions Estimations and Calculations:

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

Particulate (PM₁₀, PM_{2.5}) _____
 Volatile Organic Compounds: None _____
 Nitrogen Oxides _____
 Sulfur Oxides: None _____
 Carbon Monoxide: None _____
 Lead: None _____

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

- | | |
|---|--|
| <p>3. Fugitive Pollutants (Source)
Hop dust
CO2 gas venting: 22lbs/ Extractor
Vessel. CO2 extraction frequency = 8
to 12 per day.
Max = 12 x 22 = 264 lbs/day</p> | <p>Quantity (in gr/dscf, tons/yr, lbs/hr. ppm, etc.)
Hop Dust = Fugitive amount
CO2 Gas: 264 lbs/day x 336 operating
days = 88,704 lbs/yr or 44.35 tons/yr</p> |
| <p>4. Air Pollution Modeling
Results _____
Computer Printout Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | |

III. Emission Data:

1. CO2 discharge Height (Feet): **10'** _____ Inside Diameter (feet): **2" = 0.16'** _____
 Gas Exit Temp (degrees F): **-20 to +50F** Gas Exit Velocity (ft/min): **412 to 1648 fpm** _____
 Flow Rate (cfm): **10 to 38 CFM** _____
 Shared Stack? If a shared stack, identify process (es) or point(s) which share the stack.
 Distance from Stack to Property Line: **81'** _____

2. Natural Gas Height (Feet): **10'** _____ Inside Diameter (feet): **2" = 0.16'** _____
 Gas Exit Temp (degrees F): **150F** Gas Exit Velocity (ft/min): **875 ft/min** _____
 Flow Rate (cfm): **70** _____
 Shared Stack? If a shared stack, identify process (es) or point(s) which share the stack.
 Distance from Stack to Property Line: **81'** _____

3. Discharge Point or points (if no stack or other than stack)
 Height (feet) _____ Inside Diameter (feet) _____
 Gas Exit Temp (degrees F) _____ Gas Exit Velocity (ft/min) _____
 Flow Rate (cfm) _____

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

 Distance from discharge point to Property Line _____

4. Fuel Type: **Natural Gas** _____ % Sulfur: **NA** _____
 % Ash: **NA** _____ Unit of Measure (gal./cu.ft./etc.) cu_ft _____
 BTU per Unit of Measure: **1000** _____ Consumption Units per Year: **1,291,852** _____
 Maximum Consumption Units per Hour: **199** _____

5. Building Dimensions
 Height (feet): **28'** Length (feet): **190'** _____ Width (feet): **100'** _____

Extract Plant 3 (HxLxW in feet): **Extract 3 is 25'x 32'x 11'**

IV. Air Pollution Control Equipment:

Baghouse #6 Type: Donaldson Model #, Serial # FB-24
Efficiency: 99% PM_{2.5}: NA and PM₁₀: NA
Bag Height (feet): 8.3 Bag Diameter (feet): 8"
Filter Area (feet squared): 100 Blower Flow Rate (cfm): 729
Filter Media: Duralife Polyester Felt Dimensions (feet): 0.95 x 8.3"L
Discharge Area Dimensions (feet) _____
Cleaning Mechanism (shake) (air psi) NA
Other Data _____

Scrubber Type _____ Model #, Serial # _____
Efficiency _____ N/A
Gas Differential Pressure (psi) _____ Liquor Differential Pressure (psi) _____
Liquor Flow (gpm) _____ Discharge Area Dimensions (feet²) _____
Gas Flow (cfm) _____ Other Data _____

Cyclone #3 Type: Aerodyne Model #, Serial # GPC-15
Efficiency: 99% PM_{2.5}: NA and PM₁₀: NA
Gas Flow (cfm): 729 Discharge Area Dimensions (feet²): 0.27
Other Data _____

