YAKIMA REGIONAL CLEAN AIR AGENCY

Order of Approval Permit No NSRP-07-KS-16

New Source Review (NSR) Order of Approval for KapStone Container Corporation for Corrugator 101 (also known as number 3311) Dry End Upgrade; (which includes SE 1000 Dual Rotary Shear-2500 mm, RPS Express Slitter/Scorer (RPSE), Saber Knife Series 100L Double Level Direct Drive, Model HP Series 332 Double Downstacker and Machine Controls System(MCS))

IN THE MATTER OF approving a project which establishes an increase in air contaminants at KapStone Container Corporation, in Yakima, WA. THIS ORDER OF APPROVAL IS HEREBY ISSUED TO:

Applicant/Permittee: KapStone Container Corporation
Cardboard Box Plant
Responsible Official: Douglas Larsen

Located at: 2001 Longfibre Ave,
Yakima, WA 98903

Contact: KapStone Container Corporation
Creighton O Shaul
2001 Longfibre Ave, P.O. Box 9069
Yakima, WA 98903
(509) 494-6913

IN COMPLIANCE WITH THE PROVISIONS OF THE STATE OF WASHINGTON CLEAN AIR ACT (Revised Code of Washington (RCW)) CHAPTER 70.94.152, WASHINGTON ADMINISTRATIVE CODE (WAC) 173-400-110 and173-460-040:

ISSUE DATE: August 22, 2016

THIS ORDER OF APPROVAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

Modification of the equipment must be conducted in compliance with all data and specifications submitted with the New Source Review (NSR) application under which this Order of Approval (Order/Permit) is issued unless otherwise specified herein. The conditions and limitations of this NSR Order are attached as follows:

1.0 Description of the Source

1.1 KapStone Container Corporation hereafter, referred to as the Permittee, KS, Facility or Source is the owner and operator of a corrugated packaging plant, located at 2001 Longfibre Avenue, Yakima, WA. The Permittee is proposing to upgrade corrugator 101 (also known as number 3311) the dry end only (permitted in Order numbers; NS_LFC-95, # NSRP-LFC-14-98 and NSRP-LFC-19-99) as it starts to fail and the Facility is having a hard time finding spare parts. This upgrade includes Rotary shear, Slitter Scorer, Cut-off Knife, Top and Bottom Stacker and Machine Controls System (Table 1 and Figure 3). This upgrade will increase the capacity and the overall production as requested by the Permittee and documentation.

1.2 The Facility is a corrugated containers and miscellaneous paper products manufacturing company. This upgrade is for the dry end of corrugator 101/3311, as also shown in Figure 4 below. The floor plan of the Facility with the location, name and model number up to date (as of the date of issuance of this Order) is shown in Figure1.

1.3 Specifications for the corrugator upgrade are listed in Table 1 and specified in Figure 3 and shown in Pictures Figure 5). The Permittee submitted the specifications for the update with the New Source Review (NSR) application which shall be part of this Order. The City of Yakima exempted this project from the State Environmental Policy Act (SEPA) review process dated May 6, 2016.

1.4 Air emissions from this installation are mainly in the form of small particulates (PM_{10} and $PM_{2.5}$), Volatile Organic Compounds (VOCs), Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) pursuant to the Federal Clean Air Act (FCAA) or Washington Administrative Code (WAC) 173-460-150, respectively.

Other Information Relevant to Corrugator 101/3311:

1.5 On November 29, 2007 YRCAA issued an order of approval number (NSRP-03-LFC-2004 and NSRP-08-LFC-06) which included an upgrade to the corrugator. The upgrade in 2007 included the following:

Remove and Replace:

- Five (5) O'Dwyer splicers, and replace with 5 Marquip splicers:
- Ten (10) Geo Martin rollout stands, and replace with five (5) Langston Rollstands.
- 16 year-old equipment, and replace with a 1995 Marquip Rotary shear, a 1998 Marquip Slitter Score, and a1995 Marquip Web Diverter.

Other Information Relevant to the Facility Imposed Ink limits:

1.6 On April 30, 2015 Yakima Regional Clean Air Agency (YRCAA) issued Order number NSRP-03-KP-15 for Flexo folder gluer (Bobst 8.20) and removed the vintage Martin 718 Flexo line (permitted under Order # NOC-12LVF00) to increase Facility production.

1.7 On May 2, 2014, YRCAA issued an Order NSRP-07-KCC-14 to the Permittee for a new rotary die cutter (Sun Automation 625).

1.8 Both Orders (NSRP-07-KCC-14 and NSRP-03-KP-15) had limits on the ink usage. YRCAA agreed with Permittee during the permitting process for Order NSRP-03-KP-15 to reduce the ink usage for the rotary die cutter (NSRP-07-KCC-14) to accommodate both lines (Sun automation 625 and this new installation Bobst 8.20) so that the ASIL limit will not be exceeded. In addition, total ink usage and the glue limit are as specified in order number NSRP-03-KP-15 and this Order and shown in Attachment 1.

