**Citation:** ***R. v. Thomas Fuller and Sons Ltd.*, 2012 ONCJ 731**

# ONTARIO COURT OF JUSTICE



**B E T W E E N :**

**HER MAJESTY THE QUEEN IN THE RIGHT OF ONTARIO (MINISTRY OF LABOUR)**

**— AND —**

**THOMAS G. FULLER AND SONS LTD**

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Before Justice David M. Paciocco
Decision

Released November 23, 2012

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**David McCaskill ..... for the Crown**
**Donald Rasmussen ..... for Thomas G. Fuller and Sons Ltd.**

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**PACIOCCO, J.:**

## I. Introduction

[1] On 21 February 2006 Mr. Yves Blondin, an employee of Black and McDonald Limited, died in a construction accident while helping to lay concrete piping at the Fleet Street Pumping station in Ottawa. He sustained fatal head injuries after a 4 x 4 piece from a wooden brace that formed part of makeshift winch system being used by the defendant Thomas G. Fuller and Sons Ltd. to coax a section of concrete pipe into place snapped. When the 4 x 4 broke the tension in the winch system released. The cables recoiled with great force, and the wooden brace pivoted violently. Tragically Mr. Blondin was in its path sustaining the injuries that took his life.

[2] Thomas G. Fuller and Sons Ltd. are not charged with causing Mr. Blondin's death. However the accident that led to his death prompted an investigation and a series of charges under the *Occupational Health and Safety Act*, R.S.O. 1990 c.O-1 against both Thomas G. Fuller and Sons Ltd. and Black and McDonald Limited, the company that, under subcontract, supplied experienced pipe fitters to assist Thomas G. Fuller and Sons Ltd. in installing the concrete pipes. A joint trial was held on those charges in January of 2008. After the appeal process was completed Thomas G. Fuller and Black and McDonald Limited stood acquitted of the charges against each of them of failing to take every precaution reasonable in the circumstances for the protection of workers, contrary to subsection 24(2)(h). Three other specific charges had been withdrawn at the initial trial. After the final appeal the Ontario Court of Appeal ordered a retrial on the three remaining charges. This was that retrial. At the outset of the proceedings before me, however, the Ministry withdrew the sole remaining charge against Black and McDonald Limited and one of the remaining charges against Thomas G. Fuller and Sons Ltd. leaving only one charge against Thomas G. Fuller and Sons Ltd. to be tried. Specifically, Thomas G. Fuller and Sons Ltd. is charged before me, contrary to subsection 25(1)(a) of the *Occupational Health and Safety Act*, of failing, as a constructor, to ensure that every part of the project was designed and constructed to support or resist all loads and forces to which it is likely to be subjected, contrary to subsection 31(1)(a) of the Ontario Regulation 213/91. The theory of the Crown is obvious from the short recital of facts I have already provided; the Crown contends that the wooden brace that was being used as part of the winch system was not designed and constructed to resist the force likely to be exerted by the winch cables that were used.

[3] The parties in this trial have been cooperative, professional and respectful of court resources. By agreement the evidence in the first trial, consisting of transcripts and exhibits, has, on consent, been treated as the evidence in this trial, saving extensive court time. This evidence has been supplemented only by further testimony of an expert witness called by the defence, Robert Manhire. By agreement no credibility issues arise with any of the witnesses and there are no issues of reliability relating to the material facts. Accordingly neither "what happened" nor "how it happened," are contested. Nor is there disagreement about the law to be applied; this case is about the application of the law to the facts to determine whether the offence charged occurred. I will begin by identifying the elements of the offence charged.

## II. The Law

### A. The Offence

[4] The *Occupational Health and Safety Act* is a provincial enactment and therefore a regulatory or "public welfare" statute. Its purpose is "to maintain and promote reasonable levels

of protection for the health and safety workers in and about their workplace."[1] This includes the objective of "protect[ing] workers in hazardous industries from their own negligence."[2] In order to secure reasonable levels of safety the *Occupational Health and Safety Act* is to be "interpreted in a manner consistent with its broad purpose."[3] "This does not mean that an employer is bound to provide the safest imaginable workplace."[4] Prescribed standards are set out. The legal contest in this case is whether on 21 February 2008 Thomas G. Fuller and Sons Ltd. satisfied the standards prescribed by subsection 25(1)(a) of the *Occupational Health and Safety Act*, imposed by subsection 31(1)(a) of the Ontario Regulation 213/91.



[5] It is common ground, and obvious on analysis, that this offence is a strict liability offence. The Ministry therefore has the burden of proving the *actus reus* of the offence. Even if that *actus reus* is proved beyond a reasonable doubt, Thomas G. Fuller and Sons Ltd. will resist conviction if it establishes on the balance of probabilities that it exercised due diligence, within the meaning of the law.

[6] Subsection 25(1)(a) provides:

> "A constructor shall ensure, on a project undertaken by the constructor, that,
>
> (a) the measures and procedures prescribed by this *Act* and the regulations are carried out on the project."

It is agreed that Thomas G. Fuller and Sons Ltd., the general contractor on the project, is a constructor within the meaning of subsection 25(1)(a). Thomas G. Fuller and Sons Ltd. were therefore obliged to "ensure" compliance with the measures and procedures prescribed by regulation 213/91. The term "ensure" imposes a strict affirmative duty[5] on Thomas G. Fuller and Sons Ltd. to achieve the standards set out in the charged provision of Regulation 213/91, namely subsection 31(1)(a), failing which a *prima facie* offence will have occurred.

[7] Subsection 31(1)(a) "addresses project design and construction"[6] in the following terms:

> Every part of a project, including a temporary structure,
>
> (a) shall be designed and constructed to support or resist all loads and forces to which it is likely to be subjected without exceeding the allowable unit stress for each material used.

Specifically, in the circumstances of this case, the Ministry must prove that:

> (1) the wooden brace used in the winch system "is part of a project, including a temporary structure"; and

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[1] *R. v. Timminco Ltd./Timminco Ltee.* (2001), 54 O.R. (3d) 21 (Ont.C.A.) (herein *R. v. Timminco*)
[2] *R. v. Canada Brick Ltd/ Briques Canada Ltee.* 2005 CarswellOnt 3107 at para. 22 (Ont. S.C.J.) (herein *R. v. Canada Brick*).
[3] *R. v. Timminco, supra* at para. 22.
[4] *R. v. Canada Brick Ltd.. supra* at para. 128.
[5] *R. v. Wyssen* (1992), 10 O.R. (3d) 193 at 198 (Ont.C.A.).
[6] *Her Majesty the Queen in the Right of the Province of Ontario (Ministry of Labour)* 2011 ONCA 440 at para. 16.

(2) the wooden brace was not "designed and constructed" to support or resist all loads and forces to which it is likely to be subjected to without exceeding the allowable unit stress for that wooden brace.

If the Ministry proves these two things beyond a reasonable doubt the *actus reus* will have been established. A conviction will follow unless Thomas G. Fuller and Sons Ltd. establish, on the balance of probabilities, that they have exercised "due diligence" within the meaning of the law. In this case the resolution of these issues is affected by the law of issue estoppel, a doctrine that requires elaboration.



**B. Issue Estoppel**

[8] The "issue estoppel" doctrine is used in the prosecution of offences to prevent accused persons from answering the same allegations twice, to halt the unfairness in the Crown re-litigating issues it has lost before a court of competent jurisdiction, to avoid inconsistent findings by successive courts, and to promote the interests of finality.[7] Issue estoppel matters in the instant case because there has been a concluded trial on charges arising out of the same events that lead to the current prosecution.

[9] According to *R. v. Mahalingan*, the doctrine of issue estoppel that applies in criminal proceedings (and, in my opinion, the prosecution of regulatory offences):

> "…operates to prevent the Crown from relitigating an issue that has been determined in the accused's favour in a prior criminal proceeding, whether on the basis of a positive finding of fact or reasonable doubt."[8]

[10] To be clear, issue estoppel applies to "issues." It therefore captures not only straight findings of fact determined between the parties in a prior trial, but also "conclusions of law or mixed fact and law"[9] that have been arrived at. In order to impose a previous finding on an issue on a subsequent trial court the onus is on the party seeking to apply the doctrine to prove that the material issue has already been "resolved on the merits in the accused favour in the earlier proceeding."[10]

[11] Mr. McCaskill urged, in effect, that issue estoppel makes no material contribution in this case. He submitted that the issues are different – this case involves an allegation of inadequate design whereas previously resolved charges dealt with the protection of workers. I disagree. Issue estoppel applies to findings by a Court of competent jurisdiction in a trial between the same

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[7] *R. v. Mahalingan* [2008] 3 S.C.R. 316 at paras. 38, 44 and 45.

[8] *R. v. Mahalingan* [2008] 3 S.C.R. 316 at para. 31. The doctrine of issue estoppel differs modestly in civil cases. In civil cases where its elements have been met a judge has discretion to determine whether issue estoppel ought to be enforced: *Danyluk v. Ainsworth Technologies Inc.* [2001] S.C.R. 460 at paras. 33 and 53. It would be contrary to the principles of double jeopardy in prosecutions for a judge to conclude that the prerequisites to the doctrine are met but then refrain from applying it. Similarly, in civil cases the doctrine applies to all parties. In a criminal case it applies solely to the benefit of the accused: *R. v. Mahalingan* [2008] 3 S.C.R. 316 at para. 57.

[9] *Danyluk v. Ainsworth Technologies Inc.* [2001] S.C.R. 460 at para. 24. Although *R. v. Mahalingan* [2008] 3 S.C.R. 316 speaks at times of "factual findings" when explaining the doctrine, a phrase sufficient given the facts of that case, the rationale for the rule applies equally to all issues that have been tried and conclusively resolved between the parties.

[10] *R. v. Mahalingan* [2008] 3 S.C.R. 316 at para. 52 (S.C.C.).

parties on particular sub-issues, even if those findings are arrived at in a case having a different focus.[11] The relative charges may have different compass but where there are findings that pertain to the same events or issues made at a previous trial between the same parties by a competent court the doctrine applies.

[12] The application of issue estoppel in the instant case is, in one sense, relatively straightforward. This is because the earlier proceeding, the initial prosecution of Thomas G. Fuller and Sons Ltd. arising out of the Fleet Street accident, was not a jury trial in which only a general verdict was delivered. It was a decision by The Hon. Justice Fournier after trial by judge alone with reasons for decision including numerous expressed findings.[12]

[13] What complicates the application of the doctrine in the instant case, however, is that there were two levels of appeal from Justice Fournier's decision. In the Summary Conviction Appeal Court decision The Hon. Justice Power[13] disagreed with Justice Fournier's evaluation of due diligence relating to the charge against Thomas G. Fuller and Sons Ltd. of failing to take every precaution reasonable in the circumstances for the protection of workers, contrary to subsection 24(2)(h) (the "protection charge"). Justice Fournier held that due diligence had not been achieved relative to that count. By contrast, Justice Power concluded that due diligence had been exercised, and so the conviction on that count was set aside. Justice Power did not, however, find Justice Fournier's specific findings of fact to be unreasonable. His issue was with the legal characterization of those facts relating to the diligence of the accused on that charge. Indeed, Justice Power rehearses the same material findings of fact that were made at trial in the Summary Conviction Appeal Court decision.[14]

[14] At the next level of appeal, the Ontario Court of Appeal, leave to appeal was granted solely on the application of the legal doctrine of duplicity to the remaining charges, including the charge now before me.[15] No appeal was therefore taken relating to the acquittals on the "protection charges." As a result the Ontario Court of Appeal resolved the legal question of whether the other charges were duplicitous but left the factual findings that had been made on the "protection charges" undisturbed. Ultimately, the only issue resolved at the Ontario Court of Appeal material to the application of principles of double jeopardy was the Ontario Court of Appeal's express rejection of the proposition advanced by the defendant corporations that Justice Power's findings of due diligence relating to the "protection charge" translates in law into a prior finding between the parties that Thomas G. Fuller and Sons Ltd. exercised due diligence relating to the design and manufacture of the winch system brace. The rejection of that argument can easily be understood when it is appreciated that the "protection charge" was particularized to

[11] As the Court noted in *R. v. Mahalingan* [2008] 3 S.C.R. 316 at para. 16, "Issues estoppels is concerned not with whether the cause of action in two proceedings is the same, but with whether an issue to be decided in proving the current action is the same as an issue decided in a previous proceeding."

[12] *Her Majesty the Queen (Ministry of Labour) v Thomas G. Fuller and Sons Ltd. and Black and McDonald Ltd.* (4 March 2008, Ont. C.J., unreported).

[13] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.).

[14] See *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), paras. 44-53.

[15] *Her Majesty the Queen in the Right of Ontario (Ministry of Labour) and Black and McDonald Ltd. and Thomas G. Fuller and Sons Ltd*. 12 Dec 2009, Docket M37922, Decision on leave to appeal, and 2011 ONCA 440, appeal decision.

focus on failing to determine and limit load forces, not the "design and construction" of the wooden brace. [16] The two charges addressed different conduct and therefore give the due diligence analysis a different focus in each case.

[15] It would therefore be wrong for me to acquit Thomas G. Fuller and Sons Ltd. on the simple basis that due diligence has already been resolved, and Mr. Rasmussen is not asking that of me. He is not invoking a *res judicata* defence. He is seeking to ensure that the findings in this case are consistent with the particular findings ultimately made and hence finally determined between the same parties through the prior trial process. I will return to this doctrine as it bears upon the analysis.



## III. Analysis

## A. The *Actus Reus* of the offence

[16] As described, in the circumstances of this case, the Ministry must prove that:

(1) the wooden brace used in the winch system "is part of a project, including a temporary structure"; and

(2) the wooden brace was not "designed and constructed" to support or resist all loads and forces to which it is likely to be subjected to without exceeding the allowable unit stress for that wooden brace.

### 1. Was the Wooden Brace System "part of a project, including a temporary structure"?

[17] Mr. Rasmussen urged that the wooden brace that failed was not part of the "project." He argued that the winch system was something used in the project rather than part of that project. He therefore contended that even if the wooden brace of the winch system was unable "to resist all loads and forces to which it is likely to be subjected" the offence charged is not made out. He drew analogy between tools used in a construction project such as hammers and leverage bars and the winch system used to assemble concrete piping. In effect, Mr. Rasmussen appeared to be distinguishing between the thing contracted to be built – here the piping system - and the things used in constructing that piping system.

[18] This argument is defeated by the definition of "project" found in the *Occupational Health and Safety Act*, a definition that applies to regulations promulgated under that Act. According to that definition "Project" means "a construction project." Fortunately this rather circular definition is expanded in the legislation with inclusive references. Material elaborations for current purposes are found in parts (a) and (c) of the definition. Part (a) provides that a project includes "the construction of" a long list of things, including structures, trenches, service connections and pipe lines. The term "the construction of" suggests strongly that "project" includes the process of construction. Part (c) of the definition removes any doubt about this. It

[16] *Her Majesty the Queen in the Right of Ontario (Ministry of Labour) and Black and McDonald Ltd. and Thomas G. Fuller and Sons Ltd*. 2011 ONCA 440 at para. 32.

adds to the definition of "project" "any work or undertaking," phrases that describe not the thing being built but the process of construction.

[19] All of this is consistent with the ordinary meaning of the term "project." According to the Oxford Dictionary the term "project" refers instead to a "plan" or "scheme" or "undertaking."[17] Using the term according to its ordinary meaning, "project" describes not the thing being built but the construction undertaking at large.

[20] It is important to appreciate that the purpose of the *Occupational Health and Safety Act* and of section 31(1)(a) would be defeated if the term project was interpreted as Mr. Rasmussen has suggested, something modern conventions of statutory interpretation would seek to prevent[18] even without the definition offered in the statute. As indicated, this enactment is meant to provide reasonable protection for workers. Meanwhile subsection 31(1)(a) of the Regulation is intended to ensure that workers are not injured by the collapse or physical failure of objects or things on the construction site. The definition contended for would defeat these objectives. It would exclude from subsection 31(1)(a) the inadequate construction of things such as scaffolding or temporary bracing, which pose obvious risks to workers.

[21] I therefore find that the wooden brace constructed as part of the winch system was "part of the project."

**2. Was the wooden brace "designed and constructed" to support or resist all loads and forces to which it was likely to be subjected to without exceeding the allowable unit stress for the wooden brace?**

**(a) When the alleged offence occurred**

[22] Subsection 31(1)(a) requires that every part of a project "shall be designed and constructed to support or resist all loads and forces to which it is likely to be subjected without exceeding the allowable unit stress for each material used." The inquiry required by this subsection is therefore into the "design" and "construction" of the wooden brace. The offence occurred, if at all, when the brace became part of the project, which was as soon as it was employed in the early morning of 21 February 2006 to assist in laying the concrete piping at the Fleet Street Station.

[23] I make this point at the outset because it bears on the recital of facts I am about to undertake. Given the mischief of subsection 31(1)(a) and its language, if there was an offence in this case it would have occurred whether or not there was an accident. It follows that much of the evidence featured in the previous trial and referred to in submissions before me is of limited utility, including the circumstances of the accident. Whether the men noted signs of failure prior to the 4 x 4 breaking, or whether Mr. Blondin was authorized to be in the trench where the pipe was being laid, or whether he issued the order to apply more pressure to one of the pullers, or

[17] *The Canadian Oxford Dictionary*, (Don Mills, Ont: Oxford University Press, 2001).
[18] Including *Rizzo & Rizzo Shoes Ltd. (Re)*, 1998 CanLII 837 (SCC), [1998] 1 S.C.R. 27, at para. 21; *Bell ExpressVu Ltd. Partnership v. Rex*, 2002 SCC 42 (CanLII) , [2002] 2 S.C.R. 559, 2002 SCC 42, at para. 26; *ATCO Gas & Pipelines Ltd. v. Alberta (Energy & Utilities Board)*, 2002 SCC 4 (CanLII); [2006] 1 S.C.R. 140, 2006 SCC 4 at para.37.

whether the pipe was almost in place at the time, are not directly relevant to the sufficiency of the design and construction of the brace. At most the accident offers a hindsight illustration of forces that, at the time it was built, the wooden brace could have been subject to, a point I will return to below.[19]

**(b) The design, construction and use of the wooden brace**

[24] The wooden brace designed and constructed and employed as part of the project was created to coax sections of Hyprescon brand concrete piping together. The sections of concrete piping that were under construction at the relevant time were more than six feet in height. Obviously they could not be joined manually. The technique being employed was to suspend the section being installed by cable from a crane so that its movement would not be impeded by its weight against the ground. The process involved using the crane to align the section being installed so that it would be parallel to and gently touching the open end of the installed piping. Of course, Hyprescon pipes are designed to join together. One end of each section of pipe has a "spigot" that is smaller in diameter than the "bell" end of the pipe. Naturally, the spigot end of one pipe is inserted into the "bell" end of the adjacent pipe. The required seal between the pipes is not achieved by forcing the pipes together, concrete to concrete, until they are tight by compression. Instead the spigot has a grooved end that houses a rubber gasket that will be the primary point of contact with the bell end – a technique called "Victaulic coupling." To ensure that the rubber gasket does not impede fitting it is cleaned to remove all possible debris and a lubricant is added to both ends of the pipe, including the gasket. Once the spiggot is inserted, a restraining collar is placed around the two pipes, each of which is grooved to receive the collar. The function of the winch system is to produce the lateral movement necessary to join the pipes in the manner described.

[25] Initially the winch system consisted of two "pullers" or "come-alongs". The pullers were attached by a sling to the section of pipe that had already been laid. The other end of the pullers' cables were then attached to a 4 x 4 section of wood that was placed across the open mouth of the section of pipe about to be installed, with the cables taught enough to hold the 4 x 4 in place. Cranks on the pullers would then be manually tightened by workers, guiding the parallel pieces of piping together so they could be clamped. It is not disputed that this two puller system followed an approved joining procedure described in the Hyprescon Installation Manual.

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[19] I did consider whether subsection 31(1)(a) should be interpreted more broadly so as to require the evaluation of the adequacy of the design and construction of every part of a project given the use to which it is *ultimately* put. If subsection 31(1)(a) was to be read in this way then the question before me would be whether the wooden brace was designed and constructed to resist the forces that were actually created when Mr. Blondin gave direction to apply more force to a pipe that may have already been properly seated. I do not believe such an interpretation would be correct. Such an interpretation would gut the meaning of the term "likely to be subjected to," by focusing on the force the relevant part of the project was actually subjected to at the material time. It would also create confusion between the offence in subsection 31(1)(a) and the distinct offence in subsection 31(1)(c). Subsection 31(3) provides:

> 31(3) No part of a project, including a temporary structure, shall be subjected to a load in excess of the load it is designed and constructed to bear.

Subsection 31(3) evidently creates a separate offence for actually subjecting a part of the project to a greater load than it was designed and constructed to receive. That being so, there is no room to interpret subsection 31(1)(a) to cover that same ground.

[26] The Hyprescon Installation Manual instructs that when this system is used, provided the gasket and the spigot end evenly touch the flare of the bell end of the adjoining pipe, the pipes can be "gently push[ed] home."[20] Expressed in the language of the undisturbed finding of fact of Justice Fournier, "according to the manufacturer this [manner of] installation was reportedly easy to implement, provided the pipe sections were properly aligned – the operative concept being alignment, rather than brute force."[21] Despite the impressive size of the concrete piping, this "gentle push" is sufficient when the pipes are parallel and properly placed because relatively little friction will occur between the pipes, and because the pipe section being pulled is suspended by a crane without resistance from the ground.

[27] The winch system that I have just described is not the system that was in use at the time of the alleged offence, 21 February 2006. Improvisations occurred in an effort to cope with difficulties joining a short, irregularly shaped section of pipe. This 3 ½ foot length of concrete pipe had a bend in it. The bend meant that the ends of the pipe were not parallel. This impeded alignment, as the pressure from the two contact points of the 4 x 4 against the open end could not exert an even, lateral pressure to draw the short peace straight back into the installed pipe. Attempted installation of this section of pipe failed on 20 February 2006. Mr. Arden, the supervisor of Thomas G. Fuller & Sons Ltd., understood that this failure was because of problems aligning the shorter piece. He pondered the problem. Along with Thomas G. Fuller & Sons Ltd. workers he constructed the wooden bracing system that ultimately broke, costing Mr. Blondin his life.

[28] This new bracing system – the part of the project at issue in this prosecution - was designed and constructed of wood. It was built in a crude rectangular form from new wood pieces that had been acquired for other purposes. The vertical sides of the rectangle were constructed of 4 x 6 lengths of wood, with two per side. Two separate cross-pieces were attached to those 4 x 6's. Each cross-piece was fashioned out of two 4 x 4 lengths of wood. These two cross-pieces were installed close to the opposite ends of the vertical 4 x 6s. The effect was not unlike an uneven "X's and O's" board. This wooden brace system was designed to be placed over the open mouth of the piece to be attached. Unlike the initial pulling system anticipated in the Hyprescon Installation Manual, four pullers were employed in this system instead of two. Two of those four pullers had been used in the previous winch system. Each had a rated capacity of 1.5 tons. The two newly introduced pullers each had a capacity of 2.75 tons. According to the expert report of engineer Steven MacDonald of the Ministry of Labour, together the four pullers had a combined force of 17000 pounds. These pullers were attached at four separate points, two per side. The system did not employ gauges to measure the force being exerted at any time, and no engineering specifications were obtained. No input was therefore received from engineers into precisely where the four pullers should be attached to the brace, or where the point of contact between the brace and pipe should be located. No-one from Hyprescon was consulted on the sufficiency of this design.

[29] Other factual findings germane to the design and construction of the wooden brace were determined at the prior trial that disposed of the related "protection charge" against Thomas G. Fuller and Sons Ltd. I would have made these findings on the evidence before me but I am

[20] Exhibit 22, Appendix E, "Hyprescon Installation Manual."
[21] *Her Majesty the Queen (Ministry of Labour) v Thomas G. Fuller and Sons Ltd. and Black and McDonald Ltd.* (4 March 2008, Ont. C.J., unreported) at para. 6.

bound to do so, in any event, by virtue of the doctrine of issue estoppel. Each point was litigated between the parties now before me and each finding was left undisturbed on appeal. Specifically:

> (a) Mr. Arden was a respected and experienced construction supervisor and had become familiar with the relevant installation process;[22]
>
> (b) It was contemplated that the winch system would be operated by four men, including two Black & McDonald pipe fitters. Although they had not installed piping of this size, they were experienced pipe fitters[23] and "possessed a certain expertise in such installations" and were contracted to provide assistance.[24]
>
> (c) The use of pullers and wooden braces was "consistent with general industry practice, a practice that had proved successful over many years. Specifically, the practice recommended the use of wood timbers to install the pipes."[25]
>
> (d) The use of four pullers was not designed to increase the capacity for pressure or force to be used. Instead the four-point design was devised as a way of equalizing pressure to assist in aligning the irregularly shaped section of pipe. The four points were intended to provide "enhanced dexterity or control" or "more stability or flexibility." Simply put, "the installation process was one that was not focused primarily on force to pull together the pieces of the pipe, but, rather, it focused on maintaining proper alignment."[26] Moreover "it was not part of Fuller's plan to simply apply greater and greater amounts of force to accomplish the task at hand."[27]
>
> (e) No engineer was consulted before the design, construction and employment of the winch system. Mr. Arden, the supervisor, did not think such a measure was necessary;[28]
>
> (f) "The installation of the pipe in question involved a portion of pipe that weighed significantly less than the pieces or portions that had been installed prior to February 20, 2006. Being smaller and lighter it should have been easier to move; however the pipe was deliberately constructed with a bend in it and this bend made alignment of the pipe more difficult."[29]

[22] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (b).
[23] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (a).
[24] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (a).
[25] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (c).
[26] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (d).
[27] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 71.
[28] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 44 (k).
[29] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (f)

(g) Mr. Arden was satisfied that the level of risk of breakage could be assessed based on visual inspection and the progress being made during installation. The expectation was that signs of danger would be watched for. (I note however that professional engineer Dr. Claude Pillette opined in his testimony that the breakage that did ultimately occur was a shear failure and that shear failures "happen without warning."[30])

[30] The doctrine of issue estoppel also impels me to accept the following additional findings of fact or mixed fact and law that were rehearsed or made by Justice Power at the Summary Conviction Appeal Court hearing which finally determined the "protection charge" against Thomas G. Fuller & Sons Ltd.:

(h) "[T]he minor variation in the installation process used on February 21, 2006, was not a departure from the Manual of Installation or the standard industry practice. It was nothing more than a variance, but a variance that maintained the integrity of the industry standard,"[31] and

(i) "There was, according to Fuller's expert and according to the trial judge's findings, no necessity to have the installation process designed by a professional engineer, or for the forces to be calculated prior to the work. Assuming alignment was properly maintained, the resistance provided by the wooden timbers were far in excess of the required force to seat the pipe."[32]

Together, these are the material facts upon which the outcome of the charge contrary to subsection 25(1)(a) of the *Occupational Health and Safety Act* will turn.

**(c) The Reach and Application of Subsection 31(1)(a) – Has the Crown proved a *prima facie* violation beyond a reasonable doubt?**

[31] As already recounted, the relevant offence contrary to subsection 31(1)(a) occurred, if at all, when the four puller wooden brace was first put to use. Key to subsection 31(1)(a) is that it deals with what is "likely." Both parties therefore spoke at times in their submissions of foreseeable force. Given that there are differences between what is "foreseeable" (possible outcomes that can reasonably be anticipated) and what is "likely" (actual potential outcomes that have a reasonable likelihood of arising, as opposed to a remote possibility of occurring) I prefer to stick with the term "likely." The key point is that this offence deals with anticipated conditions rather than the evaluation of conditions with the benefit of hindsight.

[32] For this reason I reject the Ministry contention that I should treat "likely" forces as the maximum forces that the winch system was capable of exerting. I find engineer Claude Pillette's confident assertion that the real question is the "maximum load" to be of no assistance. The question of what forces are permitted by subsection 31(1)(a) is a question of law, not expert testimony. As matter of simple construction if it is not "likely" that the wooden brace would be

[30] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 44 (ff).
[31] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (g).
[32] *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para. 52 (n)

subjected to the maximum forces that could be generated by the four pullers that were used, then section 31(1)(a) does not require the wooden brace to have been designed or constructed to resist such forces. A more refined evaluation, including examination of the precise role being assigned to the winch system, is required, since it is the use to which a part of the project is to be put that determines the load or force it is likely to experience.

[33] I take Mr. McCaskill's point that as a matter of policy "when you design a structure you take into account the worst conditions, not the ideal conditions" but the legislature has seen fit to address this concern by requiring all parts of a project to be designed and constructed so as to be capable of resisting not only the intended force, but also any other force that is "likely" to occur. For this reason engineering calculations about the maximum pulling potential of the pullers, or the safety factor ratings typically built into engineering specifications, or whether a four puller system is more powerful than a two puller system, are not the indicia that will determine this charge.

[34] The featured role of the qualifying term "likely" in subsection 31(1)(a) also requires me to reject the Ministry claim that the *actus reus* is proved by the mere failure of this wooden brace on 21 February 2006. Subsection 31(1)(a) does not require every part of the project to be designed and constructed to support and resist all loads and forces to which *it ultimately proves* to be subjected to; it requires that every part of the project be constructed to support or resist the loads *it is likely* to be subjected to. If a part of the project collapses or snaps because of unlikely loads or forces subsection 31(1)(a) is not offended. Failure is therefore not enough to prove the *actus reus*.

[35] I do not read *Her Majesty the Queen in the Right of Ontario (Ministry of Labour) v Nor Eng Construction and Engineering Inc. et al*[33] as saying otherwise. While, in isolation, paragraph 26 appears to support the Ministry's argument, it is evident when reading the judgement as a whole that the learned Justice simply misspoke in paragraph 26 by omitting reference to the statutory limiting condition of "likely" loads and forces. He nonetheless understood and applied that limiting condition. His ultimate finding of a *prima facie* breach of subsection 31(1)(a) was predicated not on the simple collapse of the overpass but on the failure of the employer to construct the temporary support structure for that overpass according to the plan that had been designed to resist likely loads.

[36] For its part *R. v. Seeley & Arnill Aggregates Ltd.*[34] dealt with a different provision that is not limited in the way subsection 31(1)(a) is to things that are "likely" in the future. It focuses on things that are in the present. Section 13 of Reg. 694, the provision at issue in that case, is breached if a worker does not have a fall arrest system when exposed to the hazard of falling more than three metres. Proof of relevant failure in that context - that a worker did fall more than three metres without fall arrest - is sufficient given what that provision prescribes. No similar

[33] *Her Majesty the Queen in the Right of Ontario (Ministry of Labour) v Nor Eng Construction and Engineering Inc., Remisz Consulting Engineers Ltd., Wojiech Remisz, Cristian Constantinescu and Glenn Bot* (20 June 2008, Ont. Ct. J., unreported.).
[34] *R. v. Seeley & Arnill Aggregates Ltd.*(1993), 9 C.O.J.S.C. 1 (Ont Gen. Div.).

simple equation between result and *prima facie* offence can emerge in evaluating the application of a provision triggered by "likely" events, such as subsection 31(1)(a).[35]

[37] Did the Ministry prove beyond a reasonable doubt, then, that the wooden brace described, designed and constructed for use in coaxing an irregularly shaped section of suspended pipe into the open end of the pipeline already laid, and put to use by a crew for the purpose of aligning rather than forcing the pipe together against resistance, was sufficient in design and construction to resist likely forces? I find that the Ministry has not done so. Anticipatable forces, given the specific use to which the wooden brace was put, were likely to be modest, even bearing in mind that the pullers had the potential to exert great force. When properly aligned much larger and heavier sections of piping slid together easily, demonstrating that modest force is required when alignment is proper. The likelihood was therefore that once aligned, the small irregularly shaped piece of piping could be "gently pushed home."

[38] I have considered the forceful submission of the Ministry that it was likely given the shape of the pipe and the difficulties already experienced that alignment would continue to be a problem. I accept that. Yet the winch system, including its wooden brace, was not designed and constructed to operate on its own. It was to be used by a crew that included experienced pipe fitters under the supervision of Mr. Arden whose "plan" was to achieve alignment, "not … to simply apply greater and greater amounts of force to accomplish the task at hand." Simply put, given the comprehension of those who would be operating the system that only alignment and not force could accomplish the task it was not "likely" when the wooden brace was designed, constructed and put to use that if the pipe were to bind increased force would be used to overcome it.

[39] I have also borne in mind the mistaken expectation of Fuller workers that they could see danger signs of impending failure were it to occur, and I have considered whether this inability to see pending signs of "shear force" failure created likelihood that the system would unwittingly be used to generate increasing pressure. I do not find that it would. What would likely have been apparent to those workers was misalignment causing the pipe to meet material resistance, and it was no part of the design or construction plan to use the winch system to attempt to overcome resistance if and when encountered by exerting greater force.

[40] I have considered the observation by the Ministry that the wooden brace was "slapdash." I agree that it was fashioned without blueprint and is a crude construction, but the wood used in its construction, while not initially acquired for building a brace, was of "acceptable grade"[36] and in no way degraded by prior use. More importantly the wooden brace was designed and constructed to brace against modest force, and the evidence shows that even a single 4 x 4 would be sufficiently strong to brace the force needed to move much larger and heavier pipes, once aligned. I appreciate that the points of pressure between a single 4 x 4 with two pullers and a more complex assembly of 4 x 4's with four pullers differ but, given the emphasis on proper alignment that was to govern the use of the winch system I have no basis for using the inelegance

[35] Justice Power finally resolved this issue and I would have been bound by that disposition even had I not come to the same disposition: *Her Majesty the Queen (Ministry of Labour) v. Black & McDonald and Thomas G. Fuller and Sons Ltd.* (2009), 83 C.L.R. (3d) 44 (Ont.S.C.), para 71.

[36] Exhibit 22, Steven MacDonald P.Eng, Report of the findings of the Fleet Street Fatality in Ottawa on February 21, 2006, at 10.

of the wooden brace to find it was not likely able to bear the load of moving properly aligned piping.

[41] I have also considered carefully the engineering evidence. The Ministry's onus is not met by raising unanswered questions about the actual resistance of the wood, or whether the pullers were optimally aligned, or whether the brace was placed against the pipe in a way that would secure an equal distribution of force. What is needed is proof that given its design and construction this wooden brace would not be able to resist likely forces. Moreover calculations provided about the variable resistance of wood and potential forces generated by the winch system, or calculated estimates of the range of force exerted at the time of failure are not informative about the degree of force needed to push properly aligned piping together or the degree of force required before any improper alignment would be readily apparent to those operating the winch system. I have no evidence before me about what that force is or whether this brace would be likely to withstand it. Nor can I infer from the general design, construction or use of the wooden brace that it was not adequate.

[42] In all of the circumstances I cannot find beyond a reasonable doubt that the wooden brace was not designed and constructed to withstand the forces likely to be exerted against it. I recognize that what actually transpired embarrasses this finding to the extent that this winch system did ultimately fail, and that the winch system was ultimately used in a fashion inconsistent with the use for which it was designed and constructed. The specific charge before me is not, however, about the end game. It is about what was likely given the design and construction of the wooden brace, an evaluation that must necessarily take into account the role it was designed to perform, a role that has already been determined in litigation between the parties to be achieving alignment in order to accommodate the gentle pushing force required to marry the lubricated bell and spigot. The Ministry has therefore failed to prove the *actus reus* of the offence.

## B. Due Diligence

[43] Even had the Ministry managed to prove the *actus reus* of the charged offence I find that Thomas G. Fuller & Sons Ltd. have established "due diligence."

[44] "Due diligence is in law the converse of negligence."[37] The inquiry is into what a reasonable person would have done[38] and whether the accused person met such standard,[39] with the onus on the accused person to prove such reasonable care on the balance of probabilities. If the accused person proves they were not negligent in this sense, they avoid conviction.

[45] It is important to recognize that "due diligence" is not a generic inquiry into the overall reasonableness of the conduct of the accused person. "The [accused person] must show it acted reasonably with regard to the prohibited act alleged [the thing prohibited by the regulatory

[37] *R. v. Ellis-Don Ltd*. 428. (1990), 61 C.C.C. (3d) 423 at 428 (Ont.C.A.).
[38] *R. v. Sault Ste. Marie* (1978), 40 C.C.C. (2d) 353 at 374 (S.C.C.).
[39] *R. v. Gonder* (1981), 62 C.C.C. (2d) 326 (Yukon Territorial Court)

provision charged] … not some broader notion of acting reasonably."[40] The legal issue before me is whether, even if the wooden brace was inadequately designed and constructed to avoid the forces it was likely to be subjected to, Thomas G. Fuller & Sons Ltd. nonetheless exercised due diligence in attempting to ensure that its design and construction were up to the task.

