

# YAKIMA REGIONAL CLEAN AIR AUTHORITY

Order Of Approval Permit Nos. NSRP-03-LFC-2004 and NSRP-08-LFC-06

New Source Review (NSR) Order Of Approval for Longview Fibre Company for replacement of a Rotary Die Cutter, installation of a Flexo Folder Gluer and a Tenkay Fabric Filter to increase plant square-footage production by 6%

THIS ORDER OF APPROVAL SHALL COMBINE NSRP-03-LFC-2004 AND NSRP-08-LFC-06 AND SHALL BE REFERRED TO AS ORDER OF APPROVAL NUMBER, NSRP-08-LFC-06, WHICH IS HEREBY ISSUED TO:

Applicant/Permittee:

Longview Fibre Company, corrugated containers and

miscellaneous paper products manufacturing

Located at:

Longview Fibre Company, 2001 Longview Avenue, Yakima.

Contact:

Longview Fibre Company

Steven Rohrich Project Engineer P.O. Box 9069 Yakima, WA 98909

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

**ISSUE DATE:** 

November 29 . 2007

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

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

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## **DESCRIPTION OF THE SOURCE**

1. Longview Fibre Company (hereafter referred to as LFC or the permittee) is a manufacturer of corrugated container and miscellaneous paper products and is a Synthetic Minor Source with a federally enforceable limitation in accordance with NSR permit number NC-05-94. The conditions and limitations of this NSR permit will become part of a Title V Air Operating Permit (AOP) in the event that the permittee becomes a Title V source. This facility is located at 2001 Longview Avenue, Yakima, WA. The permittee is proposing to add, replace and upgrade the equipment listed in Table 1, Authorized Equipment List, as follows:

# **Install New Equipment:**

- Install Rotary Die Cutter, Bobst Martin 1632 NT DRO 351.2 million square feet per year (mmft²/yr) (as per application).
- Relocated within the facility: Ward 13000 Basic Rotary Die Cutter (Machine number 3600, s/n: 13171-L2BDC.
- Removal of Basic Rotary Die Cutter (Machine number 3500, s/n: 130-37-2BDC).
- Farr Tenkay 20D Dust Collector, 8,000 cfm, (interior vented to control fugitive emissions from the Die Cutter).
- Bobst Martin Flexo-Folder-Gluer Martin Midline 924 with a capacity not to exceed 288,000 mmft<sup>2</sup>/yr (as per application).

**Upgrade of 101 Corrugator** (to reduce paper waste and machine downtime; no increase in PTE):

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

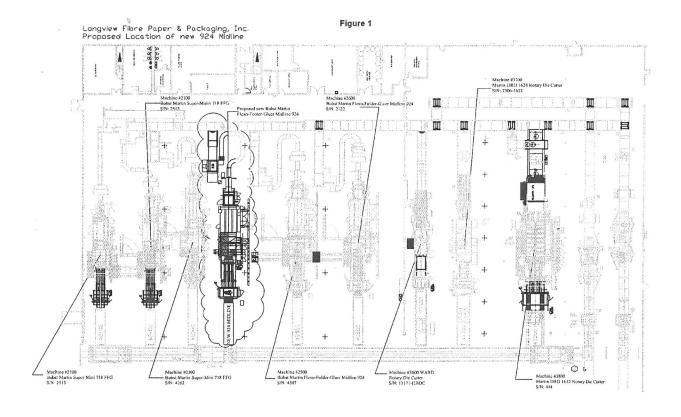
# Material Handling Project (no increase in air emissions):

- Add additional conveyor lines, upgrades to the pallet handling system, a sheet strapping line and a poly bagging operation.
- 2. Air emissions from this operation are in the form of Particulate Matter (PM), Volatile Organic Compounds (VOCs) some of which are Hazardous Air Pollutants (HAPs) and/or Toxic Air Pollutants (TAPs) in accordance with the Federal Clean Air Act (FCAA) or Washington Administrative Code (WAC), respectively. These

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emissions are emitted during manufacturing and the printing process. The net potential emission increase of HAPs is below the applicability level of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, Subpart KK, for the Printing and Publishing Industry since the permittee is not a major source of HAPs. YRCAA issued a Determination of Nonsignificance (DNS) for this project, with file number SEP 07-002.