2.0 Determinations

In relation to the above installation, YRCAA determines that the Facility shall comply with all federal, state and local laws and regulations including but not limited to the following determination:

2.1 The Source is located in an area that is in attainment with all criteria pollutants and is under maintenance plan for PM_{10};

2.2 The Facility is classified as a Synthetic Minor source;

2.3 This modification is subject to the NSR Requirements of WAC 173-400-110 and WAC 173-460-040;

2.4 In addition to limits imposed by this Order, the Facility is subject to WAC 173-400-075; and

2.5 The Facility is subject to WAC 173-400-099 – Registration Program and YRCAA Regulation 1.

THEREFORE, it is hereby ordered that the project as described above, in the NSR application, and in detailed plans, specifications and other information submitted in reference thereto, is **APPROVED** for operation, **PROVIDED** the specification submitted with the application and the following conditions are met:

3.0 Operating Approval Conditions

3.1 This Order is for the upgrade of corrugator 101/3311 dry end only as specified in this Order. This upgrade will also result in an increase in the ink usage and glue due to increase in production of the corrugated materials and as specified in this Order. These changes are and shall ensure compliance with the conditions of this Order. Corrugator 101 is located at 2001 Longfibre Ave. in Yakima WA.

3.2 This dry end upgrade includes the Rotary shear-2500 mm SE-1000, RPS Express Slitter Scorer (RPSE), Saber Knife Series 100L Double Level Direct Drive, Top and Bottom Double Stacker Model HP series 332 and Machine Controls System (MCS). The upgrade will be operated in accordance with the submitted NSR application to YRCAA.

3.3 Best Available Control Technology (BACT) shall be satisfied for any proposed new facility or modified air emission source to control air emissions. YRCAA finds BACT to be satisfied as follows:

3.3.1 An Operation and Maintenance (O&M) plan for the modification upgrade shall be developed as specified in this Order and the manufacturers recommended standards;

3.3.2 The upgrade and the speed of operation shall be operated as submitted with NSR and as per manufacturer specifications and certification;

3.3.3 If the ink limit and its TAPs content are adhered to as specified in this Order, TAPs air emissions should be below the Acceptable Source Impact Levels (ASIL) and shall always be below the ASIL;

3.3.4 The ink and glue usage limit in this Order and other issued Orders shall meet the ASIL of WAC 173-460 and the National Ambient Air Standards (NAAQs) of 40 CFR Part 50 as specified;

3.3.5 The Permittee shall strive for ink and glue containing less HAPs, TAPs and VOCs, whenever possible;

3.3.6 The excess/trims from the corrugator line shall continue to pass through the existing cyclone (46-S); and

3.3.7 In addition to the above, the Facility is proposing to add a baghouse after the cyclone before the end of the year 2017. The baghouse shall be considered as part of the BACT for this upgrade, thus the allowed increase in production as a result (attachment A).

3.4 The total air emissions from the facility-wide must be calculated monthly and submitted to YRCAA annually as part of the annual registration program. The calculation should be clear and specific for each production line in the Facility.

3.5 The Permittee must upgrade the site-specific O&M plan (the O&M Plan shall contain at least of four sections: general information, operation plan (i.e., key operating parameters), maintenance plan and any other additional information) for the corrugator upgrade and all lines. If an O&M is not developed yet, a plan must be completed within 90 days of the issuance of this Order and shall include at minimum, but not be limited to the following:

3.5.1 Maintenance or change-out of any operations must be logged manually or electronically;

3.5.2 The Log shall be designed by the Permittee and shall contain at least the date, operator name and any specific action taken and why;

3.5.3 The Material and Safety Data Sheet (MSDS and SDS) for all chemicals, including ink used must be kept on site and available for inspection; and

3.5.4 The O&M plan must include any affected unit or line with this new upgrade installation.

3.6 The O&M plan and all records including this Order must be maintained at the Facility's site or accessible place when requested by the YRCAA Air Pollution Control Officer (APCO) or any of his designated staff during inspections, or upon request, when deemed necessary, in accordance with the rules and regulations.

3.7 Corrugator 101/3311 including the upgrade must be maintained and operated as per manufacturer specification. It shall be the responsibility of the Permittee to check and make sure that corrugator and all other equipment in the Facility is maintained and operated as per manufacturer specification.

3.8 Installation of a baghouse in 2017 after the cyclone shall be considered as BACT for the increase in PM_{10} and $PM_{2.5}$ as proposed by the Facility. The Permittee will apply for another NSR before the installation of the baghouse.

3.9 This Order authorizes the installation of the following equipment:

Table 1 Authorized installation equipment list.

Unit No.	Unit Type	Manufacturer and Model Number	Capacity
1	Upgrade dry end of Corrugator 101 (3311)		1200 ft/min
1	SE Dual Rotary Shear-2500 mm (98.4 in)	Marquip Ward United	2500 mm
1	RPS Express Slitter/Scorer (RPSE)	Marquip Ward United	See figure 3 below
1	Saber Knife Series 100 L Double Level Direct Drive	Marquip Ward United	See figure 3 below
1	Double Downstacker Model HP Series 332	Marquip Ward United	See figure 3 below
1	Machine Controls System (MCS)	Marquip Ward United	See figure 3 below

4.0 General Approval Conditions

4.1 Corrugator 101/3311 dry end upgrade must comply with all applicable Federal, State, and Local laws and regulations, including, but not limited to RCW 70.94 (Washington Clean Air Act), WAC 173-400 (General Regulations for Air Pollution Sources), WAC 173-460 (Controls for New Sources of Toxic Air Pollutants) and YRCAA Regulation I.