Precipitator Type _____ Model #, Serial # _____
Efficiency _____ N/A
Gas Flow (cfm) _____ Gas Velocity (ft/sec) _____
Residence Time _____ Gas Differential Pressure (psi) _____
Precipitation Rate (ft/sec) _____ Discharge Area Dimensions (feet²) _____
Other Data _____

Ad/Absorp Type _____ Model #, Serial # _____
Efficiency _____ N/A
Gas Flow _____ Gas Velocity (ft/sec) _____
Gas Temp (degree F) _____ Bed Volume (ft³) _____
Bed Dimensions (feet) _____ Capacity (hours) _____
Contaminant (lb/day) _____ Regeneration time (hours) _____

Other Type: Vac-U-Max (F-02) Filter Receiver Model #, Serial # Z74610/03 ; C-100075
Efficiency: 99.99% on 1 micron unit
Gas Flow (cfm): 250 Discharge Area Dimensions (feet): 2.5" outlet diameter
Other Data: 65 psi Pulse Jet cleaning with 7 pleated filters (5.75" diameter x 18.75") / Inlet = 2.5" diameter
This is not new equipment. This is an existing equipment from Extract Plant 2. See Order of Approval NSRP-22-YCH-21.

Other Type: Gardner-Denver (B-02) Vacuum Pump Model #, Serial # GACMBSA / S617399
Efficiency: 99.99% @ 1 Micron
Gas Flow (cfm): 176 Discharge Area Dimension (feet): 2.5"
Other Data: 3,600 rpm
This is not new equipment. This is an existing equipment from Extract Plant 2. See Order of Approval NSRP-22-YCH-21.

Pellet Fan #5 Type: New York Blower Model #, Serial # 2006B10 / 2026-02338
Efficiency: 54.8 %
Gas Flow (cfm): 729 Discharge Area Dimension (feet): 0.19
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? **Attached SDS is CO2**

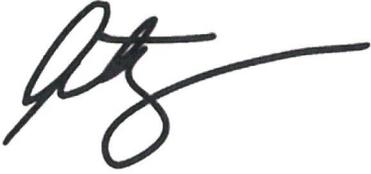
2. Fugitive Dust Control Plan (Attach if Necessary): None
3. Attach Operation and Maintenance Manual of Pollution Control Equipment.

Yes No, if not, why?

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

Yes No, if not, why?

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 12/29/25

Title: Sr. Director of CSR & Regulatory Compliance

Date 12/29/25

Name and Title of Individual Filling out Form:

Name (print): Art Ortega



Signature:

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 _____

Title _____



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: Extract Plant 2 **Date:** 10/14/2025

CONTROL ALTERNATIVE	EMISSIONS [lbs/hr] & [tons/yr]	EMISSIONS REDUCTION (a) [tons/yr]	INSTALLED CAPITAL COST (b) [\$]	TOTAL ANNUALIZED COST (c,g) [\$]	AVERAGE COST EFFECTIVENESS OVER BASELINE (d) [\$/ton]	INCREMENTAL COST EFFECTIVENESS (e) [\$/ton]	ENERGY INCREASE OVER BASELINE (f) [mmBtu/yr]	TOXICS IMPACT	ADVERSE ENVIRONMENTAL IMPACT
								[Yes/No]	[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.

