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**T District School Board 19 v. 553517 Ontario Ltd. (c.o.b. Munden Park Electric)**

Between  
District School Board 19 (formerly Peel Board of Education),  
plaintiff, and  
553517 Ontario Limited c.o.b. as Munden Park Electric,  
defendant, and  
Electrical Safety Authority, third party

[2000] O.J. No. 4681

Court File No. 98-CV-152884A

**Ontario Superior Court of Justice  
Backhouse J.**

Heard: November 6-10 and 14-17, 2000.

Judgment: December 8, 2000.

(29 paras.)

*Torts — Suppliers of services — Duties of suppliers — Installer or disconnecter of equipment — Negligence.*

Action by the District School Board 19 against Munden Park Electric, for damages for the negligent installation of electrical wiring. In December 1989, Munden was hired by the School Board to install an electrical receptacle outside the entrance to one of its schools. In July 1995, there was a fire at the school that the School Board alleged was due to Munden's failure to instal the electrical cable in accordance with the Electrical Safety Code. Munden claimed contribution and indemnity from the Electrical Safety Authority for breach of its obligation to inspect and correct any deficiencies in the electrical installation.

**HELD:** Action allowed. The fire was caused by the negligent electrical installation by Munden. The cable was not properly supported, as required by the Code. The cable was bent excessively when installed, which caused kinking that led to the arc and electrical fire. The Electrical Safety Authority was not liable towards Munden. Although the obligation of the Electrical Safety Authority to inspect arose under the Power Corporation Act, section 111(10) was intended to insulate the inspector and Authority from liability for the negligent issuance of a certificate. However, since Munden did not rely on any inspection certificate, there was no liability because reliance was a constituent element of the tort.

**Statutes, Regulations and Rules Cited:**

Power Corporation Act, R.S.O. 1990, c. P-18, s. 111(10).

**Counsel:**

D. McCaskill and X. Navorette, for the plaintiff.  
S.W. Morris, for the defendant.  
Peter A. Daley, for the third party.

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¶ 1 **BACKHOUSE J.**— This is an action against 553518 Ontario Limited carrying on business as Munden Park Electric ("Munden Park") for damages for negligent installation of electrical wiring. Munden Park claims contribution and indemnity from the Electrical Safety Authority for breach of an alleged obligation to inspect and have corrected any deficiencies in the electrical installation.

#### The Facts

¶ 2 Munden Park was hired by the District School Board 19 ("the school board") to install a 60-amp receptacle outside the front entrance to Huttonville Public School. The receptacle was to service a travelling careermobile. The work was performed on December 21, 1989 by Alan Weedon, an electrician employed by Munden Park.

¶ 3 In July 1995, there was a fire at the school which the school board alleges was due to the electrical cable not having been installed in accordance with the Ontario Electrical Safety Code ("the code"). It is alleged that the electrical cable could have been damaged during installation resulting in a kink or opening of its armour, that the cable was not supported properly and that it was in direct contact with radiator fins, leaving it susceptible to mechanical damage.

¶ 4 Damages have been agreed upon in the amount of \$325,000.00.

¶ 5 There was a good deal of conflicting testimony. Vincent Rochon is an electrical engineer and is an experienced fire investigator who investigates approximately 350 fires per year. He worked for several years in the fire marshal's office as a fire protection engineer. He was the only expert witness to have the opportunity to attend at the site on the day of the fire. He testified that he performed a systematic investigation which revealed that an electrical failure occurred in a cable which caused an arc or high-energy discharge. The failure occurred in the cable above the doors within the gymnasium. According to Mr. Rochon, the failure of the cable ignited nearby combustibles and the fire progressed upwards and outwards along the east wall and into the main lobby ceiling.

¶ 6 Mr. Rochon considered and eliminated careless smoking, spontaneous heating and arson as possible sources of fire ignition.

¶ 7 A 60-amp breaker protected the exterior receptacle and it was in the tripped (off) position at the time of the investigation. The main lobby was equipped with three light fixtures which were damaged by the fire. Two light fixtures were removed prior to the investigation but Mr. Rochon examined the light fixture which was closest to the origin of the fire. He testified that it did not overheat or fail electrically and that the light fixtures were not energized when the fire started.

