



**Background paper for the
"Seminar on Strengthening the Enforcement and
Administration of Environmental law in North America."
PANEL 2.- Procedural and evidentiary challenges for effective
environmental law enforcement. (c) Causation.
Author: CEC Secretariat.**

Be it statutory or tort-based, environmental law must grapple with the problem of scientific uncertainty that pervades most environmental issues. From evidence related to emission-exposure and dose-response models, courts must evaluate expert testimony in the distinctive contexts of legal and scientific proof, and it is rarely an easy task for plaintiffs to definitively address the issue of causation. Despite the fact that causation is fundamental to ascribing moral and legal responsibility, even the precautionary principle does not provide an operational construct to direct litigants or the judiciary.

Under Canadian law, the standard of proof for causation in a civil suit is a *balance of probabilities*, and the primary test for causation is the “but for” test. In other words, “but for” the defendant’s actions the plaintiff would not have suffered the injury in question. If this test cannot be satisfied due to factors beyond the plaintiff’s control, and it has been proven that the defendant breached a duty of care owed to the plaintiff, the *material contribution test* can be applied. The plaintiff must show that the event in question “materially contributed” to the occurrence of the injury.¹ Of course, as the Supreme Court of Canada stated recently: “[C]ontext is all important and a judge should not be unmindful, where appropriate, of inherent probabilities or improbabilities...these considerations do not change the standard of proof... In all civil cases, the trial judge must scrutinize the relevant evidence with care to determine whether it is more likely than not that an alleged event occurred.”²

Canadian jurisprudence on causation has established that both the burden and standard of proof are flexible concepts.³ Causation need not necessarily be determined by scientific precision; rather, it is a question of fact to be answered through common sense, and an inference of causation can be drawn from evidence produced.⁴ Epidemiological evidence is admissible in Canadian courts to prove a causal connection, and is often used by plaintiffs submitting health claims to either demonstrate such a connection, or to disprove other alternative sources of causality in order to create a non-coincidental “inference of reasonableness”.⁵

Beyond civil liability, causation in the context of Crown-initiated enforcement litigation is often embedded in the generalized language of environmental statutes and regulations. For example, a typical prohibition against the discharge of particular contaminants under provincial law will require proof that the discharge “causes or is likely to cause an

¹ *Athey v. Leonati*, 1996 SCC 102, at paras.14-15; *Resurfice Corp. v. Hanke*, 2007 SCC 7, at paras. 24 &25.

² *F.H. v. McDougall*, 2008 SCC 53, at paras. 40-49.

³ *Resurfice*, supra note 1 at para. 29.

⁴ *Athey*, supra note 1 at para. 16; *Snell v Farrell* 1990 SCC 73, at p.328.

⁵ *Berendsen v. Ontario*, 2008 OSCJ 6086/94.



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adverse effect".⁶ Judicial interpretation of this notion of "adverse effect" varies across the provinces, depending on the breadth of the qualifying terms contained in the relevant legislation. For example, under section 1 of Ontario's *Environmental Protection Act*, an adverse effect is defined broadly to include: (a) impairment of the quality of the natural environment for any use that can be made of it; (b) injury or damage to property or to plant or animal life; (c) harm or material discomfort to any person; (d) an adverse effect on the health of any person; (e) impairment of the safety of any person; (f) rendering any property or plant or animal life unfit for human use; (g) loss of enjoyment of normal use of property; and (h) interference with the normal conduct of business.

In British Columbia, the *Tobacco Damages and Health Care Costs Recovery Act 2000* actually reformed causation rules in the specific context of (health-based) tort actions by citizens and government against tobacco suppliers. The law codifies risk-based theories of liability by requiring simple proof of a supplier's negligent creation of risk which is presumed to be related to particular diseases associated with smoking.⁷

It should be noted that in prosecutions of particular prohibitions such as those found in the *Fisheries Act*⁸ and the *Ontario Water and Resources Act* (OWRA)⁹, proof of actual harm caused is not required to prove the offence. In fact, the issue of causation arises in relation to whether the accused caused or permitted the prohibited act. Under the *Fisheries Act*, the Crown must show that "when added to water located in any part of the world and under any circumstances, [the substance in question] is deleterious to fish."¹⁰ This relaxed interpretation has been used to interpret the OWRA. The Crown must prove that the defendant unlawfully permitted the discharge of material, that the material contained deleterious substance, that substance was discharged into the water source, and that the substance "may" impair the quality of water (it is not required to show that it is impairing or will impair the quality of water).¹¹

⁶ See Ontario's *Environmental Protection Act*, R.S.O. 1990, c. E.19, s.14(1); see Alberta's *Environmental Protection and Enforcement Act*, s.98. Note that there are over 300 laws and regulations across Canada that contain the term adverse effect,

⁷ *Tobacco Damages and Health Care Costs Recovery Act*, SBC 2000 c. 30, s. (2)5.

⁸ *Fisheries Act*, R.S. 1985, c. F-14, section 36(3): "Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water."

⁹ *Ontario Water Resources Act*, R.S.O. 1990, c. 0-40, section 30.(1): "Every person that discharges or causes or permits the discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters is guilty of an offence."

¹⁰ *R. v. Toronto Electric Commissioners*, 1991 O.C.J. 87, at p. 38.

¹¹ *Ibid.*, at p.40.