



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

September 6, 2016

Roberto Artiga
Environmental Services Manager
KapStone Kraft Paper and Packaging
PO Box 639
Longview, WA 98632

**Re: KapStone Box Plant Flexo-Folder-Gluer Project
NOC Order No. 13302**

Dear Mr. Artiga:

Please find enclosed the Notice of Construction (NOC) Order No. 13302. This order approves the installation of an additional Flexo-Folder-Gluer at the Box Plant.

If you have any comments or questions concerning the content of this document, please contact Stephanie Ogle at (360) 407-6355 or Stephanie.Ogle@ecy.wa.gov.

If you wish to appeal, you must follow the procedures described in the Order.

Sincerely,

Kim Wigfield, PE
Interim Industrial Section Manager
Waste 2 Resources Program

By Certified Mail [91 7199 9991 7034 8937 4265]

Enclosure



WASHINGTON DEPARTMENT OF ECOLOGY
MAIL STOP 47600
OLYMPIA, WASHINGTON 98504

IN THE MATTER OF AIR EMISSIONS FROM:

Longview Fibre Paper and Packaging)
d/b/a KapStone Kraft Paper Corporation)
300 Fibre Way)
Longview, WA 98632)

NOC ORDER No. 13302

DESCRIPTION

Longview Fibre Paper and Packaging, Inc., doing business as KapStone Kraft Paper Corporation (KapStone), operates a non-bleach Kraft pulp and paper mill located in Longview, Washington. The facility is an existing major source under the Prevention of Significant Deterioration (PSD) program, and currently operates under Air Operating Permit (AOP) 000007-8 issued by the Washington State Department of Ecology (Ecology) on February 23, 2007 and modified on February 15, 2008. This Order approves a project to add a Flexo-Folder-Gluer to the Box Plant Production Lines.

This project will consist of the installation of an additional Flexo-Folder-Gluer to the Box Plant. The specific model will be a used Martin Model 924 Flexo-Folder-Gluer. This machine will provide additional capacity for the facility to convert sheets of corrugated cardboard into boxes and print labels on them. The project will result in an increase in the production of corrugated cardboard at the facility, increase the number of boxes that are produced, and increase the amount of ink used by the facility to print labels on the boxes. These increases will result in minor increases of emissions from the facility.

FINDINGS

Pursuant to New Source Review (NSR) regulations in the Washington Administrative Code (WAC) 173-400-110 and 173-460-040 and based upon the complete Notice of Construction (NOC) application submitted by KapStone and the technical analysis performed by Ecology, Ecology now finds the following:

1. A NOC application dated February 2015 was submitted by SLR for KapStone for the Flexo-Folder-Gluer Project. The application was originally received by Ecology on February 25, 2015. Supplemental information was received by e-mail on March 12, 2015. Ecology reviewed and accepted the NOC application as complete on March 12, 2015. The original application was withdrawn on April 20, 2015. The application with some updated emission information was re-submitted on April 28, 2016. The re-submitted application was determined to be complete on May 26, 2016.
2. The Flexo-Folder-Gluer is a new source of emissions and is subject to the new source review (NSR) regulations specified by WAC 173-400-110, unless the increase in emissions from the new unit are less than specified threshold levels in WAC 173-400-

110(5). The estimated increase in emissions associated with this project in tons per year (tpy) and the associated exemption levels are presented in the table below.

Table 1 – Estimated emission increases for the Flexo-Folder-Gluer project and associated NSR exemption levels

	Total Suspended Particulates (TSP) (tpy)	Particulate Matter (PM) less than 10 micrometers (PM10) (tpy)	PM less than 2.5 micrometers (PM2.5) (tpy)	Volatile Organic Compounds (VOC), total (tpy)	Toxic Air Pollutants
Flexo-Folder-Gluer Project Emissions Increase	0.05	0.05	0.02	0.23	See Item 4
NSR Exemption Level	1.25	0.75	0.5	2.0	See Item 4

As shown in Table 1 above and Table 3 below, the emission increases associated with the new unit are below the exemption level for most of the pollutants, except for certain toxic air pollutants. As such, the new source review requirements of WAC 173-460-040 apply to this project.

The new source review requirements for new or modified sources of toxic air pollutants are not included in the approved State Implementation Plan (SIP); therefore, the conditions of this order are state-only requirements and are not federally enforceable.

