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YRCAA

YAKIMA REGIONAL CLEAN AIR AGENCY

Order of Approval Permit No NSRP-09-IP-14

New Source Review (NSR) Order of Approval for International Paper for the Installation of a New Flexographic line (Ward-Model #: 11500; Serial #: 11548; AKA Line 5144)

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

Applicant/Permittee: International Paper
Corrugated Box Plant

Located at: 600 West Ahtanum Road.
Union Gap, WA 98903

Contact: International Paper
Attn: William Lundy
600 West Ahtanum Road.
Union Gap, WA 98903
(509) 576 3124

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 13, 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 International Paper hereafter referred to as the Permittee, IP, the Facility or the source is the owner and operator of a corrugated box manufacturing plant, located at 600 West Ahtanum Rd., Union Gap WA. The Permittee is proposing to add a fourth flexographic (flexo) Ward line Model #: 11500; Serial #: 11548; AKA Line 5144.
- 1.2 Corrugated cardboard boxes will be fed through the unit feeder into the flexographic part for printing. Printing varies based on the customer's order. The floor plan for the existing equipment including the location of the new unit is shown in Figure 1. Small amount of particulate matters air emissions are controlled through a built-in bag. In addition, air emissions outflow and trims from the new flexographic goes through the existing cyclone and baghouse (Air Conveying Co.) located on the roof of the building. The clean air exit the baghouse to the atmosphere and the collected particles are re-injected into the cyclone in which it is mixed with water mist to coagulate the particles into large pieces. These large fragments drop down with the shredded pieces into the baler. The bales are eventually transported into the pulp mill located at the Westside of the state.
- 1.3 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 new unit with the application which shall be part of this Order of Approval (Order, Permit). The City of Union Gap exempted this project from the State Environmental Policy Act (SEPA) review process in April 2014.
- 1.4 Air emissions from this flexographic unit are in form of small particulates (PM_{10} 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 and 160, 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:

- 2.1 This 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 Ward Flexographic unit, to be located at 600 West Ahtanum Rd., Union Gap WA.
- 3.2 This Facility is a Synthetic Minor Source with regulatory order number 97-001 issued in 1997. 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 applicable and valid.
- 3.3 This Order authorizes the installation of the following equipment:

Table 1: Authorized installation equipment list

Unit No.	Unit Type	Manufacturer and Model Number	Capacity
5144	Flexographic	Ward Model #: 11500 Serial #: 11548 <i>37.5" x 96 " x 225 kicks per minute</i>	27 Tons/hr corrugated boxes

- 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 flexo 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 is limited to meet ASIL of WAC 173-460 as specified in this Order; and
- 3.4.5 The Flexographic unit shall have the built-in bag; other airflow shall pass through/discharge into the existing authorized cyclone and baghouse located at the roof top of the building.
- 3.5 The ink usage should be recorded and tallied every month and submitted to YRCAA annually including the monthly usage.
- 3.6 The total air emissions must be calculated and submitted to YRCAA on an annual basis.
- 3.7 The Permittee must develop a site-specific O&M plan for the flexographic unit. 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 Monthly, the Permittee, shall determine and record if the pressure drop across the filters is within the acceptable range. If the pressure drop is not within the acceptable range, the Permittee shall stop operation and take corrective action as specified in the facility's O&M Plan;
 - 3.7.2 Any maintenance or change-out operations must be logged;
 - 3.7.3 Any log shall be designed by the Permittee and shall contain at least the date, operator name and specific action taken;
 - 3.7.4 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 flexographic Ward unit 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 units 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 1.



- 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 number NSRP-09-IP-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 unit and other emission point in this Facility 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 this applicable Permit 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 The Permittee must conduct visible emission inspections of the flexo at least once per calendar year. Opacity as measured by 40CFR Part 60, Appendix A, Method 9 should not exceed a zero percent (0%) average. 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. Inspections are to be performed while the Facility is in operation during daylight hours. If during a yearly visible emissions inspection visible emissions other than uncombined water are greater than the allowable limit, the Permittee must as soon as practicable but within 24 hours of the initial observation:
- 5.3.1 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
- 5.3.2 Alternatively, conduct opacity reading using 40CFR Part 60, Appendix A, Method 9 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 0%, unit must be shut down and checked. Unit shall not operate until the opacity is less than or equal than the allowable limit.