[46] It is my view that issues already settled between the Ministry and Thomas G. Fuller & Sons Ltd. impel a finding of due diligence. In coming to this conclusion I am not applying the doctrine of *res judicata* to borrow the ultimate "due diligence" finding on the "protection charge." I am mindful and respectful of the Ontario Court of Appeal's direction that the ultimate issue of due diligence relating to subsection 31(1)(a) differs from the due diligence inquiry that led to the acquittal of Thomas G. Fuller & Sons Ltd. on the charge under subsection 25(2)(h) of failing to ensure that every precaution reasonable in the circumstances for the protection of workers. Instead I am recognizing that individual specific holdings arrived at between the parties during the prior trial relating to this "protection charge" operate together to satisfy the distinct brand of due diligence called for when evaluating whether the design and manufacture of the wooden brace was negligent.

[47] First is the finding that if proper alignment was maintained, "the resistance provided by the wooden timbers were far in excess of the required force to seat the pipe." Then there are the settled findings that this system was designed and constructed to be employed by experienced pipe fitters under the supervision of Mr. Arden, with the objective of achieving "enhanced dexterity and control" or "more stability and flexibility" with no plan to apply greater amounts of force. Most tellingly, Justice Power resolved finally between the parties that this wooden brace was no more than a minor variation from the Hyprescon Manual of Installation and of standard industry practice. In other words, the winch system that was designed and constructed, including the wooden brace, complied in material respects with the standards identified by the manufacturer and which had been relied upon persistently by the industry with success. It is noteworthy that during cross-examination engineer Claude Pilette, whose evidence was commended to me by the Ministry, testified that given the anticipated lack of friction between the pipes. "prior experience would dictate what kind of equipment to use."[41] That is what Thomas G. Fuller & Sons Ltd. did. So what we have here is a corporation that relied upon manufacturer instructions and industry standards in the design and construction of the wooden brace. They did so for the purpose of using the winch system as a guide to achieve alignment and to "gently push" the piping together, knowing that it would be operated with the assistance of experienced pipe fitters under the supervision of someone who appreciated that increased force would not meet with success. I think it was reasonable for Thomas G. Fuller & Sons Ltd. to have proceeded on this footing. On this evidence it is easily established on the balance of probabilities that Thomas G. Fuller & Sons Ltd. exercised due diligence.

[48] I am not dissuaded from this finding by Mr. McCaskill's able argument that once the irregular shaped section caused problems of installation, the Hyprescon manual, promising that the pipe could be gently pushed together, "went out the window" making it unreasonable to rely upon. The four puller device was designed and constructed to be used to achieve the kind of alignment that the manual required and that would, if achieved, deliver on the "gentle push"

[40] *R. v. Canada Brick Ltd.* 2005 CarswellOnt 3107 at para. 138; *R. v. Brampton Brick Ltd.* [2004] O.J. No. 3025 at para. 18 (Ont.C.A.).
[41] Transcript, 23 January 2008, Claude Pilette, p.45.

promise. Simply put, the device was designed to accommodate the promise of the manual, not because of the proven failure of that promise.

[49] Nor am I dissuaded by the failure of Thomas G. Fuller & Sons Ltd. to obtain engineering assistance or to put gauges on the system to measure the force it was exerting. Justice Power already resolved this matter when he held that there was no necessity to have the installation process designed by a professional engineer or for forces to be calculated. Even leaving that holding aside I am of the same mind. Due diligence did not require these steps be taken. I am making this finding knowing that it is common for the cases in this area to recite that "it is open to the accused to avoid liability by proving that he took *all* reasonable care,"[42] a phrase that might in isolation suggest that since engineering consultations and gauges are reasonable steps to take, the failure to do so precludes due diligence. As a matter of law, though, the phrase "all reasonable care" cannot and is not understood to require the accused to take each and every precaution that would be reasonable to take in the circumstances. As indicated, due diligence is a negligence based standard. The pertinent question is whether the accused "took all of the care that a reasonable [person] might have been expected to take in the circumstances."[43] In other words, the call for "all reasonable care" is an abridged call demanding "all reasonable care that a reasonable [person] would have taken in the circumstances." This is why it is possible to refer at the same time in the case-law to "all reasonable care" and to "efforts amount[ing] to a minimally acceptable exercise of due diligence."[44] Of course it would have been reasonable in the circumstances for Thomas G. Fuller & Sons Ltd. to have consulted with engineers and to have put gauges on the device, or even to use a steel structure instead of wood one, but for the reasons given a reasonable person would not, in all of the circumstances, have been expected to do so.

## IV. Holding

[50] I therefore find Thomas G. Fuller and Sons Ltd. not guilty of the charge contrary to subsection 25(1)(a) of the *Occupational Health and Safety Act* of failing, as a constructor, to ensure that every project was designed and constructed to support or resist all loads and forces to which it was likely to be subjected. The *actus reus* has not been proven beyond a reasonable doubt, and even had it been, due diligence was exercised, on the balance of probabilities.

**Released: November 23, 2012**

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The Honourable Justice David M. Paciocco

[42] *R. v. Sault Ste. Marie* (1978), 40 C.C.C. (2d) 353 at 374 (S.C.C.), emphasis added.
[43] *R. v. Rio Algom Ltd.* (1988), 46 C.C.C. (3d) 242 at 250-251 (Ont.C.A.); *R. v. Canadian Tire Corp, ibid* at para. 86, citing *R. v. Chapin* (1979), 45 C.C.C. (2d) 333 at 343-44 (S.C.C.).
[44] *R. v. Canadian Tire Corp*. 2004 CarswellOnt 3061 at para. 83 (Ont. S.C.J.).