¶ 8 Mr. Rochon testified that he analyzed the burn patterns, fire consumption and the electrical and mechanical systems which confirmed that the fire began within the wall assembly at the south area of the gymnasium separating it from the entrance lobby.

¶ 9 The armoured cable ran along the lobby's ceiling through the wall into the gym and along the top of the radiator fins to the exterior south wall receptacle. The outdoor receptacle was not being used at the time of the fire and there was no evidence of electrical overloading. There was no evidence of arcing in any cables other than the cable leading to the exterior receptacle. Mr. Rochon concluded that the fire resulted from the electrical failure of the armoured cable which supplied power to the exterior receptacle used on various occasions by a careermobile. He concluded that the electrical

failure most likely occurred as a result of mechanical damage to the cable caused by one or more of the following:

1. Damage during installation resulting in a kink or opening of the armour;
2. Failure to support the cable within a distance of less than 1.5 meters as required by the code;
3. Vibration to the cable caused by projectiles such as basketballs landing against the radiator enclosure along which the cable ran.

¶ 10 He acknowledged that the presence of electrical wiring at or near the point of fire did not necessarily mean the fire was caused electrically. He testified that arcing and beading of the cable was visible to the naked eye and that it was not necessary to examine it microscopically. In Mr. Rochon's opinion, the fact that there was no visible kinking to the armour could have been due to it not having survived the fire. He testified that the arc could have been triggered by movement of the cable or voltage fluctuation. In his opinion, a sharp edge such as the metal brackets supporting the metal cover for the radiator, the metal cover of the radiator or the steel "I" beam on the edge of the brick wall could have worn through the cable.

¶ 11 Robert McEwan was retained to review Mr. Rochon's report. Mr. McEwan is a professional engineer and CEO of a firm of consulting engineers. He specializes in forensic engineering investigations and has over the past twenty years carried out in excess of 2000 forensic investigations pertaining to fire loss, structural and mechanical/electrical failures.

¶ 12 While conceding that Mr. Rochon was in the best position in this case to determine the origin of the fire, in Mr. McEwan's opinion, Mr. Rochon's conclusions were speculation and his report left a number of unanswered questions. Mr. McEwan did not observe any sharp edges in the photos or failure to adhere to the code where the arcing occurred.

¶ 13 Mr. McEwan examined a photo of the arced cable and expressed the opinion that based on known characteristics of conductor damage from internal vs. external heat generation, the shorting of the cable was not from an internal defect but from application of external heat. He acknowledged on cross-examination that there was an ongoing debate in the scientific community and that it was not universally accepted that by looking at an arc alone that it is possible to conclude whether it was caused by the fire or was the effect of the fire.

¶ 14 Mr. McEwan testified that Mr. Rochon was probably right as to the origin of the fire.

¶ 15 John Clayton is a highly experienced physical metallurgist in the business of failure analysis of materials. He testified that the origin of the fire was at or very close to the site designated by Mr. Rochon but that there was no explanation for how arcing might have occurred and no obvious means of initiation. Mr. Clayton observed limited fusion and very little total wire separation in the photos and concluded that this was a low energy short insufficient to cause a fire. He did an electron microscopical examination (SEM) which confirmed his view. He concluded that the fire was not caused by an electrical short in the cable installed by Munden Park Electric for the following reasons:

1. He observed no kink at the alleged point of origin;
2. The wall along which the cable ran was not subject to significant impact or vibration;
3. There was no trigger mechanism;

4. The electrical activity in the arc was insufficient to set the wood on fire and occurred on top of the cable away from the wooden support board.

¶ 16 Mr. Clayton hypothesized that vandals climbed up to the roof and using a propane torch, cut down through the Lexan window, igniting the curtains which then fell down into the space behind the radiator, igniting the lumber above.

¶ 17 David Dadd, the electrical maintenance supervisor for the school board, testified that he gave specific instructions to the electrician, Alan Weedon, to use electrical metallic tubing (EMT) in the ceiling above the lobby and to go diagonally across the lobby while Mr. Weedon used armoured cable and went at right angles in the lobby. As both were acceptable under the code, in my view nothing turns on this. Mr. Dadd testified that it was not acceptable to use the radiator fins as supports and that it was contrary to the code not to fasten the cable every 1.5 meters.