4.2 All plans, specifications, other information and any further authorizations or approvals or denials in relation to this project, shall be incorporated herein and made a part of YRCAA file.

4.3 Except as specified in this Order, any new or additional construction, modifications or alterations not covered in this review process which will affect air emissions are subject to a NSR permitting process before it takes place as required by RCW 70.94.152, WAC 173-400-110 and WAC 173-460-040.

4.4 The YRCAA staff shall be allowed to inspect the Facility site at reasonable times to inspect equipment and/or records specific to the control, recovery, or release of air contaminants into the atmosphere, in accordance with RCW 70.94.200 and YRCAA Regulation 1.

4.5 Nothing in this approval shall be construed as preventing compliance with any requirement(s) of law including those imposed pursuant to the federal and state Clean Air Acts, and laws and regulations thereunder. Any violation(s) of such rules and regulations are subject to enforcement and penalty action in accordance with RCW 70.94.430 and YRCAA Regulation 1, Article 5.

4.6 This Order number NSRP-07-KS-16 may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:

4.6.1 Violation of any terms or conditions of this authorization; or

4.6.2 If this authorization has been obtained by misrepresentation or failure to disclose fully all relevant facts.

4.7 The provisions of this authorization are severable and, if any provision or application of any provision of this authorization to any circumstance is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

4.8 There must be no fallout or any fugitive emissions from the unit beyond the property boundary in a quantity that interferes unreasonably with the use and enjoyment of the property owner upon which the material is deposited, or is detrimental to the health, safety or welfare of any person, or causes damage to any property or business.

4.9 Deviations from these conditions are violations subject to penalties in accordance with RCW 70.94.430 and 431, WAC 173-400-230 and YRCAA Regulation 1, Article 5, Section 5.02.

4.10 The requirements of this Order apply to the Facility owner and/or operator(s) and any contractor or subcontractor performing any activity authorized under this Order. Any person(s), including contractor(s) and subcontractor(s), not in compliance with the applicable Order requirements are in violation of State and Local laws and subject to appropriate civil and criminal penalties. The Facility owner and/or operator, and all contractor(s) or subcontractor(s) are liable for the actions and violations of their employee(s). Any violation committed by a contractor or subcontractor shall be considered a violation by the Facility owner and/or operator, and is also a violation by the contractor and/or any subcontractor(s).

4.11 Applicable laws and regulations may be superseded or revised without notice. It is the Permittee's responsibility to stay current with, laws, rules and regulations governing their business and therefore is expected to comply with all new rules and regulations immediately upon their effective date. Rules and Regulations updates will be incorporated into existing permits or upon renewal of said permits.

5.0 Emission Limits

5.1 The Permittee shall not exceed the allowable emission limits shown in Attachment A.

5.2 If chemical composition changed from what was submitted with previous NSR's application (higher acrylic acid, propylene glycol, styrene or vinyl acetate), the Permittee must notify YRCAA and have a written approval from YRCAA prior to any changes.

5.3 The total ink usage from this upgrade may increase from what is shown in attachment A provided that the HAPs/TAPs remains below the thresholds and approved by YRCAA.

5.4 In addition, to the limits imposed by this Order and previous issued Orders, the Permittee shall also comply with all applicable general standards for maximum air emissions as specified in WAC 173-400-040, WAC 173-400-075 and WAC 173-460.

5.5 The Permittee must conduct visible emission inspections of the cyclone and the corrugator at least once a month. Opacity as measured by the applicable method pursuant to 40CFR Part 60, Appendix A, Method 9 or Method 22 should not exceed a ten percent (10%) and zero percent (0%) average for the cyclone and corrugator 101, respectively. If the opacity is greater than the allowable limit the Permittee shall immediately stop the equipment in question and take corrective actions as the O&M plan until visible emissions are below the respective opacity limit. Visible inspections are to be performed while the Facility is in operation during daylight hours. If during a monthly visible emissions inspection, visible emissions other than combined water are greater than the allowable limit, the Permittee must as soon as practicable but within 24 hours of the initial observation do the following:

5.5.1 Take corrective action, which may include shutting down the unit or activity until it can be repaired, and until there are no visible emissions (or until the unit or activity is in compliance with all applicable opacity limitations in this Order using the reference test method); or

5.5.2 Alternatively, conduct opacity reading using 40CFR Part 60, Appendix A, Method 9 or Method 22 whichever is applicable at the point of observation within 24 hours. All observations using the opacity reference test method must be kept on-site and made available to YRCAA staff during inspection or upon request. If opacity is greater than the allowable limit, unit must be shut down and checked. Units shall not operate until the opacity is less than or equal than the allowable specified limits.

5.6 The monthly visible emissions inspection in the above condition will be relaxed into once every six months period, if and only if, the first six months (from issuance date of this order and operation of the corrugator) will show that emission limit has not been exceeded. Each six month period is defined as January through June and July through December.

