Featured Article, January 2009

Canadian National Railway Co. v.

Royal and Sun Alliance Insurance Co. of Canada,
2008 SCC 66

Full-text: **http://www.canlii.org/en/ca/scc/doc/2008/2008scc66/2008scc66.html**

On November 21, 2008, the Supreme Court of Canada found in favour of Canadian National Railway Company (CNR), allowing CNR's appeal, and set aside the judgment of the Ontario Court of Appeal, restoring the trial judgment in CNR's favour, including interest and costs, of approximately $40 million.

This case involved an action commenced by CNR against the subscribing Insurers under a Builders' Risk Policy. The Policy was issued in connection with the construction of CNR's new larger diameter tunnel constructed adjacent to an existing tunnel under the St. Clair River between Port Huron, Michigan and Sarnia, Ontario.

The claim arose out of the failure of a soft ground earth pressure balance tunnel boring machine ("TBM") which had been purchased by CNR to be used in the construction of the tunnel. The Policy insured CNR against "all risks of direct physical loss or damage ... to ... all real and personal property of every kind and quality including but not limited to the tunnel boring machine...and structures, temporary works and underground tunnels in the course of construction." The Policy, like most standard industry forms, contained an exclusion for "the cost of making good…faulty or improper design."

At trial, considerable evidence was led by CNR about the TBM, a complex machine. It was, at the time, the largest TBM in the world and was the key piece of equipment for the project. Lovat Inc., a Canadian company, one of five world leading TBM manufacturers, was selected as the TBM manufacturer. In addition, a significant number of the world's leading experts participated in the design of the TBM, which was an exhaustive and sophisticated process. There was no evidence at trial of any short cuts taken to save costs in the design. To the contrary, considerable resources were brought to bear to produce a state of the art machine.

Approximately two months into tunnelling, the TBM failed because of a failure of the sealing system caused by excess differential deflection (adjacent components moving towards or away from each other beyond acceptable tolerances). The Project was delayed for 229

days. CNR made a claim on the Policy and the Insurers relied on, *inter alia*, the faulty or improper design exclusion to deny coverage. At trial, after 19 days of evidence and the benefit of hearing considerable expert evidence, Ground J. concluded that the Insurers had not proven that there was any fault in the design of the TBM and that, therefore, the Insurers had failed to satisfy their onus to establish the applicability of the faulty or improper design exclusion.

The expert called by the Insurers at trial had no TBM or tunnelling expertise. The trial judge preferred the evidence of CNR's expert, Dr. Les Hampson, who did have such expertise, in finding that the failure of the TBM was not foreseeable and therefore the faulty or improper design exclusion did not apply. In reaching this conclusion, Ground J. applied the foreseeability standard test as enunciated in *Foundation Co. of Canada v. American Home Assurance Co.* (1995), 25 O.R. (3d) 36 (Gen. Div.), aff'd [1997] O.J. No. 2332 (C.A.), i.e. the Insurer had the onus to prove that all foreseeable risks had not been taken into account in the design of the subject property for the "faulty or improper design" exclusion to apply.

On Appeal, the majority of the Court of Appeal modified the foreseeability test by:

1. Requiring not only that all foreseeable risks must be *taken into account* in the design but also that the design *succeed in accommodating* those risks (a standard of perfection); and

2. Failing to consider the essential comparative component of the foreseeability test (i.e. comparing the design in question to some standard).

The majority of the Court of Appeal effectively applied a *prima facie* or perfection standard, as enunciated in the Australian case of *Queensland Government Railways v. Manufacturer's Mutual Insurance* (1968), [1969] 1 Lloyd's L.R. 214 (H.C.A.), in finding that the faulty or improper design exclusion applied to excuse the Insurers from liability. In effect, the majority of the Court of Appeal concluded that *because* the TBM failed, its design was therefore faulty. This results-focussed test is, of course, tautological. This approach rendered coverage under the Policy illusory as every breakdown of a piece of equipment or structure on a construction project would theoretically attract the applicability of the exclusion. Importantly, adopting a *prima facie* test would also effectively negate the onus on an insurer to prove the exclusion as the failure itself would be establish the exclusion without any other proof required by the Insurer.

