



**CANADA LABOUR CODE  
PART II  
OCCUPATIONAL HEALTH AND SAFETY**

Roger Perron  
*applicant*

and

National Defence  
*employer*

and

Mario Thibault  
*health and safety officer*

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Decision No. 01-026  
November 28, 2001

This case was heard by Michèle Beauchamp, appeals officer, in Montreal, Quebec, on July 9, 2001.

Appearances

For the applicant:

Roger Perron, mechanic  
Pierre Leduc, co-chair, local health and safety committee

For the employer:

Bernard Pelletier, Analyst, National Defence  
François Sansfaçon, Radiation Safety Officer

[1] This case concerns an appeal made by Roger Perron, a mechanic working for the Department of National Defence (DND) at the Longue Pointe Workshop Depot, Montreal, Quebec, under subsection 129(7) of Part II of the *Canada Labour Code* (the Code) against a “no danger” decision given by Health and Safety Officer Mario Thibault of Human Resources Development Canada’s Labour Program on January 19, 2001.

[2] On January 15, 2001, Roger Perron refused to work on the basis of the provisions of subsection 128(1) of Part II of the Code. This refusal took the form of the following three memoranda, which were sent to his superiors on the dates indicated:

First memo:

January 11, 2001

Memorandum

To: WO Bélisle  
Team Leader, 2 Line

SUBJECT: Refusal to work

In view of the recent international developments involving the depleted-uranium ammunition used in the Balkans, I think that the Canadian government is taking this issue a little too lightly, particularly since other NATO member countries are conducting tests to determine whether their troops have been contaminated, while we accept a group of 11 people as being a sufficiently sizeable sample. I think we’re making a big mistake.

I get very concerned about my health when I wonder whether the vehicles I work on have been contaminated with uranium dust. We regularly find earth, dust and all kinds of other substances in these vehicles. Their air filters are full of particles originating from fields and roads in the Balkans.

Just yesterday, when I was disassembling the periscopes of a Bison painted in UN colours, I found some dust trapped between the periscopes and the hull. This showed that this part of the vehicle had not been washed or decontaminated at all.

Since I am very worried about this situation, I spoke about it yesterday with my wife and this morning with my superiors. I have not yet talked to my co-workers about it, because I don’t want to create any panic among the people that work at 202 — I’m still worried about them, though.

For all these reasons, I refuse to work, and until the situation becomes clearer and I am sure that I will not be running any risks, I ask to be assigned to other duties that will not involve my being close to these vehicles.

Second memo:

January 11, 2001

Memorandum

To: WO Belisle  
Team Leader, 2 Line

SUBJECT: Maintaining my refusal to work

Following the tests Mr. Sansfaçon conducted this morning, I want to maintain or reiterate my refusal to work.

The few readings that he made with his radiation counter show that the places tested are not radioactive. However, all Canadian Forces vehicles in the Balkans did not travel to the same places on the same roads at the same time. That is why I believe that all the vehicles that are serviced in our workshops should be systematically tested.

Also, radioactivity levels are not my only source of concern.

According to a news story in the *Montreal Gazette* of January 8, 2001:

[translation]

"Depleted uranium does not completely vaporize at the moment of impact. In fact, uranium particles can remain suspended in the air and soil for months afterwards and thereby cause radiation or chemical poisoning. Inhalation or ingestion of uranium dust can cause cancer, and metal poisoning can lead to liver damage. Scientists are not in general agreement on the various levels of risk depleted uranium represents."

So, since people are not sure about the risks that depleted uranium represents, why not err on the side of safety for the time being? It would still be possible to be less strict later, after it has been clearly shown how dangerous depleted uranium really is.

As of now, I refuse to take the risk and reiterate my refusal to work.

Third memo:

January 15, 2001

Memorandum

To: Captain Proulx  
Process Manager, 2 Line  
Building 3  
202 Workshop Depot

SUBJECT: Maintaining my refusal to work

After the meeting this morning that was attended by F. Sansfaçon, M. Bouchard, MCpl Durand, D Bélanger, F. Bussièrès and yourself, you gave me the report from the unit RadSO, Bernard Pelletier, and a letter from Mr. Sansfaçon, each stating that they did not find any trace of radioactivity in the places they tested.

The various points of information provided by participants at the meeting have been very useful for me and the test readings to date have lessened my fears.

However, since you still refuse to order a systematic inspection of the whole of Building 3 and do not appear to be absolutely sure about where the vehicles serviced there come from, I feel that you are not yet ready to assure me that my work environment does not contain any radiation hazard.