3. The KapStone facility has the potential to emit greater than 100 tpy for at least one PSD pollutant. The facility is therefore classified as a major stationary source under the PSD permitting program, and is, therefore, subject to PSD permitting consideration under WAC 173-400-720 and 40 CFR 52.21, in accordance with 40 CFR 52.21(2)(i).

A PSD permit is required if the project is a “major modification” (i.e. if the net emissions increase resulting from the modification is greater than the PSD Significant Emission Rate (SER) threshold for any regulated pollutant). The application states that any additional emissions generated by other emission units at the facility as a result of this project, i.e. additional steam demand, additional PM emissions from additional starch deliveries, etc., would be negligible. Therefore, the net emission increases for this project are the emissions increases associated with the new unit only. These emission increases were compared to the appropriate SER. The estimated emission increases associated with this project and the SERs specified by WAC 173-400-710 are included in the table below.

Table 2 – Estimated emission increases for the Flexo-Folder-Gluer project and associated SER levels

	PM10 (tpy)	PM2.5 (tpy)	VOC (for Ozone) (tpy)
Flexo-Folder-Gluer Project Emissions Increase	0.05	0.02	0.23
SER	15	10	40

4. In accordance with WAC 173-460-040, modified toxic air pollutant (TAP) sources must meet the requirements of Chapter 173-460 WAC, unless they are exempt by WAC 173-110(5). The potential increase in emissions for the TAPs that may increase associated with this project and the NSR exempt emissions rates are shown in Table 3 below. The emissions increases for acrylic acid and propylene glycol are more than the NSR exemption rates; therefore, NSR is required for these pollutants. Due to this, the facility must use best available control technology for toxics (tBACT) for emissions control of these TAPs from the new emission unit and the unit must comply with WAC 173-460-070 (ambient impact requirement). The facility may demonstrate compliance with the ambient impact requirement by either showing that the emissions increase is less than the small quantity emissions rates (SQER) or through dispersion modeling. The SQER levels are also shown in Table 3 below.

Table 3 – TAP Estimated Emission Increases, NSR Exemption Level, SQER

	Potential to Emit, lbs/24 hours	NSR Exemption Level, lbs/24 hours	SQER, lbs/24 hours
Acrylic Acid	0.016	0.00657	0.131
Propylene Glycol	0.531	0.187	3.75
Styrene	0.0018	5.91	118

- a. tBACT: The facility identified five potential technologies for controlling volatile organic compounds (VOCs), which would control acrylic acid and propylene glycol, including no control technology, thermal or catalytic oxidizers, carbon adsorbers with a solvent recovery system, completed enclosures around operations, and water based, low-VOC inks or limits on ink use. Of these technologies, limiting ink usage was determined to be the only feasible tBACT option for the proposed project. The NOC application proposes tBACT as limiting ink use to meet the Acceptable Source Impact Levels (ASIL) of WAC 173-460. Ecology concurs that limiting ink usage is tBACT for the Flexo-Folder-Gluer and has included emission limits equal to the respective SQER for the applicable TAPs to demonstrate compliance with the ASILs.

However, while limiting ink usage to meet the ASIL would mean that additional regulatory review will not be required for the project as it is described in the application, it is not clear how an increase in emissions of the identified TAPs will affect the emissions of other pollutants, including other TAPs. Based on a phone conversation with Mr. Roberto Artiga, Environmental Services Manager at KapStone, on May 13, 2016, the request for a limit of the ASIL rather than the estimated PTE is due to the fact that it is difficult for the facility to predict the types of inks that may be needed for requests from future customers.

Therefore, to provide the needed flexibility while ensuring that TAP emissions associated with ink usage are appropriately tracked and regulated, the facility will be required to maintain records about the inks that are used at the Flexo-Folder-Gluer. They will also be required to submit an annual report to Ecology identifying any new inks used by the unit during the previous calendar year, whether there were any new TAPs associated with those inks, and a calculated emission rate for any TAPs emitted by the unit. In addition, if the facility will need to use a new ink or combination of inks for a future customer that will cause either emissions of a new TAP or increase the emissions of an existing TAP at levels greater than the new source review exemption levels, the facility must submit a request to revise this Order to ensure that the new source review requirements will continue to be met for the unit.