The Supreme Court of Canada rejected the application of a *prima facie* test, instead adopting a "state of the art" standard. Binnie J., in writing for the majority, stated as follows:

"In my view, the "all risks" policy afforded the CNR greater protection than that which the majority in the Court of Appeal was prepared to allow. At the time of contracting, all parties realized that this was to be the largest earth-balance TBM ever built. Leading experts were enlisted to provide what was described as a "state-of-the art machine" (Exhibit 6, vol. 4, p. 742). The "all risk" policy was written to cover physical damage to an innovative piece of equipment almost the length of a football field operating on a scale with which the state of the art had no previous experience. The policy did not exclude all loss attributable to "the design", but only loss attributable to a "faulty or improper design". The design exhausted the state of the art but left a residual risk. Failure is not the same thing as fault or impropriety. In my view, the insurers did not meet the onus of bringing the loss within the exclusion. I would allow the appeal. (para. 5)"

In reviewing the decision of the Court of Appeal, Binnie J. noted that the trial judge held that "the TBM must be *designed* to withstand all foreseeable risks" (emphasis added), while the majority judgment of the Court of Appeal held that the design must, in fact, and with the benefit of hindsight, be shown to have *succeeded* in withstanding all foreseeable risks. The majority of the Supreme Court disagreed with the Court of Appeal, noting the conclusion of CNR's expert, Dr. Hampson, who wrote:

"[It] is not realistic to suggest that all potential problems can and always should be identified nor that the issues spotlighted by hindsight should always have been picked out. Dr. Becker [the Insurers' expert] offers no evidence that the engineering approach from Lovat was not rigorous apart from the somewhat tautological contention that because a failure occurred they should have avoided it ...

There are undoubtedly failures due to incompetence, ignorance, complacency, blind faith, mistakes and incorrect information. But there are also failures of components that could not have been foreseen and would not be focused on from the basis of information that was available at the time -- it is my contention that the St. Clair TBM is in this category. The value of hindsight after a problem cannot be over-emphasized -- but this is far removed from foreseeability in the real world."

Binnie J. interpreted these passages, stating as follows:

"I interpret these passages as saying that at any given time risks may be foreseeable but that in addressing those risks in an innovative project there is inevitably a gap between the then current state of the engineering art and omniscience, i.e. a state of perfect knowledge and technique. This gap conceals risks within risks that are not foreseeable on "the basis of information that was available at the time . . . in the real world". As Lang J.A. pointed out, quite reasonably I believe, a design is not "faulty or improper" simply because it falls short of perfection in relation to all foreseeable risks (para. 194)."

After a careful review of the applicable caselaw, including the *Queensland* case, the *Foundation* case, and *Algonquin Power (Long Sault) Partnership v. Chubb Insurance Co. of Canada* (2003), 50 C.C.L.I. (3d) 107 (Ont. S.C.J.) the majority of the Supreme Court held that the standard to be applied is the "state of the art" standard, stating as follows:

"I do not believe that where, as here, the risk is broadly defined ("metal deflects under stress"), and the design addresses that risk with state of the art diligence and expertise (as here), the insurers are entitled to the exclusion just because, with the benefit of hindsight, it turns out that "engineering knowledge and practice lacked a proper appreciation" (to quote Queensland again) of the design problem. A narrower interpretation of the exclusion, it seems to me, best accords with the intentions of the parties based on the plain meaning of the words used, namely "faulty or improper". If the insurers wished to negotiate an exclusion of costs associated with simple "design failure" or "design failure in conditions of foreseeable risk", it was open to them to have tried to do so but that is not the wording of the policy and this exclusion clause should not, in my opinion, be given that effect. (para. 56)"

In applying the facts to the law, the Supreme Court of Canada found that the trial judge's conclusions were not tainted with palpable and overriding error. The trial judge understood that while differential deflection was a known risk in the design of the TBM sealing system, the risk had been properly explored in the design phase and, based on the existing state of the art, it was not foreseeable that excess differential deflection was even a remote or

unlikely risk with this design and in these circumstances. None of the experts involved in the Project, who had substantial experience in the design and manufacture of TBMs and with tunnelling projects, expressed any concern with respect to differential deflection adversely affecting the sealing system. Binnie J. stated that "the trial judge's point, as I understand it, was reminiscent of Sherlock Holmes: the significance of the evidence was that the watchdogs did *not* bark."

The majority of the Supreme Court therefore restored the trial judgment.

Richard H. Shaban, Guy J. Pratte and Sharon C. Vogel of the Toronto offices of Borden Ladner Gervais LLP were counsel for the successful Appellant at the Supreme Court of Canada.