That is why I am informing you that I am maintaining my refusal to work.

[3] Mr. Perron told the hearing that he was afraid of being exposed to depleted uranium not only because of the contaminated dust that could be on the vehicles themselves, but also because of the fragments or particles that could have been transferred to the vehicles by CF members' shoes.

[4] Mr. Perron also feels that the Canadian standard of 5 rem of exposure per year should be reassessed, since, according to the information he had read on the subject, there is still a risk of getting cancer from exposure to a lower level of depleted uranium. He thinks that DND's testing of only 11 of the 500 vehicles that came from Kosovo was an insufficient sample.

[5] Mr. Perron also thinks that the overalls the employer supplies employees to protect their personal clothing can stay contaminated even after being washed and that the buildings in which the vehicles are kept could be contaminated as well, since they have not been cleaned. He therefore asked for systematic testing of every building and vehicle so as to eliminate all risk of exposure to depleted uranium.

[6] François Sansfaçon, the unit's General Safety Officer, stated that, following Roger Perron's first refusal to work on January 11, the employer conducted tests to detect whether the vehicles were radioactive. The officer himself made two tests on nine vehicles at that time, but no trace of radioactivity was found. These test results were then given to Health and Safety Officer Thibault.

[7] According to Mr. Sansfaçon, it was extremely unlikely that vehicles without any trace of being hit could be radioactive. In addition, if a mechanic noticed any evidence of hits on a vehicle, that vehicle would be taken out of the workshop and tested with detection equipment. It was therefore felt unreasonable to inspect the entire fleet of vehicles parked outside.

[8] Mr. Sansfaçon also informed the hearing that the 500 vehicles kept at Longue Pointe had received a first washing before being shipped back from Kosovo and had then received two further washings after returning to Canada, one of which was in Montreal with their armour removed. Sophisticated tests were conducted to determine their level of exposure to depleted uranium with the results showing levels that did not exceed the normal level of radiation from the land.

[9] Mr. Sansfaçon gave his opinion that the only risk from depleted uranium occurs when a vehicle receives a direct hit from a shell and catches fire, with the danger coming from the fine particles that are released at that time. However, once the vehicles concerned are cleaned, they are no longer contaminated with depleted uranium.

[10] Mr. Sansfaçon tested approximately 40 vehicles without detecting any trace of radiation, except on the dials which contain traces of radioactive hydrogen. If these dials are broken, they are removed, as required by Environment Canada, and sent for destruction at Atomic Energy of Canada's laboratory in Chalk River.

[11] Concerning the soil that can lodge itself between vehicle walls, Mr. Sansfaçon stated that Agriculture Canada regulations require DND to recuperate the soil and any mud produced by vehicle washing, and send both materials away to be destroyed, since Agriculture Canada considers such materials as toxic waste capable of harbouring bacteriological contaminants in the form of foreign seeds that can harm Canadian seed.

[12] Health and Safety Officer Thibault, who investigated Roger Perron's refusal to work on January 15, 2001, mentioned, both at the hearing and in the investigation report which he gave to the parties, that Mr. Perron had said that he (Mr. Perron) was afraid of being contaminated by the depleted uranium dust that might be on the military vehicles from Kosovo which he had to repair and that he therefore wanted all such vehicles to be systematically tested using a radiation detector.

[13] The health and safety officer tested five armoured vehicles for radiation with a Radiation Alert Monitor 4 detector. The results of these tests were all negative, indicating no more than the normal level of background radiation from the earth that every human being is exposed to.

[14] The safety officer also noticed that the results of the radiation tests conducted by DND were also considerably lower than the levels prescribed by Part II of the Code.

[15] Before making a decision on Roger Perron's refusal to work, the safety officer decided, with the parties' consent, to consult an engineer with the HRDC Labour Branch's Technical Services Unit in Hull, Quebec. He then forwarded to the unit director all the data that he had gathered on the work site in question, as contained in the following documents:

- three memos from Roger Perron to his superiors
- "No mandatory testing for ex-peacekeepers" — news story in the *Montreal Gazette*, January 8, 2001
- message from B. Arès to François Sansfaçon
- "Test de radioactivité sur des véhicules blindés de retour du Kosovo" — report by François Sansfaçon, dated January 11, 2001
- "Situation – 202DA, Uranium Appauvri" — report by Bernard Pelletier
- letter from François Sansfaçon to Captain Dany Proulx
- *Manuel pour matière radioactive* — DND report (C-02-040-003/TP-000)
- "DoD Studies Depleted-Uranium Effects on Gulf Veterans" — report by the American Forces Information Service, taken from the Web site at [www.defense link/mil/news](http://www.defense link/mil/news)
- "Uranium naturel ou uranium appauvri" — article by Éric Brasseur, Cybersciences, taken from the Web site at [www.cybersciences.com](http://www.cybersciences.com)
- "Armes à uranium appauvri" — article by Dan Falhey, Fondation Laka, taken from the Web site at [www.ib.be/grip/bdg](http://www.ib.be/grip/bdg)
- "Environmental Exposure Report (on) Depleted Uranium in the Gulf" — report #1-800-472-6719, published by the US Department of Defense, July 31, 1998.