¶ 18 James Capstick, President of Munden Park, testified that he was not relying upon Hydro to warranty Mr. Weedon's work.

¶ 19 Charles Sparks is a senior consultant with the Electrical Safety Authority, the successor to the Electrical Inspection Safety Division of Ontario Hydro. He joined Ontario Hydro in 1971 as an experienced electrician, became an inspector, a supervisor, a superintendent and ultimately chief operating officer. He testified that the code permits an inspection to be carried out at such time and in such manner as the inspection department determines. He testified that the certificates of inspection issued by the Electrical Safety Authority certify that an inspection was made but do not constitute a warranty to anyone. He testified that inspectors are authorized to do a selective inspection in a very small installation such as this one where the inspection fee was \$13. In inspections such as this one, inspectors would do a walk around and look at anything exposed. Only if there was poor workmanship would there be further investigation such as removing the ceiling tiles. Inspectors were required to do 15 to 17 inspections per day.

¶ 20 Mr. Sparks testified that, provided there was air circulation, the 90-degree turn of the armoured cable in the lobby ceiling and the installation along the radiator fins were permissible under the code. He was unable to say from the photos if the cable was fastened as required.

#### Issues

¶ 21 The following issues must be determined:

1. Where did the fire originate?
2. On a balance of probabilities, was the fire caused by the negligent electrical installation by Munden Park?
3. Did the Electrical Safety Authority owe an obligation to Munden Park to inspect and have corrected any deficiencies in the electrical installation?
4. If the answer to Question 3 is yes, did the Electrical Safety Authority breach that obligation?

#### Discussion

¶ 22 I am satisfied from all of the evidence that it has been established that the fire originated at the

place described by Mr. Rochon. There is very little disagreement among the expert witnesses as to this. The physical evidence, including the photos, and the observations made at the scene at the time of the fire and later all support this conclusion.

¶ 23 The question of whether the fire was caused by the negligence of Munden Park is far more difficult to answer. The only logical and probable cause of the fire was the one advanced by Mr. Rochon. He had the best opportunity to investigate the cause of the fire and he performed a thorough and complete investigation. While the plaintiff has the affirmative burden to establish the cause of the fire, not the defendant, Mr. Clayton's hypothesis, formed from examining photos of the site, of vandals climbing up to the roof and using a blowtorch as the cause of the fire, is farfetched and unsupported by any other evidence.

¶ 24 I find that the cable installed by Munden Park was not properly supported as required by the code and that, on a balance of probabilities, the cable was bent excessively when installed, causing kinking which led to the arc and electrical fire. I accept Mr. Rochon's evidence that the fact that there was no visible kinking to the armour was because it was consumed in the fire. I find that the arc which caused the fire was triggered by either voltage fluctuation or movement of the cable. I am not persuaded by the evidence of Mr. McEwan and Mr. Clayton that the arc was a consequence of the fire.

¶ 25 The obligation on the Electrical Safety Authority to inspect arises under the Power Corporation Act, R.S.O. 1990, c. P.18 as amended and its regulations. Section 111(10) of the Act provides:

"Nothing in this Act or in any of the regulations, plans, specifications or orders issued under this section renders the Corporation or any of its inspectors or other employees liable, or affects the liability of any municipal or other corporation or commission, company, firm or individual, for any injury, loss or other damages caused to any person or property by reason of defects in any of the works or matters mentioned in this section or by reason of any order of the Corporation, despite any inspection or test or the issue of any certificate by the Corporation or by any of its inspectors or other employees."

¶ 26 In my opinion, this section is intended to insulate the inspector and the Electrical Safety Authority from liability for negligent issuance of a certificate. Accordingly, even if the certificate was negligently issued (it is unnecessary to express any opinion on that point), the third party would not be liable.

¶ 27 Moreover, given the evidence of the defendant that it did not rely on any inspection certificate, there would not be any liability because in these circumstances, reliance would be a constituent element of the tort.

¶ 28 Although a number of authorities were referred to by the parties which considered similar fact situations, a review of these cases would not be helpful because each case turns on its own particular facts.

¶ 29 In the result, the plaintiff is entitled to judgment for the damages agreed. The third party proceeding is dismissed. The parties may provide within thirty days short written reasons with respect to interest and costs.

BACKHOUSE J.

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