- b. Ambient Impact: As can be seen in Table 3 above, none of the TAPs are estimated to be above the SQER. Therefore, toxic effects are not expected at the emission rates estimated for this project.
5. The current AOP for KapStone includes one emissions limit for the Box Plant Production Lines. The limit is a NESHAP limit and requires that the HAP emissions from the Box Plant Production Lines be less than or equal to 0.04 times the mass of material applied. Materials applied include inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied. The application indicates that the Box Plant Production Lines with the new unit will continue to meet this limit.
 6. An environmental checklist was submitted with the NOC Application which considered environmental impacts of the project as required by chapter 43.21C of the Revised Code of Washington (RCW), also known as the State Environmental Policy Act (SEPA). Ecology reviewed the checklist and made a Determination of Nonsignificance (DNS) which was signed on June 24, 2016 and made available for public comment at the same time as the order.
 7. The proposed project meets all applicable federal and state rules and regulations including: General Regulations for Air Pollution Sources, Chapter 173-400 WAC,

Chapter 173-460 WAC, and National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63.

THEREFORE, it is ordered that the project, as described in said NOC permit application and other information submitted to the Ecology in reference thereto, is approved subject to the conditions listed below.

CONDITIONS

1. The requirements in this condition apply to the used Martin Model 924 Flexo-Folder-Gluer that is being installed in association with this project.
 - a. The Flexo-Folder-Gluer must be operated in a manner consistent with good air pollution control practices, including minimizing usage rates and VOC contents of additive chemicals.
 - b. Compliance with this requirement will be demonstrated by limiting ink usage by the Flexo-Folder-Gluer. The limits specified in this condition shall not be exceeded. The limits shall be monitored at the monitoring frequency and with the compliance test methods specified. Reporting shall be as specified for each parameter.

	Pollutant	Limit	Monitoring and Reporting
1.b.1	Acrylic Acid	0.131 lbs/day	<p>Record the square footage in MSF produced by the Flexo-Folder-Gluer on a daily basis and the average ink usage factor ^a and weighted average content of acrylic acid in the applied ink products on a monthly basis.</p> <p>Estimate the average daily and maximum daily application of acrylic acid applied at the new Flexo-Folder-Gluer ^b and report them in the monthly report.</p> <p>Report any exceedances in the monthly report.</p>
1.b.2	Propylene Glycol	3.75 lbs/day	<p>Record the square footage in MSF produced by the Flexo-Folder-Gluer on a daily basis and the average ink usage factor ^a and weighted average content of propylene glycol in the applied ink products on a monthly basis.</p> <p>Estimate average daily and maximum daily application of propylene glycol applied at the new</p>

Pollutant	Limit	Monitoring and Reporting
		Flexo-Folder-Gluer ^b and report them in the monthly report. Report any exceedances in the monthly report.
1.b.3 VOCs	2.0 tons/year	Record the square footage in MSF produced by the Flexo-Folder-Gluer on a daily basis and the average ink usage factor ^a and weighted average content of VOCs in the applied ink products on a monthly basis. Estimate the monthly VOC emissions and the annual VOC emissions, based on a 12-month rolling average, from the Flexo-Folder-Gluer ^b and report them in the monthly report.

- a. Ink usage factor is the pounds of ink applied per MSF produced at the Box Plant.
- b. Estimate application of the pollutant using the following equation -
 (Ink usage factor) x (MSF produced by the Flexo-Folder-Gluer) x
 (weighted average content of applicable pollutant in the applied inks)

2. In addition to the monitoring and reporting requirements in Condition #1, the facility must maintain the following records for a minimum of 5 years:
 - a. Documentation about the inks that are used by the Flexo-Folder-Gluer each month, including, but not limited to, MSDS or SDS for each of the inks,
 - b. The VOC content in each ink and weighted percentage of any VOC that is a HAP or a TAP, and
 - c. An estimate of the average amount of ink used on a daily basis.
3. KapStone must submit a TAP emissions report to Ecology annually. The report must be submitted by January 31st for the previous calendar year. The report must include the following information:
 - a. A list of any new inks that were used at the facility during the calendar year.
 - b. A list of any new TAPs associated with the new inks.
 - c. The calculated annual emission rate for any TAPs that were emitted by the Flexo-Folder-Gluer unit.
4. In accordance with WAC 173-400-110, a modification to the Flexo-Folder-Gluer, including a change in the method of operation such as the use of new inks, is subject to

new source review requirements. Prior to the use of any new inks that will cause the Flexo-Folder-Gluer to emit either a new TAP or an existing TAP above the new source review exemptions levels, the facility must submit a request to revise this Order, as allowed by WAC 173-400-111(8), to address those increases. The request must include sufficient information for Ecology to assess the items specified by WAC 173-400-111(8)(a).