5.7 Condition 5.5 will be revised with the issuance of the NSR Order of Approval for the baghouse in 2017.

5.8 The total ink usage and the glue limit are as specified in this Order and previous Order of Approvals.

6.0 Monitoring, Recordkeeping and Reporting Requirements

6.1 The Permittee shall keep all records including this Order on site. Records shall include, at minimum, the monthly production from the corrugators and all other flexo graphic and die cutter lines, the number of operating hours, the monthly and the annual production output of each line and the O&M items performed. Forms for record keeping must be designed by the Permittee and shall include at minimum, the date and time of maintenance performed and the operator's name.

6.2 The O&M plan shall be updated to reflect any changes in operating procedures and such changes shall be implemented.

6.3 Records shall be maintained and kept at the site for any of the previous five years from any of current date, and be made available to the APCO of the YRCAA or his designated staff during inspections or upon request.

6.4 Any application form, report, or compliance certification, monthly records and the annual consumption report submitted to YRCAA pursuant to this Order must be signed by a responsible official.

6.5 Total air emissions for criteria pollutants, number of hours of operation, PMs, HAPs, TAPs and VOCs must be calculated monthly and reported to YRCAA on an annual basis as specified in the annual registration provided by YRCAA to the Facility.

6.6 This Order and its conditions shall remain in effect in the event of any change in control or ownership of the Facility. In the event of any such change in control or ownership of the subject Facility, the Permittee shall notify the succeeding owner of the Orders and conditions and shall notify the YRCAA of the change in control or ownership by filing an "Ownership or Name Change" form within fifteen (15) days of that change. The form can be obtained from the agency's website or requested from YRCAA's office.

6.7 This Order is invalid without paying the complete appropriate/required cost to YRCAA, pursuant to RCW 70.94.152.

Any person feeling aggrieved by this NSR Order of Approval may obtain review thereof by application, within thirty (30) days of receipt of this NSR order to the Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA, 98504-0903. Concurrently, a copy of the application must be sent to the YRCAA, 329 N 1st St., Yakima, WA 98901. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

DATED at Yakima, Washington this August 22, 2016

PREPARED and APPROVED BY:

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
Yakima Regional Clean Air Agency
for
Gary W. Pruitt
Air Pollution Control Officer
Yakima Regional Clean Air Agency

REVIEWED BY:

Norman Hepner, P.E.
Nth Degree Engineering Solutions

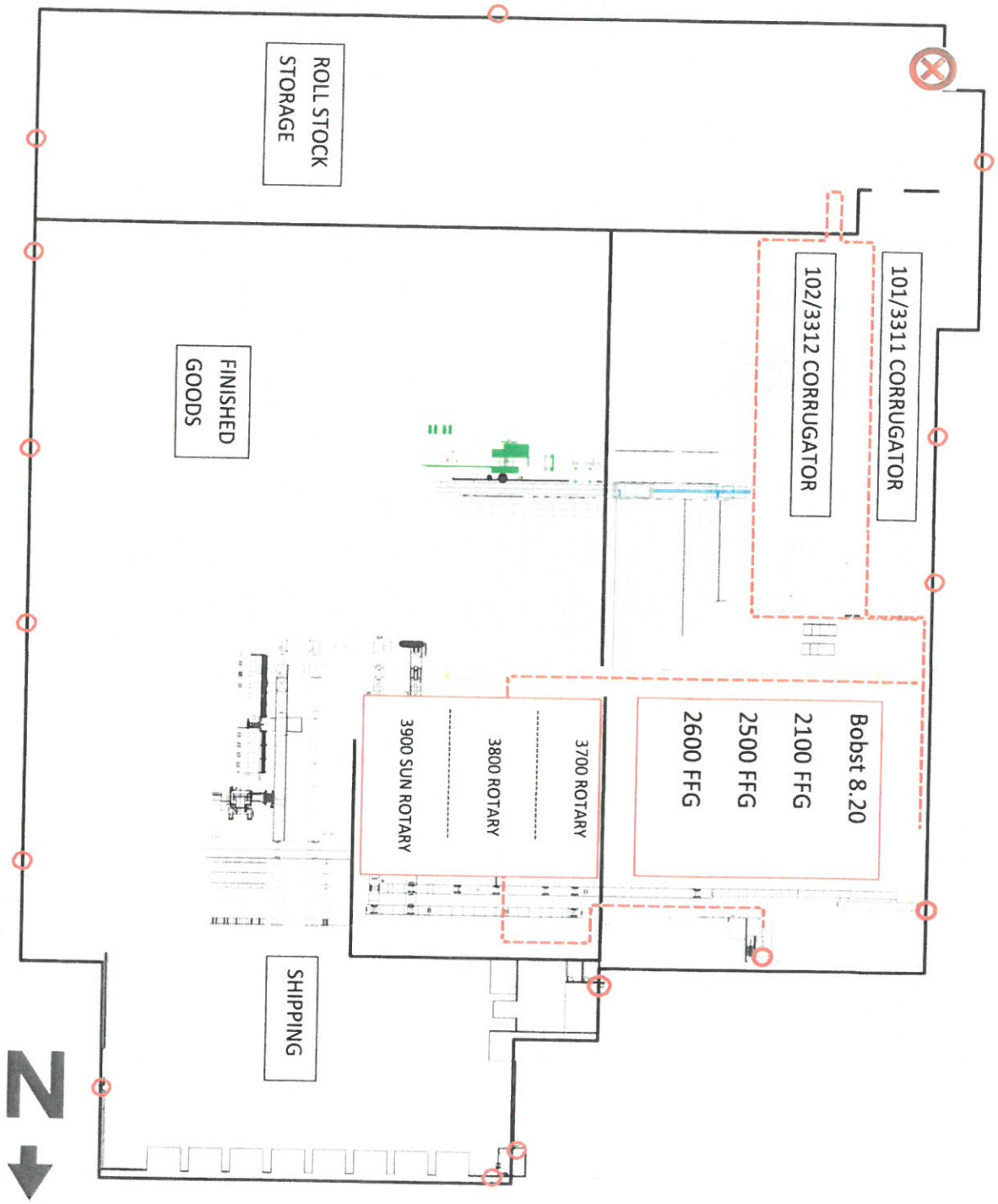
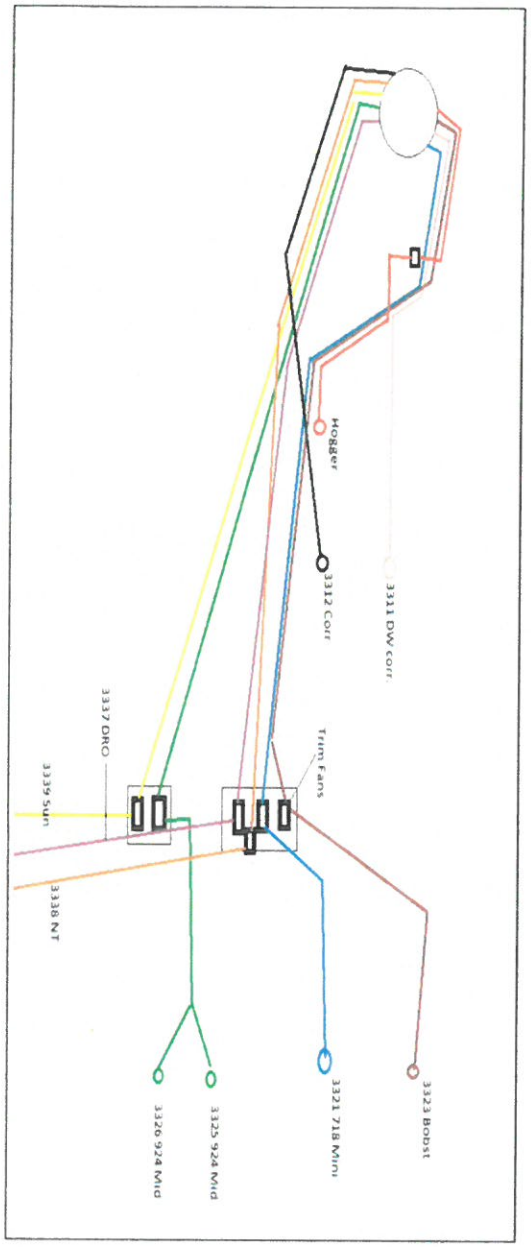


