

**FINAL SUMMARY**  
**OF ISSUES AND RESPONSES**

**Relating to the Class 1 Air Quality Operating Approval for J. D. Irving, Limited**

**Lake Utopia Paper**

**Prepared by:**  
**Authorizations Branch**  
**New Brunswick Department of Environment and Local Government**  
**November 2020**

## **INTRODUCTION**

As part of the Public Participation Process under the Clean Air Act, the Department of Environment is required to prepare a “*Final Summary of Issues and Responses*”. This marks the 150<sup>th</sup> day of the 180-day public comment period and is available on the Internet site or through any Department of Environment and Local Government office.

The department's Project Management Team is responsible for summarizing the comments (including questions) made to the department by the public to date and for providing, where possible, responses to those comments. In addition to the Final Summary Report of Issues and Responses, an intended approval is also prepared and made available to the public.

Where applicable, the responses in the Final Summary refer to conditions in the intended approval. In this way, the public has the opportunity to view the department's recommended action by the approval holder to address various concerns through the approval itself. Other responses would outline how issues are, or can be addressed through other means, including administratively, by improving operating practices, or by using pollution prevention or pollution control techniques. There may also be responses that address issues which may not be significant in terms of environmental protection or public health, but that are considered in the overall review of a facility's operational activities.

## **ABOUT THE FACILITY**

Lake Utopia Paper is a pulp and paper mill located approximately 6.5 km east of the town of St. George, New Brunswick. The mill produces corrugating medium from a mixture of two fibre types. The primary component is virgin fibre produced by the neutral sulphite semi-chemical (NSSC) pulping process from hardwood chips. The remainder is made from recycled cardboard. The mill facility was initially commissioned in 1971 and was operating as Fundy Forest Products. J.D. Irving Limited purchased the mill in 1973 and has operated it since as Lake Utopia Paper. Using the NSSC pulping process, recycled cardboard, and the corrugating paper machine, the plant produces approximately 516 tonnes per day of finished corrugating medium.

As required under the *Air Quality Regulation – Clean Air Act*, Lake Utopia Paper is considered a source and therefore, must apply for an Air Quality Approval to Operate from the New Brunswick Department of Environment and Local Government. The facility is required to conduct its operations according to conditions outlined in the issued Air Quality Approval to Operate, which are aimed at preventing unfavorable air quality conditions. The conditions are generally wide-ranging and may include such requirements as:

- limitations on operational parameters;
- requirements for testing and monitoring emissions from specific unit operations;
- requirements for testing and monitoring the ambient air quality surrounding the facility;
- requirements to operate air pollution control equipment;
- limits on emissions that are approved to be released to the atmosphere;
- provisions for equipment upgrade and/or maintenance;
- requirements for environmental emergency and/or compliance reporting; and
- other conditions aimed at minimizing the facility's impact on the environment.

The Regulation provides for approvals to be issued by the Minister of Environment and Local Government for a specified period, not to exceed five years.

For more detailed information on the Lake Utopia Paper Mill facility, please see the Facility Profile, available on the department's Public Information Access Internet Site or through any Regional Office of the department.

Information is also available by contacting Lake Utopia Paper directly. (The contact information and Internet site address appear at the end of this Summary)

## **GENERAL INFORMATION ABOUT THE SUMMARY**

The summary includes comments received from the public comment period that ran from July 15, 2020 to October 13, 2020.

***It is important to note that while the Final Summary reflects all relevant public comment received by the department, the names of specific individuals or groups who commented are not identified.***

Any comments received or issues raised which are not directly related to air quality issues regarding this facility will not be included in the summary of issues and responses.

## **SUMMARY OF COMMENTS RECEIVED AND RESPONSES PROVIDED**

During the final portion of the public comment period, from July 15, 2020 to October 13, 2020, the Department received the following comments, questions, or inquiries, regarding the Lake Utopia Paper Mill or its current Air Quality Approval to Operate, through this public review process.

### **Title Page of Approval**

**Issue:** The writer would like to see the Cover Page of the Approval identify the Facility by not only the legal name, "J.D. IRVING, LIMITED" but also state the common name of "Lake Utopia Pulp and Paper Mill". The concern is if someone searches this document only seeing the cover page they may not be immediately aware of which pulp mill is referred to within.

**Response:** Acknowledged. The Approval cover page will be modified to have "Lake Utopia Paper Mill" in place of "Corrugated Medium Pulp and Paper Mill".

**Issue:** The writer asks if a deliberate attempt was made in the Draft version to keep the specific name of the facility from appearing on the title page of the Approval?

**Response:** No. The current and previous Approval cover page versions had "Corrugated Medium Pulp and Paper Mill".

### **Definitions**

**Issue:** The writer points out that "Department" will need to be changed to describe new name for your Department recently announced.

**Response:** The Minister is now the Minister of Environment and Climate Change but the Department name remains the same, which is the Department of Environment and Local Government.

**Issue:** Why was the biomass boiler exhaust stack not included under "Mill Complex Emissions Source" definition as it is referred to in current Approval and Facility Profile?

**Response:** The biomass boiler exhaust stack is included under the definition “Mill Complex Emissions Source”. It is referred to as Boiler #4 (Biomass) Stack.

### Public Review

**Issue:** Please explain the reasoning for the six-month delay in the public review process. What was the new information the Department received that you had to review?

**Response:** In early February 2020, the Department received a written request from the company asking for an increase in the annual SO<sub>2</sub> emission limit in the renewed Approval. Since deadlines associated with the Public Participation Process were quickly approaching, the Department required more time to understand specifics on the limit increase request and to carefully review its merits prior to making an informed decision.

### Terms and Conditions

**Issue:** For Condition #16, reference is made to “at any reasonable time”. Please be specific what this means in terms of 24 hours or days of week? Could the Approval Holder deny access during ‘unreasonable’ times that could interfere with the Minister gathering evidence for an enforcement process?

**Response:** Wording such as “at any reasonable time” is common language used in Approval conditions. It would more speak to the timing for routine auditing or a site visit. As example, an Inspector showing up for an unannounced site visit at 2:00 am to a facility that does not operate 24 hours per day and expecting immediate entry. If there is probable cause for the timing of the visit, like gathering evidence for an enforcement process, then the Approval Holder does not have any right to deny access to the Facility by citing ‘unreasonable’ timing.

**Issue:** For Conditions #21 and #22, the writer feels these are sufficiently detailed to get the information to the Department but would like to see added the on call Regional Inspector be available to actually go to the site depending upon the reported event to commence an investigation. Also, would like to see action options written in the Approval depending on the occurrence or emergency event.

**Response:** The assigned on-call Inspector for the Department will vary throughout the weeks of the year. Therefore, current practice for the Department is utilization of the National Environmental Emergencies Centre (NEEC) for the initial reporting of after-hours emergencies. The NEEC then makes contact with the assigned on-call Inspector for the Department. An occurrence or potential emergency situation will differ significantly in circumstances. For that reason, it would not be practical to add specific action items into Approval Conditions. The general action items specified in Condition 22 of the Draft Approval and included as part of the Detailed Emergency Report requirements are sufficient to address this issue.

**Issue:** Please tell the public what the Minister means by an “environmental emergency”.

**Response:** "environmental emergency" means a situation where there has been or will be a release, discharge, or deposit of a contaminant or contaminants to the atmosphere, soil, surface water, and/or groundwater environments of such a magnitude or duration that it could cause significant harm to the environment or put the health of the public at risk.

This definition is included in the draft Approval.

**Issue:** For Condition #23 – Reference is made to Schedule B of the Air Quality Regulation - Clean Air Act. Please provide link. Please advise when this or these regs were last updated? Many could be outdated. How old are these or the one referred to as the “Air Quality Regulation - Clean Air Act”?

**Response:** The Air Quality Regulation and the maximum permissible ground level concentrations stipulated in Schedule B came into force in December 1997.

Link to the Air Quality Regulation: <http://laws.gnb.ca/en/ShowPdf/cr/97-133.pdf>

**Issue:** For Condition #24, with it being stated that the Approval Holder has spent significant capital to improve on air pollution control, why is it that the PM and NO<sub>x</sub> limits are to stay the same and an increase of 250 tonnes/year allowed for SO<sub>2</sub>? There is a public disconnect here, with much more explanation required. The writer feels a new increased limit on SO<sub>2</sub> emissions is unacceptable and wishes to have their viewpoint stated as such in the Final Summary.

**Response:** Between the years 2016 and 2018, a major upgrade project to the existing waste water treatment system process at Lake Utopia Paper was completed. This new upgrade allows the facility to generate, capture and use more biogas as a fuel in the boilers and has also resulted in an improved biogas measuring system. Biogas is a carbon neutral fuel that replaces a significant volume of fossil fuels and reduces the associated CO<sub>2</sub> emissions generated by the facility. The combustion of biogas results in higher SO<sub>2</sub> emissions generated.

In February 2020, the Department received notification from Lake Utopia Paper that the company projects a considerably higher future demand for a specialty (high strength / low basis weight) grade box product. It has been expressed to the Department that projections indicate keeping up with an increased future demand for this specialty grade box product will result in significantly increased organic loadings to the wastewater treatment system. The low rate anaerobic digester system as its currently designed, is well equipped with the capacity to take on the increased loadings without any modification to how it currently operates. As a result, additional biogas will be produced and contained by the system. The combustion of this additional biogas will result in higher total annual SO<sub>2</sub> emissions generated than in the previous few years by the mill. Thus, the facility has made a request to the Department for a limit increase to their permitted annual SO<sub>2</sub> emission totals. The Department has increased the annual SO<sub>2</sub> emission limit to 750 tonnes per year but has added Condition #52 into the Intended Approval, which requires Lake Utopia Paper to submit a plan for additional ambient air quality monitoring of SO<sub>2</sub> in order to ensure that the maximum permissible ground level concentrations are not exceeded.

**Issue:** For Conditions #32 and #33, the writer feels it is unacceptable that the Approval Holder is permitted to burn woodwaste from Flakeboard Company in the biomass boiler. The writer has concerns with elevated PM as a result and that the flakeboard material is manufactured with glues, resins and paints which should not be burned. The writer believes that despite having the percentage limited to 50% mixture content this is still too high.

**Response:** The same Conditions allowing woodwaste to be accepted from Flakeboard Company were in the previous Approval. This is an acceptable means of handling this waste stream and the limits on mixture amount and moisture content are appropriate. In 2014 stack testing was conducted on the biomass boiler while burning woodwaste from Flakeboard Company and there was no significant increase in emissions from the stack.

**Issue:** The writer asks what contaminants are in these Flakeboard Company woodwastes?

**Response:** The woodwaste from Flakeboard Company contains wood and small amounts of resin.

**Issue:** For Condition #34, the writer states concerns with allowing the Approval Holder to burn small quantities of oily waste, spilled oil, oily rags, bark or sawdust to absorb spilled oil and other materials including commercial absorbents approved by the Director. Please describe what commercial absorbents are approved by the Director? Will the Department require the Approval Holder to document the quantity of these material? This needs to be included in the Approval.

**Response:** That means that for the company to include commercial absorbents to be burned under this Condition that they would have to first obtain written permission from the Director. If the materials approved by Condition #34 are used as a fuel source it must be documented in the Reporting Section of the Approval (Condition #55).

### Particulate Matter

**Issue:** Regarding PM, especially PM<sub>2.5</sub>, what percentage of the 15 tonnes/year emitted in 2018 is from PM<sub>2.5</sub>? The writer states concerns with PM<sub>2.5</sub> as being toxic since the human body has no way to filter out this fine particulate.

**Response:** In 2018 the PM<sub>2.5</sub> percentage was calculated to be 74% or 11 tonnes.

### Limits

**Issue:** The writer feels that Conditions #24 through #28 send the wrong message to the Approval Holder that it is ok continue raising limits and not reducing them. The writer believes the Final Approval should have a condition that states that the Approval Holder will submit a plan of action to reduce these contaminants identified as SO<sub>2</sub>, NO<sub>x</sub> and PM.

**Response:** The emission limits are appropriate for a pulp and paper mill of this size. Ambient air quality monitoring of SO<sub>2</sub> is required to ensure that the maximum permissible ground level concentrations are not exceeded.

### Facility Management

**Issue:** The writer notes the previous Approval had three strong conditions (#28, 29 and 30). Now the Approval Holder just has to 'maintain an Odour Control Plan which is reviewed, as necessary. What is the rationale for reducing this requirement?

**Response:** The previous Conditions #28, 29 and 30 were for the Facility to initially develop and then implement an Odour Control Plan acceptable to the Department. Since that Odour Control Plan is now implemented the develop conditions (#28 and 29) are no longer required. The Plan is to be continually reviewed and updated accordingly, as per Condition #29 of the new Approval.

### Testing and Monitoring

**Issue:** The writer notes there appear to be additional testing requirements in the draft Approval as compared to the current Approval. Why is this? What are your concerns and or needs for such information?

**Response:** There are no current concerns with lack of information in this section. Some additional SO<sub>2</sub> monitoring conditions have been added to this new Approval. This is aimed at the Facility now having the technological capabilities to begin reporting industry air quality data to the Department on a near real time basis.

**Issue:** The writer recommends a condition to be included in the Testing and Monitoring section of the new Approval that would be worded as such, "The AH upon identifying emission levels of concern will submit to the Minister a pollution reduction plan of actions to address such"

**Response:** Condition #28 in the new Approval generally speaks to the Approval Holder promptly addressing potential of any off-site impact of pollutants and then tackling it with an Action Plan. This Condition adequately addresses this concern.

### Reporting

**Issue:** The writer is pleased to see 'strong' reporting conditions in this Approval, particularly Condition #54 parts b and d. Also, the writer is very pleased to see Greenhouse gas reporting Conditions such as #56 and #57. The writer asks, what are the guidelines referred to in #57 (Guidelines for Greenhouse Gas Management for Industrial Emitters in New Brunswick)? Do the guidelines include a requirement to reduce GHGs or submit a plan to reduce over time? If not, will this be included in the Approval a requirement to reduce GHG's over the life of this Approval? If no, why is that?

**Response:** The Guidelines for Greenhouse Gas Management for Industrial Emitters in New Brunswick were developed by the Department to assist industries in developing GHG Management Plans. Lake Utopia Paper was required to develop and submit a GHG Management Plan to the Department in the previous Approval to Operate. The draft Approval to Operate requires Lake Utopia to submit an annual progress report on GHG management. As of 2019 Lake Utopia Paper has reduced their GHG emissions by 56% of the 1990 level, which exceeds the New Brunswick target of 10% reduction. Below is a link to the Guidelines:

<https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Climate-Climatiques/GuidelinesForGreenhouseGasManagement.pdf>

### Approval Draft Development

**Issue:** The writer asks, in preparing the Draft Approval, please explain what role or involvement the Approval Holder had in these conditions. Were there meetings, calls with the Approval Holder to obtain their approval for new or changed conditions? Was the Draft developed completely and independently from the Approval Holder? Please respond.

**Response:** Yes. There were calls and virtual meetings occurring between the Approval Holder and the Department during the development of the Draft Approval. During the Approval renewal process, information from industry is required to determine what terms and conditions should be in the Approval to Operate but the Department does not obtain approval from the company for any new or modified terms and conditions.

### Comments on Interim Summary

**Issue:** On Page 6, what about covering the sludge ponds for odor control? The answer provided does not explain why the equalization basin covers were removed. Please provide an explanation.

**Response:** This appears to be a communication misunderstanding. Sludge ponds (equalization basin) were historically covered as much as possible during operations of the facility. The answer did not mean that the covers were removed but rather meant that the equalization basin itself had been removed in 2018 since it was no longer required, following the installation and operation of the low rate anaerobic digester.

**Issue:** Regarding #8 answer provided, the writer did not receive these annual Air Quality Reports as mentioned in the correspondence. Please forward.

**Response:** The requested reports were originally sent by email to the writer in August 2020. They have been re-sent to the writer following the Department's receipt of this comment.

**Issue:** Regarding #11 answer provided, "Several meetings occurred during this Approval period" The writer asks, did the Approval Holder make presentations as to what they wanted or needed in the new Approval or were the meetings about concerns regarding increase in air contaminants such as SO<sub>2</sub> and PM?

**Response:** Those meetings referenced in this answer would have included some face to face correspondence, video and phone calls but were not specifically about air contaminant concerns and/or upcoming Approval renewal requests from the Approval Holder. The provided Department response in the Interim Summary, "several meetings occurred during this Approval period" was just a general in nature statement that was focused on the duration of the time period that the previous Approval was in effect and not on the Approval renewal period.

**Issue:** Regarding #14 answer provided, the writer feels the answer to the question is unclear and vague.

Previous comment was; *the writer feels limits for SO<sub>2</sub>, PM and NO<sub>x</sub> should be further reduced from the last Approval. Judging by the reductions in GHG emissions one would expect the other emissions would go down.* Previous answer provided was; *SO<sub>2</sub>, PM, NO<sub>x</sub> emissions and GHG emissions are not directly correlated. Each fuel produces different amounts of SO<sub>2</sub>, PM and NO<sub>x</sub> when combusted.*

**Response:** The emission limits are appropriate for a facility of this size. Emissions of PM, SO<sub>2</sub> and NO<sub>x</sub> are not directly correlated to GHG emissions but more dependent on the type of fuel burned. For example, a major upgrade project to the existing waste water treatment system process at Lake Utopia Paper was completed. This new upgrade allows the facility to generate, capture and use more biogas as a fuel in the boilers. Biogas is a carbon neutral fuel that replaces a significant volume of fossil fuels and reduces the associated CO<sub>2</sub> emissions generated by the facility. The combustion of biogas results in higher SO<sub>2</sub> emissions generated.

**Issue:** Regarding #15 answer provided, the writer feels the question provided was not answered and stresses the question is clear and specific and requires an equally clear and specific answer.

Previous questions were; *Did the air pollution control equipment on each boiler work 100% of the time? Were there periods of time when such air pollution equipment was not working? If so for what time period; hours, days, weeks, months?* Previous answer provided was; *Each boiler stack is equipped with opacity monitoring to detect PM. If the opacity monitors are not working visual inspections are conducted to compare with the Smoke Density Chart as issued by the Province of New Brunswick. Since the main source of PM is the combustion of bark, the boiler does not operate on bark if the monitor is not functioning.*

**Response:** The Department is not aware of any periods of time in which that Facility was operating with non-functioning pollution control equipment on any of the boilers.

## **MINISTER'S DECISION**

The Minister has concluded that J.D. Irving, Limited - Lake Utopia Paper will be issued a five year Approval to Operate, effective December 13, 2020. The new Approval, with identification number I-10795, will replace the existing Approval I-8900 on that date.

## **CONTACT INFORMATION:**

For further information on the operation of the Lake Utopia Paper please contact:

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