Yakima Regional Clean Air Authority

NOC-14-LFC-98 & NOC-19-LFC-99

Notice of Construction for Longview Fibre Company for Flexo Folder Gluer and a Single Facer Corrugating Machine (After the Fact)

Applicant: Longview Fibre Company
P.O. Box 9069
Yakima, WA 98909

Located at: Longview Fibre Company, 2001 Longview Avenue, Yakima.

I. Finding of Facts:

1. Longview Fibre Company hereafter is referred to as LFC, is a corrugated containers and miscellaneous paper products manufacturing company. LFC is a Synthetic Minor Source. LFC has five Flexo Folder-Gluer lines and two Corrugating Machine lines. LFC submitted a Notice Of Construction (NOC) for adding a 6th line of Flexo Folder-Gluer (Martin 718) and replacing one of the Corrugating Machine BHS to MHI 60GII Paser (Single Facer) including 2 splicers and 4 roll stands. The 60GII is 98 inches wide and 1200 feet per minute which is equal in rating to the old one. This NOC covers the 6th Flexo Folder-Gluer and the replacement of the corrugating machine BHS to MHI 60GII including 2 splicers and 4 roll stands.

2. This modification has the potential to increase the emissions of Particulate Matter (PM), Volatile Organic Compounds (VOC) and a small quantity of Hazardous Air Pollutants (HAP's). The area in which this facility is located has been determined to be in a non-attainment with both state and federal National Air Quality Standards for small particulate matter PM_{10} and Carbon Monoxide (Co) and in attainment with other state and federal ambient air quality standards. The net potential emissions rates increase of the VOC, PM and PM_{10} from this modification, are below the significant emission rate in accordance with the applicability of 40 CFR, Part 52, Subpart A, section 52.21, Prevention of Significant Deterioration (PSD). This determination is based on the total potential increase in emission from these addition and modification. Thus, this projects is not subject to such PSD permit.

3. The main emissions from this project is the PM_{10} from the Flexo Folder-Gluer followed by VOC from the label printing. However, LFC has an issued NOC permit number NC-05-94 for their boiler with limitation on the diesel # 2 usage

rather than PM_{10}. This proposed project is a source modification which qualifies as a source of air contaminants as provided for in the Yakima Regional Clean Air Authority (YRCAA) Restated Regulation I, Article IV, Section 4.02 and the Washington Administrative Code (WAC) 173-400-110.

4. The facility must be incompliance with all other requirements specified in all current federal and state air pollution laws and regulations, including but not limited to Revised Code of Washington (RCW) 70.94 (Washington Clean Air Act), Federal Clean Air Act, Washington Administrative Code (WAC) 173-400 (General Regulations for Air Pollution Sources), WAC 173-460 (Controls for New Sources of Toxic Air Pollutants), WAC 173-401(Operating Permit Regulation) and the YRCAA Restated Regulation I.

5. This project modification will generate the following additional maximum emissions:

Pollutants	Estimated Pollutants (Tons/Year)*
Small Particulate Matter (PM10)	6.89
Volatile Organic Compounds (VOC's)	3.18
Sulfur Oxides	0.32
Nitrogen Oxides	0.21
Carbon Monoxide	0.17
Hazardous Air Pollutants (HAP's)	0.31

* The above emissions are based on engineering mass balance and the information provided by Longview Fibre Company.

6. As required by WAC 173-400-112, this project must use Best Available Control Technology (BACT) to control emissions. As submitted by LFC a cyclone system exists with a capacity of 67,300 CFM. Current operation including this project is estimated at 49,000 CFM. In addition, no material handling fans were added. However, the trim lines were re-configured and a time diverter were added to handle trims in pairs. That means the trims will be conveyed by the belt to the cyclone by pairs, without addition of any material handling fans because of the time diverters. Fugitive particulate emission from the equipments itself when vacuum is used to control the corrugated sheet, a small bag system attached to the equipment is used as submitted by LFC. These controls shall satisfy and be considered BACT.

7. As required by WAC 173-460-060, this project will use Best Available Control Technology for Toxic Air Pollutants (T-BACT). The emissions from the application of water based lap glue adhesive, corrugator thermosetting resin

and label printing 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.

II. Approval Conditions:

LFC is a Synthetic Minor source with a Federally enforceable limitation NOC permit number NC-05-94. The conditions and limitations of this NOC permit shall become part of the Synthetic minor permit Number NC-05-94 and will become part of the Title V in the event that LFC becomes a Title V source.

1. This NOC is for the 6th line of Flexo Folder-Gluer (Martin 718) and replacement of one of the two Corrugating Machine i.e., BHS to MHI 60GII Paser (Single Facer) including 2 splicers and 4 roll stands in accordance with the specification submitted with this NOC application to YRCAA.

