

The Pulp and Paper Sector

Fact Sheet

Regulations in Force

For 30 years, the Government of Canada has been controlling the pollution stemming from pulp and paper mills on the basis of regulations that were considerably reinforced in 1992, namely by the addition of two regulations regarding the release of substances declared to be toxic in 1990.

Federal Regulation:

The *Federal Pulp and Paper Effluent Regulations*, under the *Fisheries Act*, aim at pollution prevention for the protection of fish and their habitat. These regulations control the liquid effluent of Canadian pulp and paper mills by enacting standards with respect to the level of acute lethality for fish, biochemical oxygen demand (BOD) and total suspended solids (TSS).

Between 1992 and 1995, transitional authorizations were granted to mills committed to the implementation of the measures required to ensure compliance with regulatory standards. The results were very positive: since the implementation of secondary wastewater treatment systems, TSS releases dropped by over 60%, while effluent toxicity and BOD dropped by almost 90%.

Two other federal regulations were adopted under the *Canadian Environmental Protection Act (CEPA)*:

- The *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations* require that mills using a chlorine bleaching process ensure that the dioxin and furan in their effluent are below measurable levels;
- The *Pulp and Paper Mill Defoamer and Wood Chip Regulations* require that defoamer manufacturers conduct an analysis of their product with a view to preventing the formation of dioxins and furans. In addition, the regulations prohibit the use of wood chips from wood treated with polychlorinated phenols.

Provincial Regulation:

The provincial regulation on pulp and paper mills, which comes under the *Environmental Quality Act*, was also reinforced in 1992.

Canada-Quebec Agreement

In Quebec, where almost 40% of Canada's pulp and paper mills are located, an agreement was entered into with the federal government in 1994 to ensure the harmonization of its environmental requirements with those of the province. Thus, Quebec receives information from the mills and forwards to Environment Canada the data required under the three above-mentioned regulations. This single window reduces the industries' administrative burden, but does not remove the responsibilities of each government with respect to enforcement.



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Quebec-Canada co-operation in the area of pollution control targeting pulp and paper mills pre-dates back to before the 1992 regulation and this agreement. Already, in 1988, the governments of Canada and Quebec decided to join forces under the framework of the St. Lawrence Action Plan (SLAP), which has continued its activities since 1993 under the name St. Lawrence Vision 2000.

SLAP aimed at attaining a 90% reduction of toxic liquid releases from 50 plants located along the river. This objective was reached, and 38 pulp and paper mills were among the targeted enterprises.

Response to Violations

The Department does inspections to verify compliance with the Act and regulations, and conducts investigations, when there are sufficient grounds to believe that violations have been committed. These activities include the study of reports submitted by the mills, and effluent sampling and analysis activities conducted to determine compliance or find evidence and information regarding the alleged violation.

The *Fisheries Act* and the *Canadian Environmental Protection Act* set out several repressive measures in response to a violation. The main measures are:

- directions from the inspector;
- directions in the event of releases;
- compliance orders;
- departmental orders;
- injunctions;
- recovery of costs by the Crown;
- alternative measures;
- fines and imprisonment.

The Department can also issue a warning following a violation.

The repressive measures are submitted to criteria established by departmental policies: nature of

violation, efficiency of measure to be taken against the offender to prompt compliance or avoid the offender's repetition of the violation, and consistent enforcement on the part of the Department.

The assessment of the nature of the violation takes the following factors into account: gravity of environmental harm, deliberate violation, repetition of violation, or non-disclosure of information. The efficiency of the measure is assessed on the basis of the offender's previous compliance, his or her diligence and desire to co-operate, and the measures taken by other government authorities for whom similar violations are punishable by law, all with a view to rapidly ensuring compliance and prevent subsequent violations.

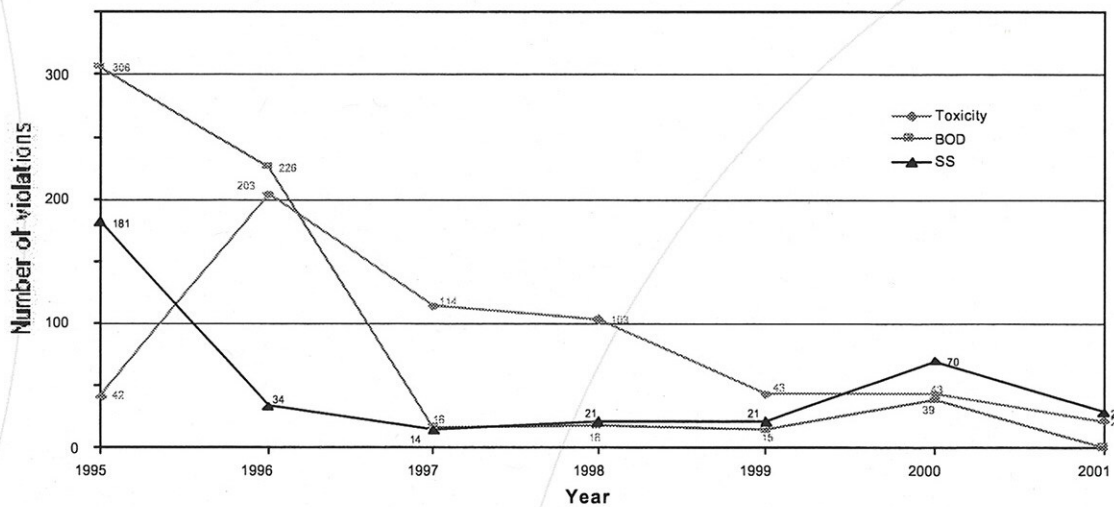
Environmental Compliance and Legal Measures