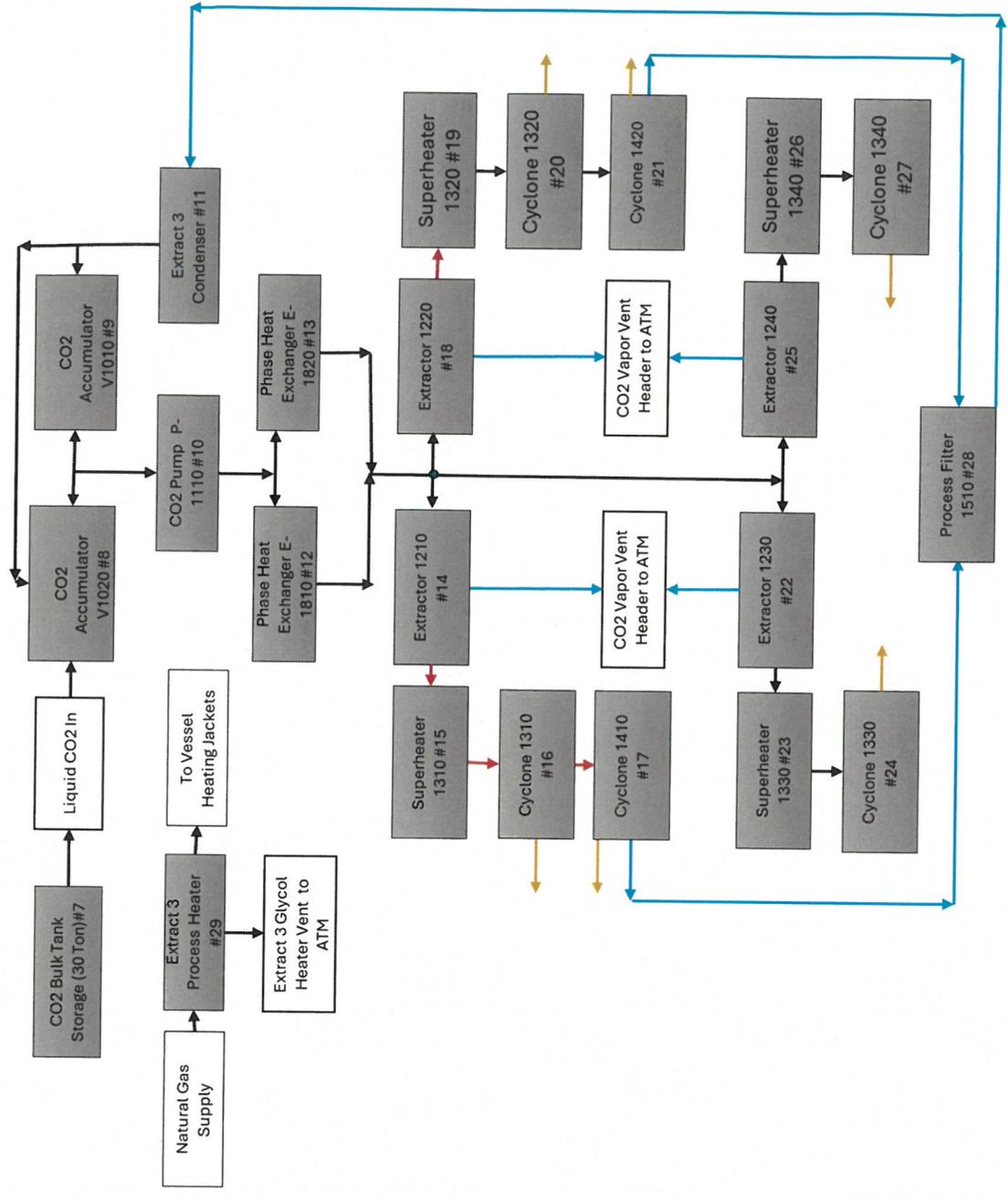
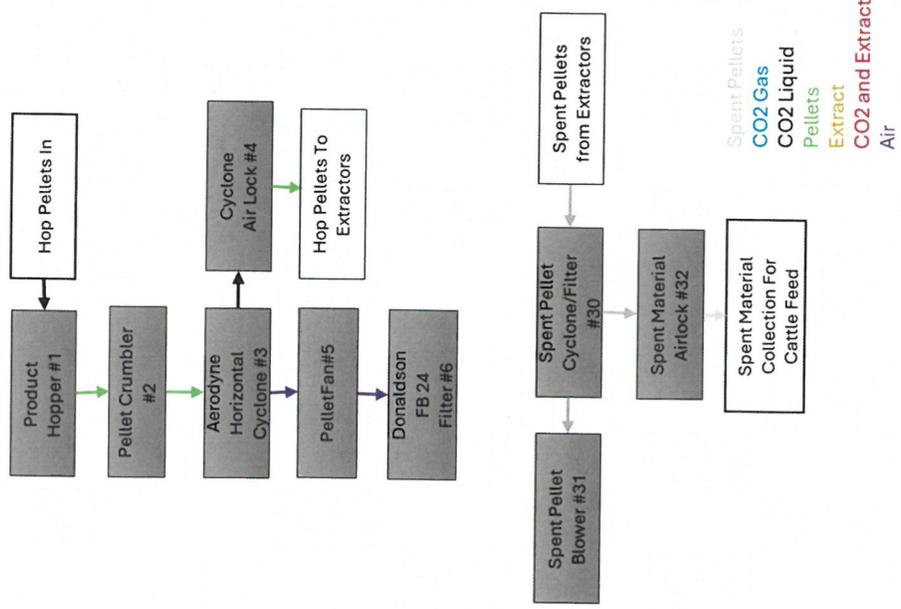
Notes:

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.

Extract 3

No.	Equipment Name	Manufacturer	Model Number	Year	Existing or New
1	Product Hopper	YCH	NA	Unknown	Existing
2	Pellet Crumbler	YCH	NA	Unknown	Existing
3	Extractor Cyclone	Aerodyne	GPC-15	2025	Existing
4	Cyclone Airlock	Ancaster	MD 6	2025	New
5	Pellet Fan	New York Blower	1906A7.5	2025	New
6	Pellet Blower Baghouse	Donaldson	FB-24	2025	New
7	CO2 Bulk Storage Tank	Tomco	98502	1998	Existing
8	CO2 Accumulator V1020	Vitalis	R-400	2025	New
9	CO2 Accumulator V1010	Vitalis	R-400	2025	New
10	CO2 Pump P-1110	Vitalis	R-400	2025	New
11	Extract 3 Condenser	Russell	VLD30L44-G	2025	New
12	Phase Heat Exchanger E-1810	E-1810	R-400	2025	New
13	Phase Heat Exchanger E-1810	E-1810	R-400	2025	New
14	Extractor 1210	Vitalis	R-400	2025	New
15	Superheater 1310	Vitalis	R-400	2025	New
16	Cyclone 1310 (*)	Vitalis	R-400	2025	New
17	Cyclone 1410 (*)	Vitalis	R-400	2025	New
18	Extractor 1220	Vitalis	R-400	2025	New
19	Superheater 1320	Vitalis	R-400	2025	New
20	Cyclone 1320 (*)	Vitalis	R-400	2025	New
21	Cyclone 1420 (*)	Vitalis	R-400	2025	New
22	Extractor 1230	Vitalis	R-400	2025	New
23	Superheater 1330	Vitalis	R-400	2025	New
24	Cyclone 1330 (*)	Vitalis	R-400	2025	New
25	Extractor 1240	Vitalis	R-400	2025	New
26	Superheater 1340	Vitalis	R-400	2025	New
27	Cyclone 1340 (*)	Vitalis	R-400	2025	New
28	Process Filter 1510	Vitalis	R-400	2025	New
29	Extract 3 Process Heater	Navien	NPE-240AS/S2	2025	New
30	SpentMaterial Cyclone/Filter	VAC-U-MAX	Z74610/03 100075	2020	Existing
31	Spent Material Blower	Gardner Denver	GACMBSA	2020	Existing
32	Spent Material Airlock	Ancaster Conveying Systems	8" Round MD-QC	2023	Existing

(*) - These equipment are not air handling cyclones.



This equipment are not air handling cyclones: Cyclone 1310, Cyclone 1410, Cyclone 1320, Cyclone 1420, Cyclone 1330, and Cyclone 1340.