5. The operation and maintenance manual for the Box Plant Production Lines must be updated to reflect the addition of the Flexo-Folder-Gluer. The operation and maintenance manual must be followed. A copy of the manual must be available to Ecology.
6. The following notifications concerning the project shall be submitted to Ecology:
 - a. Within 15 days of commencing construction, a letter informing Ecology of the date on which construction commenced and a description of the construction activity undertaken.
 - b. Within 30 days of completing the project or permanently stopping work on the project, a letter informing Ecology of the date on which the project was completed or work on the project was permanently stopped.
7. In accordance with WAC 173-400-111(8), the owner or operator may request, at any time, a change in the conditions of this Order. The request should include the information necessary to demonstrate compliance with the requirements of WAC 173-400-111(8)(a)(i) through (a)(v).
8. Access to the source by Ecology or local regulatory personnel shall be permitted upon request and presentation of proper credentials for the purpose of compliance assurance inspections. Failure to allow access is grounds for revocation of this determination of approval.
9. The Permittee shall retain records of all required monitoring data, records, and additional support information for a minimum period of 5 years from the date of monitoring sample, measurement, report, or application.
10. Any activity or operation, which is undertaken by KapStone or others, in a manner which is inconsistent with the notice of construction application received by Ecology on April 28, 2016 and this order, shall be subject to Ecology enforcement under applicable regulation. Nothing in this order shall be construed so as to relieve KapStone of its obligations under any state, local, or federal laws or regulations.

11. This approval shall become void if construction is not commenced within eighteen (18) months after receipt of this approval, or if construction of the project is discontinued for a period of eighteen (18) months.

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

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

1. Violation of any terms or conditions of this authorization.
2. Obtaining the authorization by misrepresentation or failure to disclose fully all relevant facts.

The provisions of this authorization are severable and, if any provision of this authorization, 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.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do both of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

MORE INFORMATION

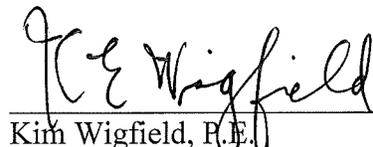
- **Pollution Control Hearings Board**
www.eho.wa.gov/Boards_PCHB.aspx
- **Chapter 43.21B RCW, Environmental Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice and Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 70.94 RCW, Washington Clean Air Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=70.94>
- **Air Quality Rules**
www.ecy.wa.gov/laws-rules/ecywac.html#air

SIGNATURES

Reviewed by:


Stephanie Ogle, P.E.
Environmental Engineer
Waste 2 Resources Program

9/6/16
Date


Kim Wigfield, P.E.
Acting Industrial Section Manager
Waste 2 Resources Program

9/6/16
Date

**Washington State Department of Ecology
Response to Public Comment**

**Longview Fibre Paper and Packaging
d/b/a KapStone Kraft Paper Corporation
300 Fibre Way
Longview, Washington 98632**

**NOC Order No. 13302
Flexo Folder Gluer Project
August 4, 2016**

Department of Ecology (Ecology) published notice of an opportunity to comment on the proposed notice of construction (NOC) order in both the The Daily News and Tu Decides on June 24, 2016. The NOC order will allow Longview Fibre Paper and Packaging, d/b/a KapStone Kraft Paper Corporation (KapStone), to install an additional flexo folder gluer in their Box Plant. This piece of equipment will make boxes from sheets of corrugated cardboard and print labels on them. In the notice, Ecology invited public review of the proposed NOC order and provided a 35-day public comment period. The deadline for submittal of written comments was July 29, 2016. An open house followed by a formal hearing was held on July 27, 2016. No one attended the event and no oral comments were received at the hearing. Ecology received written comments from one individual via email during the comment period.

Ecology carefully reviewed the comment that was received. During the review Ecology considered whether the comment provided any new facts relevant to the project, or identified any areas where the proposed NOC had neglected or misapplied an applicable requirement found in rule or law. We have included the comment that was received in this document. No changes were made to the Order as a result of the comment. A copy of the final NOC order will be sent to all interested parties upon issuance and posted on the Industrial Section website at <http://apps.ecy.wa.gov/industrial/>.

