

## Background to the Swan Valley OSB plant investigation

The Clean Environment Commission is investigating changes that Louisiana-Pacific Limited is requesting to *The Environment Act* Licence Number 1900 S4. This licence was issued in 1997 and in 2004 its nitrogen oxide emission limits were amended. The currently requested increases in air emission limits would allow Louisiana-Pacific to decommission its regenerative thermal oxidizers (RTOs). Details of the Louisiana-Pacific proposal can be found in the documents available at <http://www.gov.mb.ca/conservation/eal/registries/3741lp/index.html>.

The air emission changes pertain to the dryer and press operations at the Swan Valley OSB plant. The following two tables list the air emission limits for each of these operations in *The Environment Act* Licence Number 1900 S4 and the limits that Louisiana-Pacific is applying to have included in an amended licence. Table 1 presents Licence Number 1900 S4 limits and the proposed air emission limits for the dryer. Table 2 presents Licence Number 1900 S4 limits and proposed air emission limits for the press. In both cases, the air emission limits are expressed as grams per second.

**Table 1. Dryer limits (In grams per second)**

<b>Pollutant</b>	<b>Licence 1900 S4, as amended until January 8, 2009</b>	<b>Louisiana-Pacific proposed limit</b>
nitrogen oxides	6.5*	5.24**
volatile organic compounds (VOC)	1.1	20.96
phenol	0.05	0.5
total particulate matter (TPM)	5.14	5.14
formaldehyde	0.085	4.0
benzene	0.008	0.172
hydrogen cyanide	0.4	0.4

**Table 2: Press limits (In grams per second)**

<b>Pollutant</b>	<b>Licence 1900 S4, as amended until January 8, 2009</b>	<b>Louisiana-Pacific proposed limit</b>
nitrogen oxides	4.62*	4.62**#
volatile organic compounds (VOC)	0.28	2.78
phenol	0.7	0.7
total particulate matter (TPM)	2.10	2.10
formaldehyde	0.08	1.1
benzene	0.0003	0.0197
diphenyl-methane diisocyanate (MDI)	0.0141	0.089

\* Nitrogen oxide emissions from the dryer operation could exceed 6.5 grams per second as long as the total emission of nitrogen oxides from the dryer and press operations did not exceed 11.18 grams per second. Similarly nitrogen oxide emissions from the press operation could exceed 4.62 grams per second as long as the total emission of nitrogen oxides from the dryer and press operations did not exceed 11.18 grams per second.

\*\* Under the Louisiana-Pacific proposal, the provision that allowed exceedances of either the nitrogen oxide dryer or press emissions as long as the total emission limit of nitrogen oxide limits from the dryer or press emissions is not exceeded would be repealed.

# While Louisiana-Pacific did not request a change to its nitrogen oxide press emission limit in its application, modelling data provided with its application (Table 2 at <http://www.gov.mb.ca/conservation/eal/registries/37411p/index.html>) indicate that the maximum emissions from the press under worst-case conditions would be 1.5 grams per second.