Figure 1: Floor plan of the Facility including corrugators and all operational lines.

Machine	Pipe Diameter (in)	Area (sq ft))	Enter Velocity (ft/min)	Volume (CFM)	
3325 & 3326	16	1.40	5,600	7,819	
3323 Bobst	16	1.40	6,000	8,378	
3321 Mini	16	1.40	3,800	5,306	
3339 Sun	16	1.40	5,600	7,819	
3338 NT	18	1.77	5,000	8,836	
3337 DRO	16	1.40	4,700	6,562	
Corr 3312	12	0.79	5,500	4,320	
Corr 3311	13	0.92	5,500	5,070	
Hogger	18	1.77	6,000	10,603	
		0.00	5,500	0	
			Total Volume (CFM)	64,712	
			Cyclone is 16" diameter (CFM)	66,500	



AIR CONVEYING CORPORATION
2196 E. PERSON AVE. - MEMPHIS, TN 38114
PH: (901) 454-5016 -- FAX: (901) 324-7979
E-MAIL: mregan@accfilter.com
WEBSITE: AIRCONVEYINGCORP.COM

Figure 2. Air conveying system with the capacity to the cyclone

MarquipWardUnited
A BW Papersystems Company

EQUIPMENT AND FEATURES SUMMARY

Prices shown are in USD

Equipment

SE 1000 Dual Rotary Shear - 2500 mm (98.4 in) (Quantity 1)
- Additional Scrap Cart(s) (Quantity 1)
- Third Party Inspection for a Shear (Quantity 1)

RPS Express Slitter/Scorer (RPSE) (Quantity 1)
- Additional Slit Heads - RPSE (Quantity 2)
- Additional Pairs of Scoring Heads - RPSE (Quantity 28)
- Web Support Forks and Knife Infeed Slider Table (Quantity 1)
- Third Party Inspection for a Slitter (Quantity 1)

Saber Knife Series 100L Double Level Direct Drive (Quantity 1)
- Cut-To-Mark Capability (Quantity 1)
- Third Party Inspection for a Knife (Quantity 1)

Model HP Series 332 Double Downstacker (Quantity 1)
- Plastic Flat Belt Conveyor in Lift Bays (Quantity 2)
- Isolation Transformer (Quantity 1)
- Third Party Inspection for a Stacker (Quantity 1)

Machine Controls System (MCS) (Quantity 1)
- Dry End Setup Change Package (Quantity 1)
- Performance Software Package (Quantity 1)
- Wet End / Dry End Setup Change Interface (Quantity 1)
- Third Party Inspection for MCS (Quantity 1)

Equipment: [redacted]

Proposal #: 28884
Date: 8-February-2016
17740099

KapStone Container Corporation
Yakima, WA
Page 3 of 19

barrywehmiller
bw
betterworld

Figure 3. Specifics of the corrugator 101/3311 dry end upgrade as submitted.

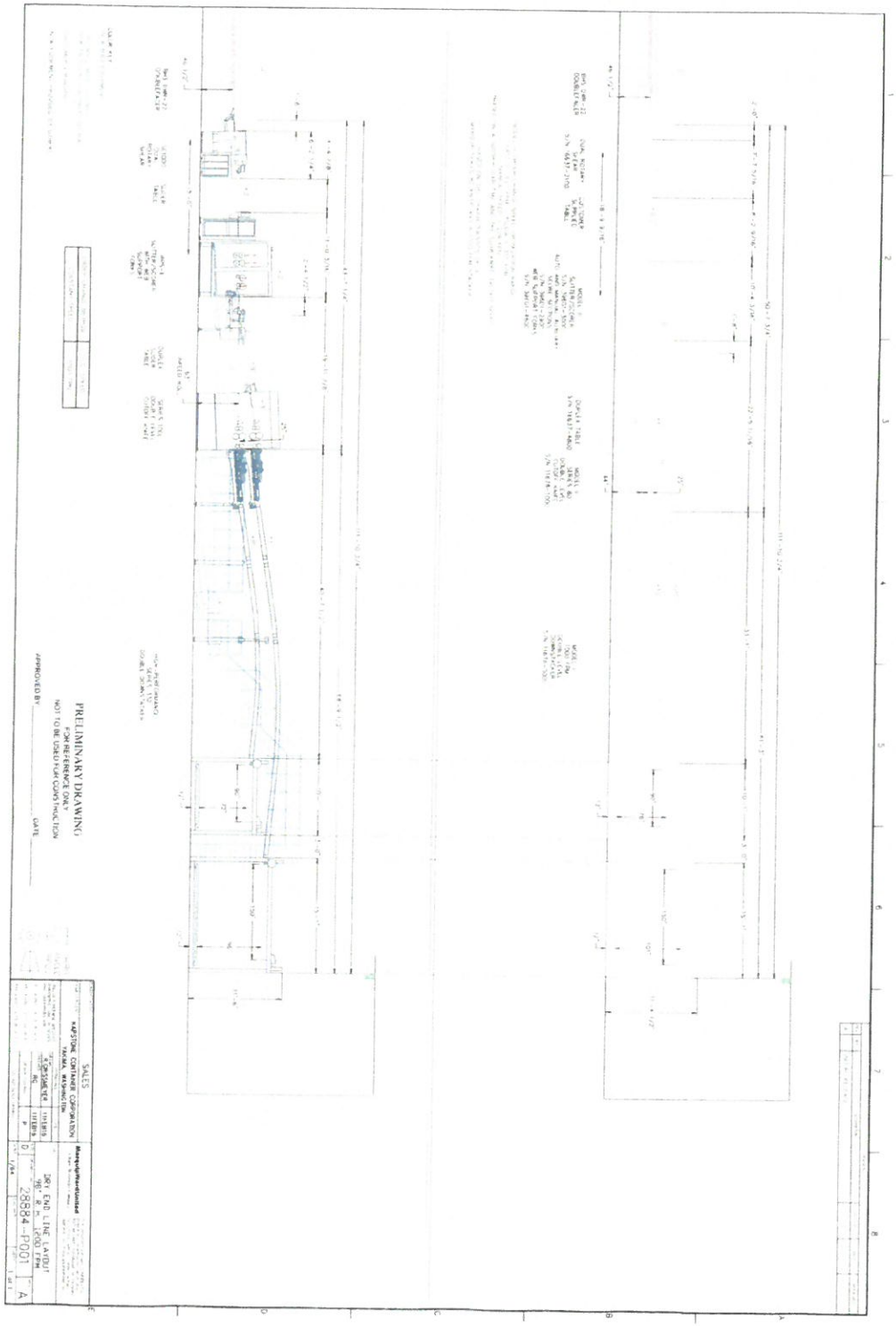


Figure 4. Corrugator 101/3311 dry end upgrade layout as submitted

101/3311 Dry end.

The stacker belt sections, the cutoff knife and the slitter-scorer will also be replaced.

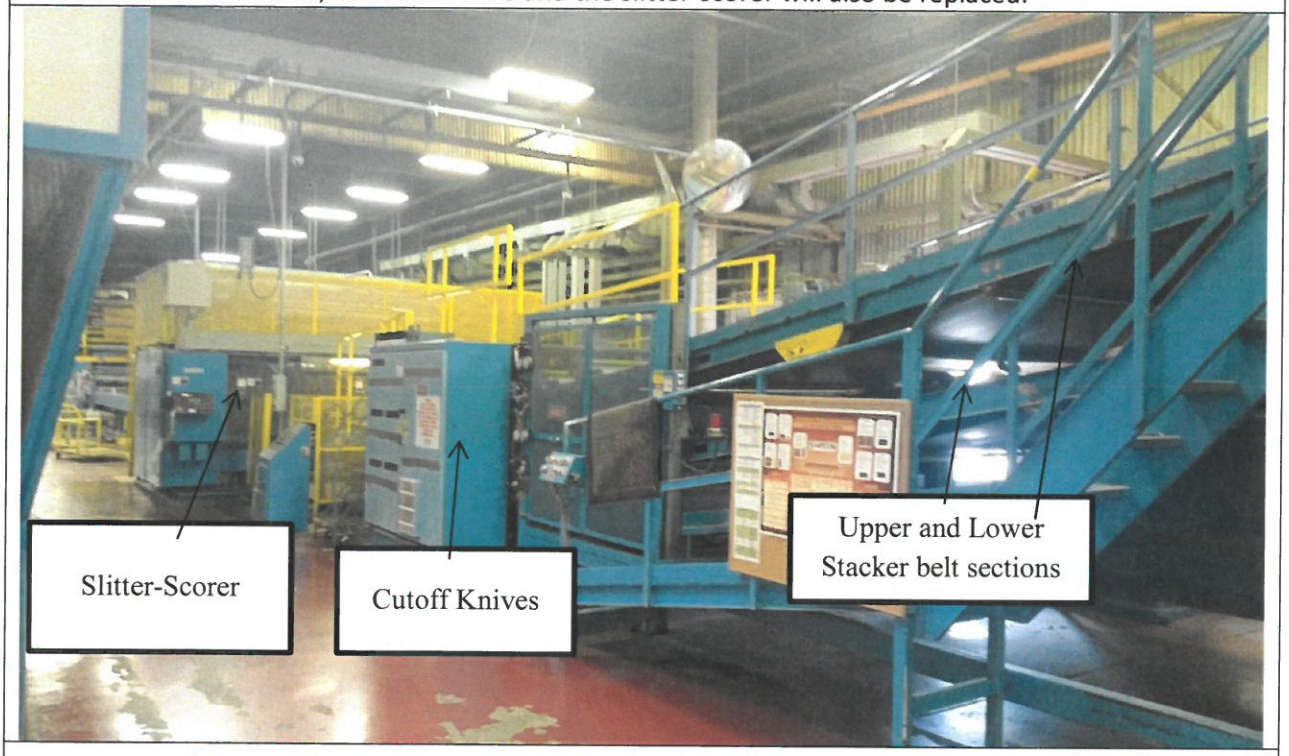
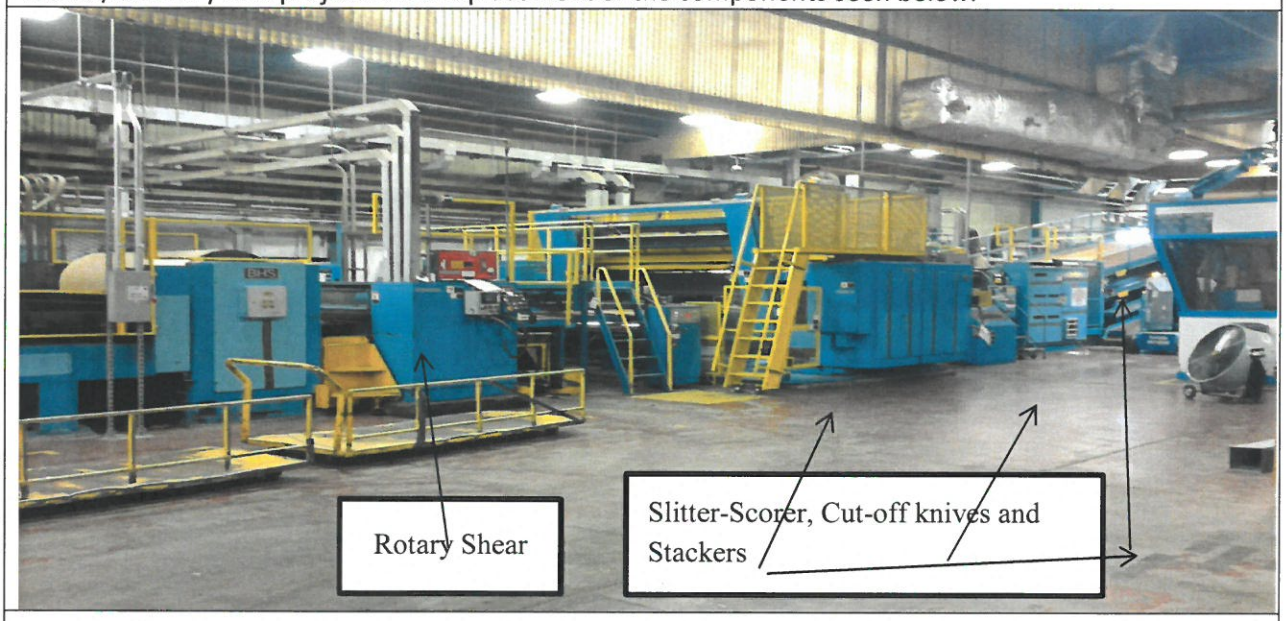


Figure 5. Pictures for Corrugator 101/3311

The 10/3311 dry-end project is the replacement of the components seen below.