The comment appears in regular text below, followed by Ecology's response in italicized text. Ecology will send a copy of this response to comments to the individual who provided comments.

Comment

I am writing regarding the proposed Notice of Construction Order No. 13302 and Determination of Nonsignificance for the Kapstone Flexo Folder Gluer Project.

I realize the lead agency has determined the increased air emissions are not expected to have "a probable significant adverse impact on the environment". I also realize the increased amounts of the pollutants are not listed as large; however, the residents of Longview have noticed that industrial odors have increased to be much, much more frequent during the past couple years--sulfur, NCGs, or other chemicals almost daily/nightly--and sometimes inside homes, businesses, and at times the local hospital. The community impact has been very large. Once in a while we experience sickening odors from Kapstone; residents suffer bad headaches and other symptoms very often from the two local mill sources. As a result, no matter the odor threshold, any increase in toxics/pollutants in this area is a serious concern and I oppose these.

Acrylic acid is described with an acrid or tart smell, and exposure per the EPA includes a strong irritant to the skin, eyes, and mucous membranes in humans. The Agency for Toxic Substances and Disease Registry mentions styrene as "reasonably anticipated to be a human carcinogen"; affected organ systems include the liver, nervous system, and eyes; and it has a sweet smell and often contains other chemicals that give it a sharp unpleasant smell.

Residents here suffer a high rate of cancer and asthma, and the health of babies and children is especially a deep concern when breathing unpleasant, sickening odors from mill toxins. Many days local residents would like to be outside enjoying life and they end up rushing around closing their house windows and staying inside. At other times, the odor is indoors, sometimes during the day and sometimes waking people at night. There is always the chance of an upset and we have experienced enough of those here (not necessarily from Kapstone). We do not need additional air emissions in this area.

Thank you for your consideration of the health and safety of Longview residents and of the area environment.

Response to the Comment: Ecology understands that odors are a concern for the facility. However, the minor increase in emissions associated with the proposed project are not anticipated to result in an increase in odors for the following reasons:

- 1. Generally odors associated with the kraft pulp and paper processes are due to the total reduced sulfur (TRS) emissions, which are generated from sulfur compounds. The*

emissions from the proposed project are not sulfur-based and won't increase the TRS emissions from the facility.

- 2. As described in the comment, acrylic acid can have an odor if it is present at concentrations greater than the odor threshold concentration. According to EPA's website on Acrylic Acid, the odor threshold is 277 micrograms per cubic meter (ug/m³). The permit limit for acrylic acid of 0.131 lbs/day is correlated to an acceptable source impact level (ASIL) concentration of 1 ug/m³ at the fence line of the property. At less than 1% of the odor threshold concentration, the predicted increase in emissions of acrylic acid is not expected to contribute to an increase in odors.*

*Ecology also notes that WAC 173-400-040(5), states that "any person who shall cause or allow the generation of any odor from any source or activity which may unreasonably interfere with any other property owner's use and enjoyment of his property **must use recognized good practice and procedures to reduce these odors to a reasonable minimum.**" Condition 1.a of the NOC Order requires that the Flexo-Folder-Gluer must be operated in a manner consistent with good air pollution control practices, including minimizing usage rates and VOC contents of additive chemicals. This will ensure that the any potential for odors from this project will be minimized.*

Finally, the comment also expresses concerns about potential health impacts from the predicted increase in acrylic acid (and other chemicals) associated with this project. As mentioned previously, the NOC Order includes limits to ensure that the emissions of acrylic acid and propylene glycol will remain below the ASILs. These ASILs were established to ensure that emission increases at or below that level will be sufficiently low to protect human health from potential carcinogenic and/or other toxic effects, as required by WAC 173-460-070. As stated previously, the NOC Order includes a requirement to minimize the usage rates and VOC contents of the additive chemicals. The NOC Order also includes a recordkeeping and reporting requirement for tracking the chemicals that are used by the Flexo Folder Gluer that don't have specific limits in the permit to ensure that emissions of these chemicals are maintained below the exemption rates specified by WAC 173-460-070, as described in the application. As such, the limits and conditions in the Order should minimize any potential health impacts associated with the proposed project.

No changes were made to the NOC Order as a result of this comment.