Other VOC emissions also occur from evaporation of cleaning solvents during ink mixing and clean-up of parts and equipment used in the operation. The permittee provided the layout and data of the subject equipment, which is part of this NSR review. The layouts of the equipment are shown in Figure 1 below. TAPs emitted from this operation are listed in WAC 173-460-150 or WAC 173-400-160.



4. Installation and modification of equipment as specified in Condition number 1, above, requires a New Source Review (NSR) permit pursuant to the Revised Code of Washington (RCW) 70.94.152 and the Washington Administrative Code (WAC) 173-400-110. This facility is located in an area that is in federal attainment for all criteria pollutants and has a maintenance plan for PM<sub>10</sub>.

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#### **OPERATIONAL CONDITIONS**

- 5. This Order of Approval permit is for the subject equipment in Condition number 1, above, at 2001 Longview Avenue, Yakima, Washington, in accordance with the plan and specifications submitted with the NSR applications to YRCAA, and shall become part of this permit.
- 6. As provided in RCW 70.94.152 and WAC 173-400-110(3)(a), the equipment and operation subject of this NSR permit shall use Best Available Control Technology (BACT) to control emissions. BACT for control of small particulate matter (PM<sub>10</sub>) requires use of a high efficiency cyclone or other control equipment that is more efficient. As submitted by the permittee, a trim handling cyclone system (46-S) exists with a capacity of 67,300 CFM. The air-handling requirement for the current operation, including this project, is estimated at 63,776 CFM. The permittee reconfigured the trim lines and added a time diverter to send trims to the cyclone in pairs, thereby avoiding the need for additional material handling fans. In addition, a small, interior vented bag system attached to the corrugator equipment is used to control fugitive PM emissions and a Tenkay Fabric Filter will control fugitive emissions from the Die Cutter, as submitted by the permittee. The YRCAA determines that these controls satisfy the BACT requirements at this time.
- 7. As required by WAC 173-460-060, this project will use Best Available Control Technology for Toxic Air Pollutants (T-BACT) to control all air emissions from any proposed new facility or modified source. YRCAA finds the T-BACT analysis to be satisfied as follows:
  - 7.1 TAP emissions shall always be below the Acceptable Source Impact Levels (ASILs).
  - 7.2 When applicable, the permittee shall strive to use non-toxic ink and solvent.
  - 7.3 The emissions from the application of water based glue lap adhesive, corrugator thermosetting resin and label printing ink will be minimized by the use of handling and application practices detailed in the Operation and Maintenance (O&M) procedures typical for corrugated box manufacturing facilities.
- 8. The permittee shall install and maintain a gauge or manometer to measure the pressure drop across the exhaust filters of the Tenkay Fabric Filter. Within 30 days after the receipt of this permit, the acceptable range for the gauge shall be clearly marked on or nearby the gauge. The acceptable range must be maintained at all times during operation. This range shall be used as an indicator to change bags or otherwise perform maintenance when the differential pressure is out of range.
- 9. The permittee must up-date their site-specific operation and maintenance (O&M)

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plan to include the new equipment's specification and features. Such O&M plan shall include but not be limited to the following:

- 9.1 Required scheduled lubrication of all moving parts as specified by the equipment manufacturer, if any;
- 9.2 Required scheduled calibration of process control instruments as specified by the equipment manufacturer, if any;
- 9.3 Scheduled inspection and replacement of equipment or parts for wear and tear, as specified by the equipment manufacturer, if any;
- 9.4 Other O&M procedures, as needed.

O&M plan development must be completed within 120 days after the issuance of this Order.

