



NSRP-02-WRLLC-21

Filing Fee: \$400.00

186 Iron Horse Ct
329 North First Street, Yakima WA 98901
Phone: (509) 834-2050 Fax: (509) 834-2060
Website: <http://www.yakimacleanair.org>

New Source Review Application (NSR)

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 WestRock Longview, LLCMAILING ADDRESS 2001 Longfibre Avenue, Yakima, WA 98903PHONE NUMBER (509) 248-4241 FAX No. () _____NATURE OF BUSINESS Containerboard Box PlantTYPE OF PROCESS, EQUIPMENT, OR APPARATUS Sun Automation 625 Rotary Die Cutter (RDC) material handling equipment upgrade: stacker replacement, addition of two bundle breakers, two load formers, new conveyors.

LIST OF AIR CONTAMINANT(S) WHICH WILL BE PRODUCED AND/OR CONTROLLED _____

PM10, PM2.5, VOC, and TAPs - See NSRP-03-KS-15 & NSRP-08-KS-17ESTIMATED COSTS: OF BASIC SOURCE EQUIPMENT \$ \$3.6MM

OF CONTAMINANT CONTROL APPARATUS \$ _____

ESTIMATED STARTING DATE: April 2021ESTIMATED COMPLETION DATE: May 2021ADDRESS WHERE EQUIPMENT WILL BE LOCATED: 2001 Longfibre Avenue, Yakima, WA 98903

Describe Input to Output Process (Attach drawings, schematics, prints, or block diagrams) The facility manufactures corrugated cardboard sheets and cardboard boxes. Sheets of cardboard will be fed through the upgraded rotary die cutter. Labels will also be printed on the boxes.

Process: Production Output per Year (tons, pounds, etc) RDC625 & Bobst 8.20 Ink Use < 625 TPY (See NSRP-03-KS-15)Maximum Output per Hour (tons, pounds, etc) NSRP-03-KS-15 assumes 260 operating days/yr, 24-hr operation

Percentage of Production (%)

Dec - Feb 25%Mar - May 25%Jun - Aug 25%Sep - Nov 25%

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JAN 29 2021

YRCAA

Operating Schedule: Hrs/Day 24Days/Wk 7Wks/Yr 52

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 is Attached.

YRCAA SEPA checklist is available by phone, or by our website at <http://www.yakimacleanair.org>

- ☐ The city/county has established an exemption for this project.
☐ I certify that the SEPA has been satisfied or this project is exempt:

_____ by _____
Date Government Agency

II. Emissions Estimations and Calculations:

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

Particulate (PM₁₀, PM_{2.5}) N/A (Emissions included in NSRP-08-KS-17)Volatile Organic Compounds 0.76 tons/yrNitrogen Oxides N/ASulfur Oxides N/ACarbon Monoxide N/ALead N/A

2. Toxic Pollutants (Name)	Quantity (in gr/dscf, tons/yr, lbs/hr. ppm, etc.)
Propylene Glycol	0.00 lbs/day (not present in current inks)
Acrylic Acid	1.87E-03 lbs/day
Styrene	3.36E-02 lbs/day
_____	_____
_____	_____

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

4. Air Pollution Modeling Results N/A

Computer Printout Attached? Yes No

III. Emission Data:

1. Stack Height (Feet) N/A 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) N/A 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. Paper scraps are directed to existing cyclone and baghouse.

Distance from discharge point to Property Line _____

3. Fuel

Type N/A

% 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) 20Length (feet) 800Width (feet) 560**IV. Air Pollution Control Equipment:****Baghouse**Type Ohio Blow Pipe Gold Series 72Efficiency 99.9%

Bag Height (feet) _____

Bag Diameter (feet) _____

Filter Area (feet squared) _____

Blower Flow Rate (cfm) 68,000

Filter Media _____

Dimensions (feet) _____

Discharge Area Dimensions (feet) _____

Cleaning Mechanism (shake) (air psi) _____

Other Data Installed under NSR Order of Approval NSRP-08-KS-17**Scrubber**

Type _____

Efficiency _____

Gas Differential Pressure (psi) _____

Liquor Differential Pressure (psi) _____

Liquor Flow (gpm) _____

Discharge Area Dimensions (feet²) _____

Gas Flow (cfm) _____

Other Data _____

CycloneType Trim-handling cyclone systemEfficiency 99.9%Gas Flow (cfm) 67,300Discharge Area Dimensions (feet²) _____

Other Data _____

Precipitator

Type _____

Efficiency _____

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 _____

Efficiency _____

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 _____ Efficiency _____
 Gas Flow (cfm) _____ Discharge Area Dimensions (feet) _____
 Other Data _____

V. Additional Information:

2. Fugitive Dust Control Plan (Attach if Necessary)
3. Attach Operation and Maintenance Manual of Pollution Control Equipment.
 Yes ☒ No if not, why? No new pollution control equipment.
3. Attach Vendor Information or Manufacturer's Instructions on Pollution Control Equipment.
 Yes ☒ No if not, why? No new pollution control equipment.
4. Attach Related Information on Chemicals or Materials that will be emitted
 (MSDS Sheets, Company Information, etc.) 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 1/21/2021
 Title Business Unit General Manager Date 1/21/2021

Name and Title of Individual Filling out Form:

Name (print) Karl Schumacher
 Signature _____

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

Name Creighton Shaul
 Title Safety/Environmental Coordinator

Filing fee of \$400.00 must be paid before review will begin. A surcharge fee for time required to prepare and process the application will be invoiced after the permit to operate is issued.