[16] Industrial Hygiene Engineer François De Mers of the Technical Services Unit analysed the documents and results that Health and Safety Officer Thibault had sent him. In a memo dated January 18, 2001, De Mers notified the officer that "Apart from the DND results (from Messrs. Sansfaçon and Pelletier), few [of the documents] are relevant to the issue that concerns us."

[17] He also mentioned that he had found two documents containing interesting information on exposure to depleted uranium: the December 19, 2000 update of the US Department of Defense's report on "Environmental Exposure Report (on) Depleted

Uranium in the Gulf” (1-800-497-6261) and the US Army Research Institute of Infectious Diseases’ report on “PDA Team Activities During Operation Vigilant Warrior,” May 8, 1995.

[18] Engineer de Mers notes that the US Department of Defense’s report #1-800-472-6719 is the only document he has found on “exposure levels” to depleted uranium experienced by military and civilian personnel during the Gulf War.

[19] He explains that, according to this document, three categories of persons were most exposed to depleted uranium during the Gulf War: first, those who were inside or near combat vehicles hit by depleted uranium shells and those who came to their assistance immediately afterwards. In the worst-case scenario, such people would have received a maximum radiation dose of 4.8 rem, which is very close to the 5-rem threshold used in Canada, the United States and almost every other country in the world.

[20] The second category consists of those who worked on damaged combat vehicles to assess damage and radiation levels or remove ammunition or carry out repairs. Supposing that people in this category worked on such vehicles for 1 – 3 hours at a stretch, they would be exposed to a maximum radiation level of 0.016 – 0.065 rem — a level 75 – 300 times lower than the threshold level.

[21] The third category consists of troops who had gone through several smokescreens put up by Iraqi battle tanks after being hit by depleted uranium missiles or who, on several occasions, had been inside contaminated vehicles on the battlefield. In these cases, radiation exposure is estimated to be 0.000003 – 0.01 rem, i.e., lower than the threshold level.

[22] Engineer de Mers gave his view that if Longue Pointe depot mechanics worked only on vehicles that had been hit by depleted uranium missiles, they would, based on the exposure estimates for the second category, be exposed to 0.005 rem per hour. Supposing that they worked on such vehicles seven hours per day, five days per week and 48 weeks per year, their total exposure would come to 0.84 rem, still far less than the 5-rem threshold.

[23] As for exposure to soil contaminated by depleted uranium, De Mers states in his report that he only found a little information on the contamination levels in the soils of Iraq or Kosovo. However, he did find very useful information in the document by the American PDA team that had visited a depot in Kuwait where hundreds of civilian and military vehicles damaged during the war were stored, since several of these vehicles had been destroyed by depleted uranium missiles.

[24] The team analysed soil samples that were taken either from parts of vehicles that were close to holes made by depleted uranium missiles or from small gullies created by rainwater runoff; the team also calculated the radiation exposure levels of the technicians that had taken these samples. All these tests showed that, even if the soil was contaminated at all, the level was not dangerous for people who worked with it. De Mers said that this evidence led him to “believe that the same was true for the soil from Kosovo that was still lodged in the cracks and crannies of the vehicles at the Longue Pointe depot.”

[25] Turning to the question of the level of contamination in the Longue Pointe vehicles, De Mers explained that Sansfaçon and Pelletier had taken radiation readings on at least 11 vehicles from Kosovo and the results showed levels of 4 – 5 disintegrations per second, i.e., a level virtually the same as the background level of 4.6 – 5 disintegrations per second measured on the work site. According to De Mers, “readings close to background levels might be due to the fact that most of the vehicles kept at Longue Pointe had been decontaminated twice. So, one thing is sure: they are definitely not very contaminated, if at all.”