- 10. Within 120 days from the date of issuance of this order of approval, the permittee shall submit notification to YRCAA indicating that the O&M plan is completed and in place. If the permittee needs to make any future modification to the subject equipment or their operating procedures, he must inform the YRCAA and have approval in writing before such modification takes place. The O&M documents must be updated and implemented to reflect such modification.
- 11. There must be no fallout from this facility or its operation in quantities that cause damage to, interfere unreasonably with the use and enjoyment of, or is detrimental to the health or safety of any property, person or business.
- 12. All air emissions from this facility shall comply with air emission standards at all times. It is the responsibility of the owner to make sure that air emissions are within all known rules and regulations including the general standards for maximum emissions in accordance with WAC 173-400-040 and 173-460.
- 13. As permitted in permit numbers NC-05-94, NOC-14-LFC-98 and NOC-19-LFC-99, visible emissions from Cyclone number 46S shall be limited to 10% opacity. No visible emission shall be allowed from any other stack or building opening. If the permittee observes visible emissions from other than Cyclone 46S, 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:
  - 13.1 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. Therefore, it must be checked against any operational conditions which have resulted in compliance in the past. 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/or

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- 13.2 Conduct an opacity evaluation by a certified opacity reader in accordance with 40 CFR 60, Appendix A, Method 9 and such opacity evaluation shall be conducted within 48 hours to verify compliance with the zero percent (0 %) opacity limit (and 10 percent (10 %) for the Cyclone only). Corrective action must be taken no later than 48 hours to identify and correct the problem causing the opacity. 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.
- 14. This Permit authorizes the construction and modification of the following equipment:

Table 1. Authorized Equipment List.

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Unit No.	Unit Type	Manufacturer	Model and/or Size	Manufact urer Date	Serial Number	Process Capacity (mft <sup>2</sup> /yr)	Flow Rating	
1	Rotary Diecutter (Machine # 3800)	Bobst Martin	DRO 1632 NT	11/2003	#444	351,200 mft <sup>2</sup> /yr	9200cfm	
2	Rotary Diecutter (relocation)	Ward	3611		13171- L2BDC	63,372 mft <sup>2</sup> /yr	7200 cfm	
3	Rotary Diecutter (removed)	Ward	3511		130-37- 2BDC	Unknown		
4	Tenkay Dust Collector (for # 3800 converter)	Farr Company	20D MK4	06/1996	94DC222 90	N/A	8,000 cfm	
5	Flexo-Folder-Gluer Martin (Machine # 2500)	Bobst Martin	Midline 924	06/2006	4507	297,572 mft <sup>2</sup> /yr	7,200 cfm	
6	Corrugator 101 upgrade	BHS		06/1969	Unknown	30,562 mft <sup>2</sup> /yr 125.2 mft <sup>2</sup> /mach -hr	4500 cfm	

#### **GENERAL CONDITIONS**

15. Establishment of the subject equipment in Condition number 1, above, and any other emission points at this facility shall be in compliance with all other requirements specified in all current federal, state and local air pollution laws and regulations, including but not limited to RCW 70.94.152 (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 the YRCAA Regulation 1.

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- 16. All plans, specifications or other information submitted to YRCAA and any further authorizations, approvals, or denials in relation to this project, shall be incorporated herein and made a part of the YRCAA file and this permit.
- 17. Nothing in this approval shall be construed as obviating compliance with any requirement(s) of law including those imposed pursuant to the Washington Clean Air Act, and rules and regulations thereunder. Any violation(s) of such rules and regulations are penalized in accordance with RCW 70.94.430 and YRCAA Regulation 1, Article 5, Compliance and Enforcement.
- 18. Authorization may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:
  - 18.1. Violation of any terms or conditions of this authorization; or,
  - 18.2. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.
- 19. The provisions of this authorization are severable and, if any provision of this authorization, or application of any provisions 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.
- 20. Permit requirements apply to the facility owner and/or operator(s) and any contractor or subcontractor performing any activity authorized under this permit. Any person(s), including contractor(s) and/or subcontractor(s), not in compliance with the applicable requirements in this permit 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).
- 21. The RCW Rules and Regulations may be superseded or revised without notice. It is the permittee's responsibility to stay current with 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 regulation updates will be incorporated into existing permits or upon modification of said permits.
- 22. Any person feeling aggrieved by this NSR order of approval permit may obtain review thereof by application, within thirty (30) days of receipt of this NSR permit to the Pollution Control Hearings Board (PCHB), P.O. Box 4903, Olympia, WA. 98504-4903. Concurrently, a copy of the application must be sent to the Yakima Regional Clean Air Authority, 6 So. 2nd St., Larson Building, Room 1016. Yakima,

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- WA. 98901. These procedures are consistent with the provisions of Chapter 43.12B RCW and the rules and regulations adopted thereunder.
- 23. If, or whenever the permittee wants to change the quantity set forth in Condition # 25 or 26, another NSR must be filed with YRCAA before the changes take place and BACT and T-BACT requirements must be satisfied.

#### **EMISSION LIMITS**

24. The permittee submitted a proportionate amount of yearly raw material usage of ink and solvent for the subject equipment along with Material Safety Data Sheets (MSDS) for each and any applicable production increase. The corresponding VOC and HAP emissions from the use of these raw materials were calculated and a summary is shown in Table 2, below, along with a proportionate increase in criteria pollutants from combustion.

Table 2. Summary of the Increased Air Emissions.

Pollutants	Estimated Actual Pollutants (Tons/Year)*		
Small Particulate Matter (PM10)	0.6		
Volatile Organic Compounds (VOCs)	1.7		
Sulfur Oxides	0.01		
Nitrogen Oxides	1.03		
Carbon Monoxide	1.25		
Hazardous Air Pollutants (HAPs)	0.175		

- \* The above emissions are based on engineering mass balance and the information provided by Longview Fibre Company.
- 25. The Maximum yearly quantity of ink and solvent to be used in the printing operation along with PM10 emissions from the control equipment are tracked as part of a permittee's Synthetic Minor permit where a plant-wide emission cap is in place. The actual usage of ink and solvent along with PM10 emissions must be reported to YRCAA on an annual basis.
- 26. Facility-wide emission limits shall not exceed those permitted in any of the previous permits issued to the facility.

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## MONITORING AND RECORDKEEPING REQUIREMENTS

- 27. Once during each week that the fabric filter is in use, the permittee shall determine and record if the pressure drop across the exhaust filters is within the acceptable range. If the pressure drop is not within the acceptable range, the permittee shall take corrective action as specified in the facility's O&M Plan.
- 28. The permittee must log incoming deliveries of ink, solvent and all other materials that contribute to VOC, TAP and HAP emissions. This log must include, at least, the delivery date, name, quantity and lot number. The permittee must also tally the quantities of the monthly consumption of all materials used. MSDS's must be maintained on-site for all materials contributing to VOC, TAP and HAP emissions. Copies of the logs and all records must be provided when requested by the YRCAA Air Pollution Control Officer, or his representatives.
- 29. Total emissions for criteria pollutants and the VOC, TAPs and HAPs must be calculated and submitted to YRCAA on an annual basis as specified in the Synthetic Minor Permit and the annual registration provided by YRCAA to the facility.
- 30. YRCAA staff shall be allowed to enter the facility at reasonable times to inspect for compliance with applicable regulations and the conditions on this Order and other previously issued permits.
- 31. The required records and a copy of the O&M plan for this plant 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.
- 32. Fabric filter maintenance or change-out shall be logged and kept with the pressure drop readings in Condition #27. Any log shall be designed by the permittee and shall contain at least the date, operator name and specific action taken.
- 33. All recordkeeping shall be maintained for the past three years from any present time.

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# REPORTING REQUIREMENTS

- 34. Total emissions for criteria pollutants, VOCs, TAPs and HAPs must be calculated and reported to YRCAA on an annual basis as specified in the Synthetic Minor permit, other previously issued permits and the annual registration provided by YRCAA to the facility.
- 35. Any application form, report, or compliance certification, including the annual consumption report, submitted pursuant to this and other permits must be signed by a responsible official.
- 36. This permit 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 permit 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.

DATED at Yakima, Washington this

29

day of November, 2007.

PRERARED BY:

Dave Lenington, MSE

Air Quality Engineer

REVIEWED BY:

Joseph Andreotti, P.E.

Andreotti and Associates

**REVIEWED & APPROVED BY:** 

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Engineering, Planning & Monitoring Division Supervisor

for

Gary W. Pruitt

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Yakima Regional Clean Air Authority

EXPINES 68/24/ OR