

YAKIMA REGIONAL CLEAN AIR AGENCY

Order of Approval Permit No NSRP-07-KCC-14

New Source Review (NSR) Order of Approval for KapStone for the Installation of a New Rotary Die Cutter and a Shredder

IN THE MATTER OF approving a project which establishes a new air contaminant source at KapStone, in Yakima, WA. THIS ORDER OF APPROVAL IS HEREBY ISSUED TO:

Applicant/Permittee:

KapStone Container Corporation

Corrugated Box Plant

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 and 173-460-040:

ISSUE DATE:

May 2 2014

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

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



1.0 Description of the Source

- 1.1 KapStone Container Corporation, hereafter referred to as the Permittee, KCC, is the owner and operator of a corrugated Box Plant, located at 2001 Longfibre Avenue, Yakima, WA. The Permittee is proposing to install a new rotary die cutter (Sun Automation 625). In addition, the Permittee replaced the old shredder with a new one without any permitting or notification, though it is a replacement-in-kind. The old shredder is an old one which was never permitted.
- 1.2 Corrugated sheets of cardboard are fed through the rotary die cutter which will cut it into the required design of the cardboard boxes. The boxes will then be printed-on with logos or any pictures or names of companies based on a customer's order. This rotary die cutter is equipped with a two-color system. The Facility is using low-VOC water-based inks for printing. The unit will be ducted to an existing 9,200 cfm fan to convey the trim waste into an existing cyclone (46-S) which will be collected and baled. The bales are sent out to a pulp mill.
- 1.3 The Permittee removed the rotary die cutter Ward 3600 and the Flexo-folder-Gluer 2300. Order of Approval (Order, Permit) number NSRP-08-LFC-06 issued in 2006, also indicate installation and removal of equipment which increase the plant square-footage production by 6%.
- 1.4 The new unit will be operated in accordance with the submitted New Source Review (NSR) application to the Yakima Regional Clean Air Agency (YRCAA). Specifications for the units are listed in Table 1. The Permittee submitted the specifications for the rotary die cutter and the shredder units with the application, which shall be part of this Order. The City of Yakima exempted this project from the State Environmental Policy Act (SEPA) review process in March 2014.
- 1.5 Air emissions from this unit are in form of small particulates (PM₁₀ and PM_{2.5}), Volatile Organic Compounds (VOCs), and toxic air pollutants (TAPs) and hazardous air pollutants (HAPs) in accordance with the Federal Clean Air Act (FCAA) or Washington Administrative Code (WAC) 173-460-150, respectively.

2.0 Determinations

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

- 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 source is subject to the New Source Review Requirements of WAC 173-400-110 and WAC 173-460-040;



- 2.3 The Facility is subject to WAC 173-400-099 Registration Program and YRCAA Regulation 1; and
- 2.4 This Facility is a synthetic minor source and as such is not subject to 40 CFR Part 63-National Emission Standards for Hazardous Air Pollutants- Subpart KK- National Emission Standard for the Printing and Publishing Industry unless the source becomes a Title V source as defined in the Federal Clean Air Act (FCAA).

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 installation of a rotary die cutter Sun Automation 625, and a new shredder located at 2001 Longfibre Ave. in Yakima WA.
- 3.2 This Facility is a Synthetic Minor Source as stipulated in permit number NC-05-94 issued in 1994. The conditions and limitations of this Order shall become part of a Title V Air Operating Permit (AOP) in the event that the Permittee becomes a Title V source. In addition, other issued Orders/Permits are still valid.
- 3.3 This Order authorizes the installation of the following equipment:

Table 1: Authorized equipment list for installation

Unit No.	Unit Type	Manufacturer and Model Number	Capacity
1	Rotary Die Cutter	Sun Automation 625	2.9 Tons/hr corrugated boxes
2	Shredder/ Hogger	Balemaster Model #: 1275-107	Feed width: 60"

- 3.4 Best Available Control Technology (BACT) or Toxic BACT (T-BACT) shall be satisfied for any proposed new facility or modified air emission source to control air emissions. YRCAA finds BACT and T-BACT to be satisfied as follows:
 - 3.4.1 An Operation and Maintenance (O&M) plan for the unit shall be developed as specified in this Order and based on the manufacturers recommended standards;
 - 3.4.2 The equipment must be operated as per manufacturer specifications and certification;
 - 3.4.3 TAPs air emissions shall always be below the Acceptable Source Impact Levels (ASIL);



- 3.4.4 The ink usage will be limited to meet ASIL of WAC 173-460 as specified in this Order of Approval.
- 3.4.5 The rotary die cutter shall have a cyclone and a vacuum filters which shall achieve at minimum 90% efficiency or more: and
- 3.4.6 The trims from the rotary die cutter operation must pass through/discharge to the existing authorized cyclone (46-S) prior to baling.
- 3.5 The total air emissions for all emission points must be calculated and submitted to YRCAA on an annual basis.
- Pursuant to WAC 173-400-105(4) the Permittee shall conduct an actual air flow measurements going into the existing cyclone (46-S). The actual air flow shall not exceed the design capacity of the cyclone (67,300 cfm). The actual air flow test shall be conducted within 90 days after the completion of the installation of the rotary die cutter. The result shall be submitted to YRCAA within thirty days after the test is conducted.
- 3.7 The Permittee must develop a site-specific O&M plan for the rotary die cutter, the shredder and all other units in the Facility including those serving as control equipment. If an O&M is not developed yet, a plan must be completed within 60 days of the issuance of this Order and shall include, but not be limited to the following:
 - 3.7.1 The Permittee shall routinely inspect the vacuum filters and vacuum system cyclone to determine whether maintenance or filter cleaning are necessary, as recommended by manufacturer.
 - 3.7.2 Any maintenance, including filter cleaning, or change-out operations must be logged and the records shall contain at least the date, operator name and specific action taken; and
 - 3.7.3 The Material and Safety Data Sheet (MSDS) for all chemicals used must be kept on site and available for inspection.
- 3.8 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 staff during inspections or upon request when deemed necessary in accordance with the rules and regulations.
- 3.9 The rotary die cutter must be maintained and operated as per manufacturer specification. It shall be the responsibility of the Permittee to check and make sure that the unit is maintained and operated as per manufacturer specification.



4.0 General Approval Conditions

- 4.1 The rotary die cutter, shredder, control equipment and other emission sources in the Facility 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 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 rules 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 of Approval permit (NSRP-07-KCC-14) 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 this Facility including these units permitted by this order 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 of Approval 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 of Approval 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).

5.0 Emission Limits

- 5.1 The Permittee shall not exceed the allowable emission limits shown in Attachment A.
- 5.2 The Permittee shall also comply with all applicable general standards for maximum air emissions as specified in WAC 173-400-040 and WAC 173-460.
- 5.3 Opacity as measured by 40CFR Part 60, Appendix A, Method 9 should not exceed a ten percent (10%) and zero percent (0%) average for the cyclone (46-S) and rotary die cutter cyclone filter, respectively. No visible emission shall be allowed from any other stack or building opening. If the Permittee observes visible emissions from other than Cyclone 46-S, the Permittee shall immediately stop the operation creating the emission and take corrective action as directed in the O&M Plan until no more visible emissions are observed. Corrective actions may include the following:
 - 5.3.1 Verify and certify that the affected equipment is performing according to its design functions within the acceptable design parameters and is being operated according to O&M procedures. If the equipment is not performing according to design and O&M procedures, the Permittee must take corrective action within 48 hours to correct the problem; and
 - 5.3.2 Alternatively, conduct opacity reading using 40CFR Part 60, Appendix A, Method 9 within 48 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. Unit shall not operate until the opacity is less than or equal than the allowable limit. If Method 9 is to be used and the Permittee has no certified reader on site, the Permittee should call YRCAA and will be advised accordingly.



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 ink usage, the number of operating hours and the O&M items performed. Recordkeeping system must be designed by the Permittee and shall include the date and time of maintenance performed and the operator's name.
- 6.2 The required records, logs and a copy of the O&M plan for this Facility shall be kept on site and shall always be readily available, organized and accessible when requested by YRCAA personnel or during an inspection. The O&M plan shall be updated to reflect any changes in operating procedures and such changes shall be routinely implemented.
- 6.3 Records shall be maintained and kept at the site for any of the previous three years from any of current date, and be made available to the Air Pollution Control Officer (APCO) of the YRCAA or his designated staff during inspections or upon request.
- Any application form, report, or compliance certification, monthly record and the annual consumption report submitted to YRCAA pursuant to this Order of Approval must be signed by a responsible official.
- 6.5 Total emissions for criteria pollutants, number of hours of operation, HAPs, TAPs and VOCs from the ink usage must be calculated and reported to YRCAA on an annual basis as specified in the annual registration and any previously issued Permit to the Facility.
- 6.6 This Order of Approval 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 Order of Approval 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 or requested from YRCAA's office.
- 6.7 This Order of Approval is invalid without paying the complete appropriate/required fees 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 May 2014

PREPARED BY:

Mylene Gueneron

Engineer/Planner

Yakima Regional Clean Air Agency

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:

Joseph Andreotti, P.E., Andreotti and Associates



Attachement A NSRP-07-KCC-14

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Rotary Die Cutter

Model: Sun Automation 625

shredder

Model: Balemaster 1275-107

		Allowabl	Allowable Air Emissions (TPY	ons (TPY)			Actual	Actual Air Emissions (TPY)	ins (TPY)	
eduibilients	PM ₁₀	PM _{2.5}	VOC	Acrylic Acid Styrene		PM ₁₀	PM _{2.5}	VOC	Acrylic Acid Styrene	Styrene
New rotary Die Cutter Sun Automation	0.15	0.052	6.0	0.0141	0.0015	0.15	0.052	0.7	0.0047	0.0005
Existing rotary die cutter Bobst Martin	0.175	0.053	0.15	0.0094	0.001	0.175	0.053	0.15	0.0094	0.001
Ward 3600 *	0.04	0.001	0.51	0.0037	0.00041	0.004	0.001	0.51	0.0037	0.00041
Flexo 2300*	900.0	0.002	0.56	0.004	0.00045	0.006	0.003	0.56	0.004	0.00045
Old shredder*	0.75	0.264				0.6425	0.22616			
New shredder	0.75	0.264				0.6425	0.22616			
Net Change	-1.2180526	-0.42643	-0.02	0.0158	0.00164	-0.96974	-0.35075	-0.22	0.0064	0.00064
TOTAL	1.08	0.369	1.05	0.0235	0.0025	0.9675	0.33116	0.85	0.0141	0.0015

* equipment removed

Allowable annual ink use: 96.3 TPY

weighted avwerage content:

0.015% acrylic acid, 0.002% styrene

Allowable Cardboard shredded (TPY): 7500

EF: 0.2 for PM10 and 0.0704 for PM2.5

Actual Cardboard shredded (TPY): 6,425

0.015% acrylic acid, 0.002% styrene

Projected annual ink use: 32.1 TPY weighted avwerage content:

EF: 0.2 for PM10 and 0.0704 for PM2.5