OFFICAL USE ONLY

YRCAA NSR No: _____ Date Fee Paid: _____

Received by: _____ Filing Fee: **\$400.00**



ATTACHMENT A

SEPA Checklist

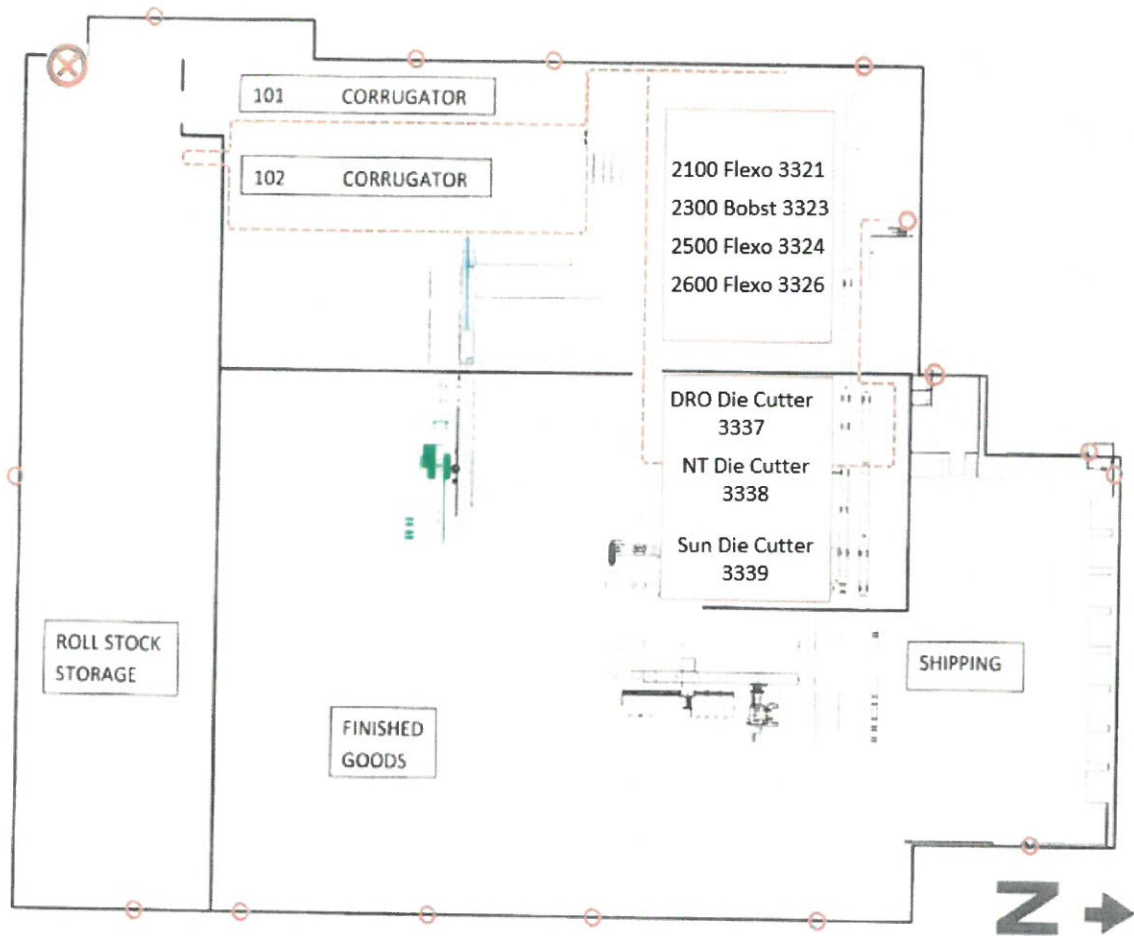
SUN625 Rotary Die Cutter
WestRock Longview, LLC
2001 Longfibre Avenue
Yakima, WA 98903
January 2021



ATTACHMENT B

Process Flow Diagram and Equipment Layout

SUN625 Rotary Die Cutter
WestRock Longview, LLC
2001 Longfibre Avenue
Yakima, WA 98903
January 2021





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JAN 29 2021
YRCAA

January 21, 2021

VIA ELECTRONIC MAIL
[hasan@yrcaa.org]

Hasan M. Tahat, Ph.D.
Compliance, Engineering and Planning Division Supervisor
Yakima Regional Clean Air Agency
329 North 1st Street
Yakima, WA 98901

RE: WestRock Longview LLC - SUN625 Rotary Die Cutter Upgrade Project

Dear Dr. Tahat:

WestRock Longview LLC (WestRock) is planning proposed upgrades to the Sun Automation 625 (SUN625) Rotary Die Cutter (RDC) currently permitted under NSRP-07-KCC-14, NSRP-03-KS-15, NSRP-07-KS-16 and NSRP-08-KS-17 (the "Project"). We are submitting the enclosed New Source Review (NSR) application for the purpose of requesting that the Agency issue a determination that no construction permitting is required for the proposed Project.