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. 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 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 five 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.
- 6.4 Any application form, report, or compliance certification, monthly record and the annual consumption report submitted to YRCAA pursuant to this Order must be signed by a responsible official.
- 6.5 Hours of operation, total emissions for HAPs, TAPs and VOCs must be calculated and reported to YRCAA on an annual basis as specified in any Order and 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 this Order 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 via our website or requested from YRCAA's office.
- 6.7 This Order is invalid without paying the complete appropriate/required fees to YRCAA, pursuant to RCW 70.94.152.

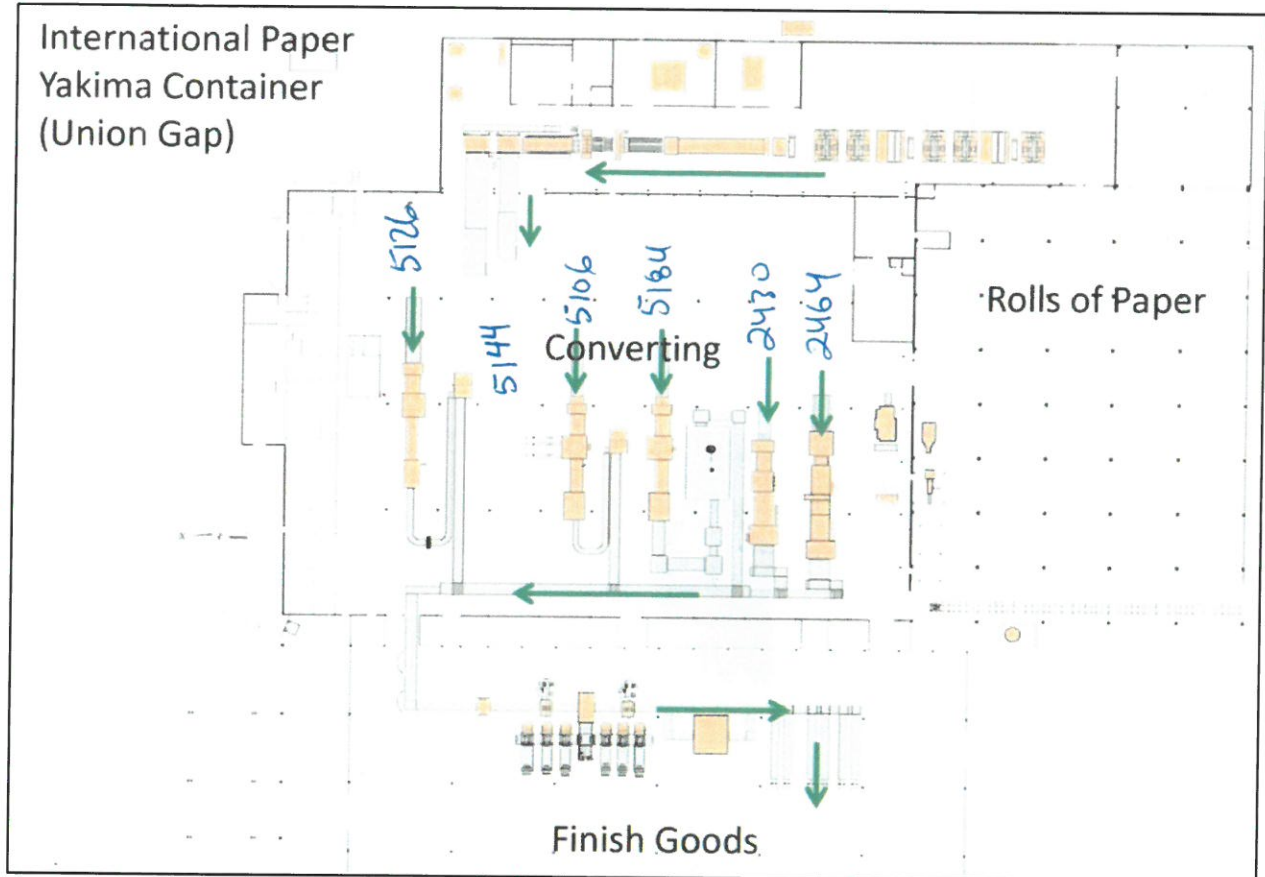
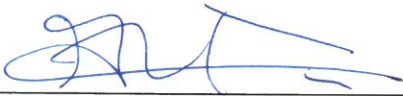