2. Maximum allowable emissions from these two addition and modification must not exceed the total amount as specified in Table 1. of the findings of fact section. The annual total amounts of all actual raw materials usage including all emissions must also be submitted and reported to YRCAA with the registration forms on an annual basis.

3. LFC must maintain all records including purchases for all raw materials that contribute to HAP's and VOC's emissions. Material Safety Data Sheets (MSDS) must be maintained on-site for all those materials contributing to HAP's and VOC's and a copy of each must be provided when requested by YRCAA personnel.

4. YRCAA deemed that BACT and T-BACT requirements must include implementation of a site-specific O&M manual based on corrugators, Flexo Folder Gluer and label printing manufacturers operations manual or plant operations experience. Lids of containers with contents that contribute to VOC's or HAP's emissions must be closed all the time except when in use.

5. LFC must have an O&M plan developed within 180 days after the issue date of this NOC permit for these equipment. If an O&M plan for the existing single facer still exist, LFC must up-date it to include the new specification and features of the rebuilt MHI 60GII single facer. Such O&M plan shall include but not be limited to the following:

    i) required scheduled lubrication of all moving parts as specified by the equipment manufacturer, if any;
    ii) required scheduled calibration of process control instruments as specified by the equipment manufacturer, if any;

    iii) scheduled inspection and replacement of equipment or parts for wear and tear, as specified by the equipment manufacturer, if any,

LFC must log and keep records of required maintenance inspection in the O&M plan including any remedial action taken as a result of the inspection, if any.

6. Site-specific O&M procedures for all equipment that has the potential to affect ambient air emissions shall be developed and followed. A copy of such procedures will be made available to Yakima Regional Clean Air Authority (YRCAA) as appropriate.

7. A letter certified by a responsible official must be submitted indicating that the O&M manual has been completed and in place within 180 days from the issuance of this NOC permit. Whenever any physical modification of the operation or its operating procedures are instituted, the O&M documents must be updated and implemented to reflect such modification. Maintenance Records shall be kept at the facility and when requested, these records will be made available to YRCAA Personnel during routine compliance inspections.

8. Visible emissions from the cyclone and the process affected by this addition and modification as stated in NOC permit number NC-05-94 and as measured in accordance with 40 CFR Part 60, Appendix A, Method 9, shall not exceed ten percent (10%) opacity at any time. There shall be no emissions from this facility or its operations which would unreasonably interfere with the use and enjoyment of property owners in the adjoining areas. Whenever visible emissions other than condensed uncombined water vapor are observed during the operation, inspection, indicated by complaint, or are otherwise observed, LFC shall do either of the following:

   a) Verify and certify that the equipment where visible emissions is observed is performing according to its designed functions within the acceptable operating parameters, and is being operated according to O&M procedures. Therefore, it must be checked against any operating conditions which have resulted in compliance in the past. If the equipment is not performing according to design and O&M, LFC must take corrective action within 48 hours. Corrective action taken shall not take the place of any reporting requirements for such deviations; or

   b) 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 10 % opacity standard. If opacity is greater than 10 %, appropriate, timely corrective action must be taken no later than 48 hours to identify and correct the problem causing the opacity. Corrective action taken shall not take the place of any reporting requirements for such deviations.

9. Records of the above required inspections and/or opacity evaluations in Approval Condition number 8. must be maintained and must contain at least the following:

i. Date and time of inspection;
ii. Stack, vent, or emission point identification;
iii. Operational status/condition of the associated emission unit;
iv. Observed results and conclusions;
v. Description of corrective action taken to resolve any observed opacity;
vi. Date and time opacity problem is resolved;
vii. EPA Method 9 results if opacity evaluation is conducted;
viii. Name of person(s) performing the inspection, measurement, or monitoring.

These records shall be kept and maintained at the plant site for at least a period of five years and be made available during inspections or when requested by YRCAA.

10. As stated in the approval condition of NC-05-94 the maximum PM_{10} emissions from the trim cyclone must be 0.03 grains per standard cubic foot as tested in accordance with 40 CFR Part 60 Appendix A, Method 5, (Determination of Particulate Emissions from Stationary Sources). A source test of the trim cyclone emissions will be required when incidents of violation to the opacity standard are recorded during routine compliance inspections or a verifiable violation as a result of complaints.

11. Any new, additional construction, modifications or alterations not covered in this review process which will affect air emissions must be subject to a NOC review and must be approved before the actual construction, changes or modifications takes place as required in WAC 173-400-110 and in Section 4.02 of the YRCAA Restated Regulation I.

12. In accordance with YRCAA Restated Regulation I, Article II Section 2.02(B), industrial inspection of LFC for compliance assurance measures can be conducted at any time deemed necessary.

13. 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 I, Article VIII.

III. Additional Approval Conditions:

1. All plans, specifications and other information submitted to YRCAA relative to this project and further, documents and any further authorizations or approvals or denials in relation thereto must be kept at the office of YRCAA files and by such action shall be incorporated herein and made a part hereof.

2. Nothing in this approval shall be construed as obviating compliance with any requirement of law other than those imposed pursuant to the Clean

Air Washington Act, and rules and regulations thereunder.

3. Authorization may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:

   a. Violation of any terms or conditions of this authorization; or

   b. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.

4. 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.

5. Any person feeling aggrieved by this NOC may obtain review thereof by application, within thirty (30) days or receipt of this NOC to the Pollution Control Hearings Board, 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, WA. 98901. These procedures are consistent with the provisions of Chapter 43.12B RCW and the rules and regulations adopted thereunder.

DATED at Yakima, Washington this 7th day of October, 1999.

PREPARED BY:

10/12/99

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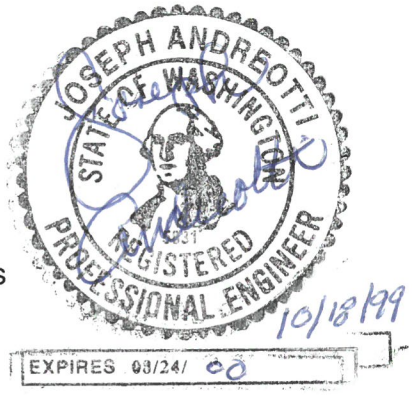

APPROVED BY:

Les Ornelas
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Computation for NOC's No:

NOC-14-LFC-98 & NOC-19-LFC-99

Longview Fibre Company.

Calculation for Flexo Folder Gluer & Single Facer Corrugated Machine.

The Flexo Folder Gluer, converts corrugated sheets into containers. Steps involved in this machine are, printing, cutting, folding and gluing:

This industry has 5 flexo machines and two corrugated machines. A total of 8 Machines.

One cyclone is connected to these machine to collect trims and control particulate matters:

Maximum flow rate of the cyclone is 67,000 CFM. Actual usage is 49,000 CFM.

EMISSIONS FROM CUTTING AND TRIMMING.

Potential Particulate Emissions (PM_{10})=

67,000 ft**3/min* 0.03 grain/ft**3 * 1Ib/7000 grain* 1 ton/2000 Ib *1440 min/day* 365/1yr

=75.46 tons/yr for the 8 machines. Assume trimming is distributed equally, thus,

the addition of one flexo will contribute about **9.43** Tons per year of PM10.

Actual Particulate Emissions(PM_{10})=

49,000 ft**3/min* 0.03 grain/ft**3 * 1Ib/7000 grain* 1 ton/2000 Ib *1440 min/day* 365/1yr

=55.19 tons/yr for the 8 machines. Assume trimming is distributed equally, thus,

the addition of one flexo will contribute about **6.89 Tons per year of PM10**.

EMISSIONS FROM INK (Water Based) PRINTING.

Actual VOC's Emissions=

Ink usage for 1998= 160.71 Tons Water Based Ink.

Assume the same usage for the six flexo: 160.71/6= 26.78 Tons per machine.

=14.63 Tons **Calculation is Based on 155.45 tons of ink which gives about 15.13 tons of VOC's emission.**

=14.63/6 **2.44** tons/year of VOC's

=0.26 Tons **Calculation is Based on 155.45 tons of ink which gives about 0.25 tons of HAP's.**

=0.26/6 **0.04** tons of HAP's

EMISSIONS FROM ADHESIVES.

Adhesives usage in 1998 is 81.37 Tons.

Potential VOC's Emissions=

VOC' emission based on MSDS is 56 grams/litter. for Glue lap Adhesive

Thus, this will give 4.17 Tons of VOC's

=4.16/6machines = 0.69 Tons per Year

VOC' emission based on MSDS is 4 grams/litter for HB Feller

Thus, this will give 4.17 Tons of VOC's

0.30/6machines = 0.05 Tons per Year

	HAP's emissions.					
	Ethyl Acetate is 2%	Based on MSDS				
=	0.02*81.37/ 6 machines		0.27			
	Acetaldehyde 0.004%		Based on MSDS			
=	0.004*81.37 / 6 machines		0			
	Toluene 0.008%	Based on MSDS				
	0.008*81.37/6 machines		0			
Therefore Total emissions are:						
PM10 =			**6.89**	**Tons/year**		
VOC's =	**2.44+0.69+0.05**		**3.18**	**Tons/year**		
HAP's =	**0.043+0.27+0.0005+0.0011**		**0.31**	**Tons/year**		
A small amount of NOx, SOx and Co emissions from boiler increases as a result of						
Products fluctuation.						