



“ALL RISKS”

Faulty or Improper design on the International Front

On 21st November 2008 the Supreme Court of Canada handed down the long awaited judgment in Canada National Railway Co. (“CNR”) v Royal and Sun Alliance Insurance Co of Canada in relation to the interpretation of a “*faulty or improper design*” exclusion clause.

In the early 1990s, CNR established a process to design and construct a customised tunnel boring machine (“TBM”) for use in the construction of a railway tunnel under the St Clair river between Ontario and Michigan. At the time, it was the largest TBM of its kind in the world.

Builder’ Risk Policy – All Risks

CNR had insured the project under a Builders’ Risk Policy covering ...

“ALL RISKS of direct physical loss or damage, including general average and salvage charges to:

(a) All real and personal property of every kind and quality including but not limited to the [TBM] ...”

The cost of making good faulty or improper design was excluded:

3. EXCLUSIONS: This Policy does not insure:

...

(iii) faulty or improper design...

Boring began in November 1993, but approximately two months later, after digging about 14 percent of the route (but before reaching the river itself) the engineers discovered that dirt had entered the TBM’s main bearing chambers.

Operations halted and a vertical shaft was dug from the surface down to the level of the TBM for access.

The parties/experts were unable to agree on the precise cause of the failure. The Court however accepted it was due to “*excess differential deflection*” of the cuttinghead.

Following repairs and modifications (a 229-day delay) the boring was completed in December 1994, although at a considerably increased cost.

The insurers refused to indemnify CNR relying on a “*faulty or improper design*” exclusion clause.

The case proceeded through the Ontario Courts: the Superior Court of Justice found in the insured’s favour - the exclusion did not apply, the Ontario Court of Appeal found in the insurer’s favour - the exclusion did apply.

The case finally rested with the Supreme Court of Canada who by majority of 4-3 found in the insured’s favour.

The dissenting Judges acknowledged the exclusion would not have applied to designs that were fit for purpose, but failed due to rare and unforeseeable circumstances. However, in their view the

failure was due to the original design’s inability to cope with the necessary and foreseeable incidents of the TBM’s expected use.

The cause in the insurers view, was a design problem: differential deflection in excess of that provided for by the design.

Differential deflection was *foreseeable*. Reference was made to Hooke’s Law: for over 300 years engineers have known that structural steel deflects (bends) under pressure. This occurs when two adjacent components (in this case the moving cuttinghead and the static bulkhead) move towards or away from each other.

So, if expected or foreseeable why is the design not faulty or improper?

The first thing to note is that the policy did not exclude loss attributable to the *design*, but only loss attributable to a “*faulty or improper design*”. In other words, the loss may have been caused by the design, but unless the insurer shows the design to be “*faulty or improper*”, the exclusion does not apply.

“Failure is not the same thing as fault or impropriety.”

The failure was caused by excess differential deflection. That being the movement away or towards one another *beyond acceptable (designed) tolerances.*

At the time of contracting, all parties realised that the TBM was an innovative piece of equipment and the largest of its type ever built. Leading experts were enlisted and the machine was described as “state-of-the art”.

Binnie J:

“...a design is not faulty or improper simply because it does not meet a standard of perfection in relation to all foreseeable risks.”

“...In my view, the words “faulty or improper” require the insurers to go beyond simply showing a failure in circumstances of foreseeable risk. The words “faulty or improper”, and in particular the word “improper”, require the insurers to establish that the design fell below a “realistic” standard.”

“... A standard of perfection in relation to all foreseeable risks, in my view, was not required by the words used by the parties. It was for the insurers to demonstrate that the exclusion applies.”

Looking forward, insurers will need to consider refining the clause to all “*design failure*” or “*design failure in conditions of foreseeable risk*”, or adapt the premium to reflect the magnitude of the risk they may assume from the current wording.

Conclusion

Although the conclusion of the Supreme Court was that the exclusion did not apply they did so by majority of 4-3. It is interesting and of equal significance to note the contrasting reasons given by the dissenting judges.

All Risks Design Exclusion Clauses (of varying type and wording) stir considerable passion. Like the Judges in this case, there is often little or no overlap between the parties, each vehement that their own interpretation is the correct one.

Lesson: take a deep breath, step back and look at the other side of the coin.

If you wish to discuss any of the issues above or have any specific queries please do not hesitate to contact Charlotte Waters on 0207489 2035 who will be pleased to assist