Figure 1: Floor Plan including the numbering of the rotary die cutters (2464, 2430); flexo units (5184, 5106, and 5126) and the new Flexo Ward Unit #5144.

Any person feeling aggrieved by this NSR Permit 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.

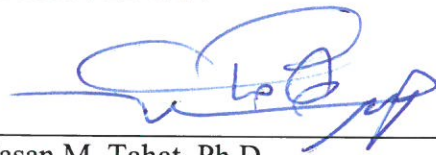
DATED at Yakima, Washington this May 13, 2014

PREPARED BY:



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APPROVED BY:



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REVIEWED BY:



Joseph Andreotti, P.E.,
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5/13/14

hours of operation: 6864 hrs/yr

ASSUMING the ink usage is equally distributed through the 5 machines (3 flexo - 2 die cutters), 5106 is considered as not used for the calculations

ink ID	2013	2012	2011	% increase 2011-2013	Max from the last 3 years	Max+20%	Max+50%	Max*20
flexo fast dry	0	0	5.6	-100	5.6	7	8	112
transfer agent 2	92.8	147.2	166.4	-44	166.4	200	250	3,328
inks #18	7032	3591.2	15063	-53	15063	18076	22,595	301260
inks #17	3039.4	5047.6	6333.4	-57	6333.4	7600	9,500	126668
inks #16	1053	1630.2	1270.8	-12	1630.2	1956	2,445	32604
inks #15	16506	16079	15063	10	16506	19807	24,759	330120
inks #14	30137.8	34043.8	22269.8	35	34043.8	40853	51,066	680876
TOTAL (purchased per year)	57,861.00	60,539.00	60,171.60					

allowable quantity
(lbs/yr)

ink	name	CAS #	% weight	lbs/yr	lbs/h avr period	TPY	category	avr period	ASIL	SOER	De Minimis
inks #18	isopropyl alcohol	67-63-0	100%	112	0.01632		TAP	1hr	3200	7.01	0.35
	styrene acrylic	N/A	8%	266.24	0.93091		TAP	24hr	900	118	5.91
	acrylic acid	N/A	0.15%	33.89175	0.11850		HAP	24hr	70.8	9.31	0.465
	ammonium hydroxide	1336-21-6	3%	677.835							
	barium red	1103-38-4	5%	1129.725							
	barium orange	67801-01-8	5%	1129.725							
	monoethanolamine	141-43-5	3%	677.835							
	acrylic acid	N/A	0.15%	14.25015	0.04983						
	ammonium hydroxide	1336-21-6	3%	285.003							
	barium red	1103-38-4	5%	475.005							
inks #16	barium orange	67801-01-8	5%	475.005							
	acrylic acid	N/A	0.15%	3.66795	0.01283						
	ammonium hydroxide	1336-21-6	3%	73.359							
	copper pink	12224-98-5	5%	122.265							
	copper violet	12237-62-6	5%	122.265							
	copper blue	147-14-8	15%	366.795							
	copper green	1328-53-6	10%	244.53							
	acrylic acid	N/A	0.15%	37.1385	0.12985						
	ammonium hydroxide	1336-21-6	3%	742.77							
	monoethanolamine	141-43-5	3%	742.77							
inks #14	acrylic acid	N/A	0.15%	76.59855	0.26783						
	ammonium hydroxide	1336-21-6	3%	1531.971	0.76599						
TOTAL allowable acrylic acid (lbs/avr period): 0.57884											

TOTAL HAPS (acrylic acid) TPY:
TOTAL allowable TAPs TPY:
TOTAL allowable VOCs TPY: