FPAC.ca
APFC.ca

Monday, April 3rd, 2023

The Honourable Stephen Guilbeault, P.C., M.P.
Minister of the Environment
c/o The Executive Director Program Development and Engagement Division
Department of the Environment
Gatineau, Quebec K1A 0H3

Sent by email: substances@ec.gc.ca

Re: Notice of Objection and Request for Board of Review in relation to the Proposed Order to add 'Crude Tall Oil' to Schedule 1 to the *Canadian Environmental Protection Act, Canada Gazette*, Part I, Volume 157 (February 18, 2023), Number 7: Order Adding a Toxic Substance to Schedule 1 to the *Canadian Environmental Protection Act, 1999*

FPAC provides a voice for Canada's wood, pulp, and paper producers nationally and internationally in government, trade, and environmental affairs.

As an industry with annual revenues exceeding $75B, Canada's forest products sector is one of the country's largest employers operating in over 600 communities, providing 225,000 direct jobs, and over 600,000 indirect jobs across the country. Our members are committed to collaborating with provincial governments, Indigenous peoples, other rights holders and stakeholders to develop a cross-Canada action plan aimed at advancing forest health, while supporting workers, communities and our environment for the long term. We are a critical partner in the fight against climate change and have invested $1.5 billion dollars in clean technology in the last five years.

This submission responds to the February 18th, 2023 Gazette Notice in which the Governor in Council, on the recommendation of the Minister of the Environment ("Minister"), proposed an Order to add "Crude Tall Oil" (CTO) to Schedule 1 of the *Canadian Environmental Protection Act, 1999* ("CEPA") (hereafter referred to as "Proposed Order"). FPAC would like to formally object to the Proposed Order, and request that you establish a Board of Review under Section 333 of the ***Canadian Environmental Protection Act, 1999*** (the Act) to review the recommendation.

Forest Products Association of Canada
Suite 410–99 Bank Street. Ottawa, Ontario K1P 6B9

For the consideration of the Minister, we have provided a newly released peer-reviewed publication entitled "The crude tall oil value chain: Global availability and the influence of regional energy policies." (Aryan and Kraft, 2021[1]) This paper speaks to the economics associated with CTO production and was not available to the Ministers at the time of the decision by the Governor in Council. This study confirms that only certain plants around the world can produce CTO. This is in contrast to the conclusions of the Final Screening Assessment (FSA), which erroneously assumes that all kraft pulping facilities in Canada have the potential to release the CTO.

We have also attached a memorandum prepared by the National Council for Air and Stream Improvement (NCASI). This memorandum was available to the Ministers at the time of the decision by the Governor in Council, which was listed as February 3rd in the Canada Gazette notice posted by Wendy Nixon, Assistant Clerk of the Privy Council. That memorandum is now offered as additional new evidence that was not available when the Final Risk Assessment was published in the summer of 2022.

We believe that the FSA cements a scientific error relating to CTO releases from existing facilities. In our view, there is sufficient data to rebut this claim, as adduced to the Ministers through the NCASI memorandum of February 8, 2023. That memorandum is now offered as additional new evidence that was not available to the Ministers as they completed their final risk assessment published in the summer of 2022.

To be clear, CTO is not an inadvertently generated by-product of kraft pulp manufacturing, as it can only be produced at mills with a separate, self-contained tall oil plant operating under strongly acidic conditions and elevated temperatures. **It cannot be inadvertently produced in mill effluents.**

In addition, the NCASI memorandum explains that the ecological exposure assessment used in the FSA erroneously assumes that the concentration of resin acids in condensates is directly associated with the presence or potential presence of CTO in effluent. Resin acids in condensates predominantly come from pulping and chemical recovery areas of a kraft pulp mill, and therefore, presence of resin acids in a condensate stream cannot be construed as evidence of the presence of CTO product.

The NCASI memorandum suggests that given the absence of CTO loss data from kraft pulp mills, i.e., data supporting direct, routine losses of CTO to wastewater treatment (WWT), and the fact that resin acids in condensates predominantly come from pulping and chemical recovery areas of a kraft pulp mill, Environment and Climate Change Canada (ECCC) and Health Canada (HC)

[1] Aryan V. and A. Kraft, 2021. The crude tall oil value chain: Global availability and the influence of regional energy policies. Journal of Cleaner Production. 280 (2021) 124616. https://doi.org/10.1016/j.jclepro.2020.124616

revise their predicted environmental concentration (PEC) estimates to zero rather than using generic data on resin acids in mill condensates as the foundation upon which to base PEC estimates. NCASI also suggests ECCC/HC consider the mill-specific information used in preparing the FSA as representing the total potential environmental exposure resulting from CTO production in Canada. This information suggests less than a handful of mills in Canada possess CTO production capacity.

CTO is a product and as such it is not released to the environment. It is worthwhile noting that the absence of available information on CTO losses also confirms that, on a routine basis, kraft pulping facilities operating CTO production plants do not intentionally sewer any amounts of CTO to their wastewater treatment system.

As indicated in previous exchanges with ECCC, any spills that may occasionally occur from the tall oil plant are collected in a sump and pumped back into the process. In the rare event a marginal amount of CTO overcomes the spill containment measures in place and enters the sewers, the wastewater treatment system would act to biodegrade the substances in CTO as effectively it biodegrades resin acids from other areas of the pulping facility.

Given the above, the mathematical extrapolation of CTO concentration in condensates from resin acids data, and the use of that concentration to develop an emission factor to wastewater treatment for CTO, are not appropriate from a scientific basis. This error impacts the conclusion reached in the FSA regarding the risk of harm to the environment from CTO. We believe this new NCASI memorandum explores this scientific discussion in a way that warrants an independent scientific assessment by a Board of Review.

Consultation Process

We believe that ECCC/HC's publication of the FSA and Risk Management Approach (RMA) for CTO embedded significant updates to its ecological risk assessment methodology that were not present in the draft screening assessment (DSA), and it did so without consulting with affected stakeholders. We feel that this is inappropriate. It is our view that this was undertaken in contravention of the principles that underly Section 4.1 of the Cabinet Directive on Regulation, and specifically the Policy on Regulatory Development.

We were surprised to learn that in the FSA, ECCC/HC significantly altered the proposed approach for the estimation of CTO releases into the environment and did not provide the opportunity for comment. This is a stark departure from the established precedent under the current Chemicals Management Plan (CMP). By way of example only, when completing the DSA for the substance Tetrahydrofuran (The Furans Group), the government learned of new routes of exposure. Rather than making adjustments and finalizing the screening assessment, ECCC/HC re-released an

updated DSA for additional public comment (March 18th, 2023). We believe that would have been an appropriate approach for CTO given the material changes that were made to the scientific approach.

Upon reviewing the Directive, FPAC members have concluded that its application to the updated publication was inadequate as the decision made by the regulatory authority was not supported by an evidence-based process. We believe a constituted Board of Review will be able to examine that decision making process, and based on the new evidence, agree that the preponderance of evidence does not support the approach used in the FSA.

Conclusion

As currently published, the FSA for CTO mischaracterizes the pulp and paper sector in Canada with respect to CTO releases to the environment. As noted in the proposed RMA report, this mischaracterization has the potential to require a costly system, the implementation of which will have no measurable effect on the final effluent release of a substance that is not expected to be present in process waters headed to wastewater treatment. Requiring mills to manage the environmental risk of CTO based on assumptions regarding the interrelationship between CTO and resin acids that are not accurate and which lack validation is likely to lead to fruitless efforts. This is because it is not scientifically possible for CTO to come out of solution in mill effluent, any minor associated resin acids would be indistinguishable from resin acids generated elsewhere in the pulp mill, and resin acids are effectively removed through existing wastewater treatment systems.

Sincerely,

Mahima Sharma
Vice-President, Innovation, Environment, and Climate Change
Forest Products Association of Canada (FPAC)