Introduction:

The SUN625 RDC, which is a flexographic printing machine capable of feeding, printing, and converting, was installed in 2014. WestRock is planning to upgrade some of the material handling equipment associated with the RDC to improve operational efficiency. The Project will involve the following:

- Addition of two bundle breakers to accommodate larger corrugated blank sizes with multiple outs through the machine to improve throughput.
- Replacement of the current 112-inch pre-feeder and infeed conveyor with units sized to allow for the increased blank sizes.
- Replacement of the existing AG stacker with a new style (George Martin Scrubber) stacker which will aid in efficient scrap removal.
- Installation of two load formers and a supporting conveyor to allow for palletizing the product.

Please note that these upgrades are associated with the sheet feeds and converting sections of the RDC, and no modifications to the actual printing section of the RDC are proposed.

The design production capacity of the RDC is 630 thousand(M) square feet/hour (MSF/hr); however, given the other facility production limitations, this design capacity is not possible, and its expected maximum capacity is 250 MSF/hr. Based on data for the past three years, the current average actual production of this RDC is 52 MSF/hour. The proposed Project is expected to increase the actual production of the RDC to 80 MSF/hr.

The Volatile Organic Compounds (VOC) and Toxic Air Pollutants (TAP) limit permitting history for the RDC is presented below:



Permit History for the SUN625 RDC:

Permit Number	Permitted Units	Emission Limits Comments
NSRP-07-KCC-14	SUN625 RDC	VOC & TAPs emission limits based on allowable ink use of 96.3 tons per year (tpy)
NSRP-03-KS-15	Bobst 8.20 FFG & SUN625 RDC	VOC & TAPs emission limits based on allowable ink use of 625 tpy and glue use of 150 tpy for both the FFG and RDC
NSRP-07-KS-16	Corrugator 101, Bobst 8.20 FFG & SUN625 RDC	VOC & TAPs emission limits based on allowable ink use of 625 tpy and glue use of 150 tpy for both the FFG and RDC
NSRP-08-KS-17	All Emission Units: Corrugators, RDCs and FFGs	PM ₁₀ & PM _{2.5} emission limits based on the total production of the corrugator & stack testing results

WestRock has determined that the proposed Project is exempt from the NSR review based on the following:

- The total ink usage for both the FFG and RDC is currently less than 20% of the allowable ink use of 625 tpy.
- The actual ink usage for the RDC for the past 3 years was ~41 tons/year, and the proposed upgrades to the unit is expected to increase the actual usage to ~ 58 tons/year.
- As a conservative estimate, we have estimated a maximum ink use of 80.6 tons/year assuming the RDC will be operating uninterrupted at 80 MSF/hr (8760 hrs/yr).
- The flexographic printing at the facility uses water-based inks with very low VOC and HAP contents. The modification to the RDC does not increase the actual emissions by more than each of the threshold levels listed in WAC 173-400-110 (5)(a)(ii), Table 110(5) or WAC 173-460-150 as shown below.

SUN625 RDC Actual and Projected Emissions

RDC Production / Usage	Units	VOC/ TAP (%)	2017	2018	2019	Projected Actuals	Project Increase	WAC 173-400-110 (5) Exemption	WAC 173-460-150 De Minimis	Below the Exemption Level?
Actual Production	MSF/yr		328,894	282,227	359,768	700,800				
	MSF/hr		52.7	45.2	57.7	80.0				
Ink Usage	tons/yr		38	35	41	80.6				
	lbs/MSF		0.23	0.25	0.23	0.23				
VOC	tons/yr	1.60%	0.61	0.57	0.67	1.34	0.76	2.0		Yes
Propylene Glycol*	lbs/day	0%	0.0	0.0	0.0	0.0	0.0		1.1E-01	Yes
Acrylic Acid	lbs/day	0.0010%	0.0030	0.0028	0.0033	0.0047	1.87E-03		3.7E-03	Yes
Styrene	lbs/day	0.0093%	0.0270	0.0252	0.0296	0.0588	3.36E-02		3.2E+00	Yes

*Propylene glycol is not present in the current inks used at the facility.



As shown above, this proposed project does not warrant a NSR review. However, as requested by YRCAA, an NSR application, associated documents, and an application fee of \$400 is being submitted for the purpose of providing the Agency with the information it needs to issue a non-applicability determination.

As the Project is scheduled to start in April 2021, WestRock requests YRCAA to review and provide concurrence with the NSR exemption as soon as possible. Please feel free to contact Karl Schumacher at karl.schumacher@westrock.com or (253) 254- 4136 if you need any additional information regarding this Project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Don Ricci", with a stylized flourish at the end.

Donald Ricci
Business Unit General Manager