101/3311 Corrugator Wet End. The wet end begins at the double-back glue machine.

No replacement of any of the equipment at the 101/3311 wet end.

Figure 5. Pictures for Corrugator 101/3311 (continuation)

Attachement A
NSRP-07-KSCC-16
KapStone
Page 17 of 17

Air emission from -
Air emission from Corrugator 101/3311 Dry End Upgrade at 1200 ft/min with 98.4 inches wide at 6240 hours per year

Air emission from - NSR- NSRP-03-15
Air emission from the Flexo Folder Gluer (Model: Bobst 8.20)
Sun Rotary Die Cutter (Sun 625)

PMs emissions

Cyclone emissions (Source test 09/24/2015)	emission factor (lbs/ mSF)
PM_{10}	0.0039
$PM_{2.5}$	0.00139

Potential Corrugator 101 Upgrade	3,684,096	mSF per year
Existing Corrogartor 101 (Actual ave '14 n '15)	1,695,657	mSF per year
Proposed increase in production	468,000	mSF per year
Potential Increase in Production	1,988,439	mSF per year
Actual production	**1,695,657**	**mSF per year**
Potential production	**3,684,096**	**mSF per year**

* Estimated number from Kapstone

TOTAL PMs Emissions

	Trims (Tons/yr) **	PM10 (TPY)	PM2.5 (TPY)
Actual	7529	3.31	1.18
Potential/ allowable	16357	7.18	2.56

*** 148 lbs = 1mSF, 6% waste*

PMs emissions

Cyclone emissions (Source test 09/24/2015)	emission factor (lbs/ mSF)
PM_{10}	0.0039
$PM_{2.5}$	0.00139

Flexo-gluer (Bobst 8.2) actual production *	522,000	mSF per year
Die Cutter (Sun 625) actual production *	250,000	mSF per year
Flexo-gluer (Bobst 8.2) potential production	600,000	mSF per year
Die Cutter (Sun 625) potential production	302,000	mSF per year
Actual production	**772,000**	**mSF per year**
Potential production	**902,000**	**mSF per year**

* Estimated number from Kapstone

TOTAL PMs Emissions

	Trims (Tons/yr) **	PM10 (TPY)	PM2.5 (TPY)
Actual	3428	1.51	0.54
Potential/ allowable	4005	1.76	0.63

*** 148 lbs = 1mSF, 6% waste*

PMs emissions

Production Ratio %	Total Air Emissions		After Control Baghouse	
14.2	460512			
14.7	460512			
30.2	460512			
15.2	460512			
45.5	211957.125			
24.5	460512			
		PM10 (TPY)	PM2.5 (TPY)	
		3.31	1.18	
		7.18	2.56	
After control	0.0E+00	0.0E+00	7.2E-05	2.6E-05

VOCs and HAPs emissions

Contents

0.84%	propylene glycol weighted average
0.017%	acrylic acid weighted average
0.0019%	styrene weighted average
0.1%	Vinyl Acetate weighted average
1.6%	VOCs in ink
0.35%	VOCs in glue

ACTUAL Usage as submitted in the application

ACTUAL ink (TPY)	101
ACTUAL glue (TPY)	50

	TPY	lb/hr	lb/d	g/s	De minimis (lb/d)	SQER (lb/d)	Model Value (ug/m3)	ASIL (ug/m3)
TOTAL Propylene Glycol	0.849	0.272	6.534	0.034	0.187	3.75	4.6	28.5
TOTAL Acrylic Acid	0.017	0.006	0.132	0.0007	0.007	0.131	0.1	1
TOTAL styrene	0.002	0.001	0.015	-	5.91	118	-	0.0217
TOTAL vinyl acetate	0.050	0.016	0.385	-	1.31	26.3	-	200
VOCs	1.825	0.585	2.996		-	-	-	-

Modeling

Parameters:
urban (population 92,000)
1 g/s
volume source: lateral dimension =185.32 /4.3 = 43.1 m, vertical = 8.05/2.15 = 3.74 m

release height = 4.02 m
default aerscreen meteorological conditions
distance = 93.7 m (center of volume soure + 10ft)
urban and average moisture

Results:
At 94 m, 24-hour concentration is **133 ug/m3**

PTE/ Allowable Usage

PTE ink (TPY)	**625**
PTE glue (TPY)	**150**

	TPY	lb/hr	lb/d	g/s	De minimis (lb/d)	SQER (lb/d)	Model Value (ug/m3)	ASIL (ug/m3)	Permit limit (lb/d)
			= based on 260 days						
TOTAL Propylene Glycol	**5.256**	**1.685**	**40.433**	**0.212**	0.187	3.75	28.2	28.5	**41**
TOTAL Acrylic Acid	**0.106**	**0.034**	**0.817**	**0.0043**	0.007	0.131	0.6	1	**1.4**
TOTAL styrene	0.012	0.004	0.091	0.0005	5.91	118	0.064	900	**5.9**
	0.150	0.048	1.154	0.006	1.31	26.3	0.8	200	**1.31**
VOCs	**10.738**	**3.442**	14.25	0.075	**	**	**	**	**15.03**
	=(usage)(content %)*								