The *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations* target nine mills in Quebec. This represent 36 quarterly reports submitted to the Department per year. No violations were detected from 1995 to 2000. In 2001, Environment Canada issued a warning following two cases of late production of the data required.

The *Pulp and Paper Mill Defoamer and Wood Chip Regulations* target the same nine mills and represent 108 monthly reports per year. In 1995, Environment Canada detected a violation for which no measure had been taken and issued a warning to a mill for having twice exceeded the standards. In 1999 and 2001, the Department also issued a warning to a mill following an exceedance. No violations were detected in 1996, 1997, 1998, and 2000.

As to the *Federal Pulp and Paper Effluent Regulations*, Environment Canada receives, in total, approximately 740 monthly reports each year from the 62 mills concerned.

Violations to the Pulp and Paper Effluent Regulations since 1995



Legal measures were taken by Environment Canada for the following violations:

	“Lethality» Violation”	“BOD” Violation	“SS” Violation
1995	No measures	No measures	No measures
1996	1 investigation (106 violations committed by one mill)	No measures	No measures
1997	1 investigation (55 violations by one mill)	No measures	No measures
1998	1 investigation (80 violations by one mill)	No measures	No measures
1999	2 investigations (23 violations by 2 mills) 15 warnings (19 violations by 15 mills)	4 investigations (10 violations by 4 mills)	1 investigation (6 violations by 1 mill) 5 warnings (7 violations by 5 mills)
2000	5 investigations (20 violations by 5 mills) 10 warnings (14 violations by 10 mills)	3 investigations (24 violations by 3 mills) 2 warnings (2 violations by 2 mills)	2 investigations (23 violations by 2 mills) 9 warnings (27 violations by 9 mills)
2001	5 investigations (13 violations by 5 mills) 5 warnings (9 violations by 5 mills)	1 investigation (1 violation by 1 mill)	1 investigation (9 violations by 1 mill) 1 warning (2 violations by 1 mill)

Information on the compliance with the Quebec regulations on pulp and paper mills can be found on the Web site of the Ministère de l'Environnement du Québec:

http://www.menv.gouv.qc.ca/programmes/bilans/pates_00/

Improvement of the Environment in the Vicinity of the Pulp and Paper Mills

Since 1992, the *Federal Pulp and Paper Effluent Regulations* of the *Fisheries Act* require that mills assess regulatory efficiency by conducting Environmental Effects Monitoring (EEM) of their effluent.

These studies compare fish and benthic invertebrates (which are a good indicator of habitat quality) in a reference area to those in an area exposed to the effluent. The first cycle of studies ended in 1996, the second in 2000, while the third cycle will end in 2004.

Ten years following their launching, the EEM activities have already revealed the positive effects of the regulations. Most of the mills noted that the environment in exposed areas had shown an improvement between Cycle 1 and Cycle 2. These studies show a reduction in the quantities of chlorinated furans and dioxins in fish, and the effluent of 98% of the concerned mills in Quebec (compared to 84% at the end of Cycle 1) showed furan and dioxin levels that are below *CEPA* standards.

Conclusions and Outlook

Based on the industry's monthly reports, the compliance rate is now over 97% with respect to the *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations* and the *Pulp and Paper Mill Defoamer and Wood Chip Regulations* which come under the *CEPA*.

As to the *Federal Pulp and Paper Effluent Regulations*, the number of violations continues to drop, but the "number of measures taken/number of violations" ratio is on the increase. This shows not only an improvement as regards compliance, but also a more rigorous supervision by the Department with respect to enforcement. For example, the 22 acute lethality violations were all followed by an enforcement measure in 2001. Lastly, the beneficial effects reported following the two first EEM cycles lead us to expect other improvements at the end of Cycle 3 in 2004.

For further information:

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