[26] On the basis of the sampling methods adopted by the American National Institute for Occupational Safety and Health (NIOSH) and which are used for reference in Canada, De Mers also estimates with respect to the number of vehicles sampled by DND that “11 vehicles out of 500 is an adequate sample for concluding that we can be 90 per cent sure that one of these samples would be among the 20 per cent with the highest radiation levels. This strategy is more than sufficient for screening purposes.”

[27] De Mers ends his report with the following comment: “Based on the average result that was virtually the same as a normal background radiation level and the sample size used, as well as on the data from the two American studies mentioned, I am sufficiently convinced to conclude that people working on vehicles from Kosovo are not being exposed to any danger within the meaning of the *Canada Labour Code*.”

[28] On the basis of this conclusion from engineer De Mers, Health and Safety Officer Thibault decided that employee Roger Perron was not exposed to any danger within the meaning of the Code.

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[29] Subsections 146(1) and 146(2) of Part II of the Code define the appeal officer’s role when an appeal is brought against a “non-existent danger” decision issued under subsection 129(7). Here are relevant excerpts from these subsections:

146.1(1). If an appeal is brought under subsection 129(7) or section 146, the appeals officer shall, in a summary way and without delay, inquire into the circumstances of the



decision or direction, as the case may be, and the reasons for it and may:

- (a) vary, rescind or confirm the decision or direction; and
- (b) issue any direction that the appeals officer considers appropriate under subsection 145(2) or (2.1).

(2) The appeals officer shall provide a written decision, with reasons, and a copy of any direction to the employer, employee or trade union concerned, and the employer shall, without delay, give a copy of it to the work place committee or health and safety representative.

[30] Was Mr. Perron facing a danger within the meaning of the Code when he refused to work on November 14, 2000? Here are the clauses of Part II of the Code that cover refusal to work:

128(1) Subject to this section, an employee may refuse to use or operate a machine or thing, to work in a place or to perform an activity, if the employee while at work has reasonable cause to believe that

- (a) the use or operation of the machine constitutes a danger to the employee or to another employee;
- (b) a condition exists in the place that constitutes a danger to the employee;
- (c) the performance of the activity constitutes a danger to the employee or another employee.

129(7) If a health and safety officer decides that the danger does not exist, the employee is not entitled under section 128 or this section to continue to refuse to use or operate the machine or thing, work in that place or perform that activity, but the employee, or a person designated by the employee for the purpose, may appeal the decision, in writing, to an appeals officer within ten days after receiving notice of the decision.

[31] In this case, Mr. Perron's testimony at the hearing clearly showed his concern at being exposed to depleted uranium while working as a mechanic on DND vehicles that had come from Kosovo. His fears were accentuated because he had read articles on the subject in various newspapers, which had stated that civilian and military employees had either contracted cancer or died of it without being exposed to higher-than normal radiation levels, or that countries like Britain or the United States had tested their troops to determine whether they had been exposed to depleted uranium, or that government information on depleted uranium had been deliberately kept secret.

[32] Mr. Perron's employer had duly responded to his refusal to work and had conducted radiation tests that turned out to be negative. As part of his investigation into Mr. Perron's refusal to work, Health and Safety Officer Thibault also carried out radiation tests and his findings were negative as well.

[33] After being consulted by the health and safety officer, engineer François De Mers of the Labour Branch's Technical Services Unit, conducted extensive research to obtain more up-to-date information on exposure to depleted uranium. The documents that he

studied and his analysis of the results of the tests conducted by DND and the health and safety officer led him to conclude that “people working on vehicles from Kosovo are not being exposed to any danger within the meaning of the *Canada Labour Code*.”

[34] It is very understandable that Mr. Perron could have been worried about being exposed to depleted uranium while working on military vehicles that had arrived from Kosovo. However, Health and Safety Officer Thibault performed tests that had given negative results and had detected only normal radiation levels in the soil samples tested. DND also carried out radiation tests that gave results that were well below prescribed levels. Lastly, engineer De Mers, after thoroughly studying the information available on the subject, as well as standard levels and the results of the samples taken by the health and safety officer and DND, concluded that there was no danger for the employee within the meaning of the *Canada Labour Code*.

[35] I agree with the conclusion drawn by engineer De Mers because it is based on scientifically verifiable technical analysis. The level of radiation Mr. Perron is exposed to does not represent any risk for his health and safety.

[36] For all the above reasons, I agree with the “no danger” decision given by Health and Safety Officer Thibault.

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Michèle Beauchamp

## **SUMMARY OF APPEALS OFFICER DECISION**

**Decision No.:** 01-026

**Applicant:** Roger Perron

**Employer:** National Defence

**Health and Safety Officer:** Mario Thibault

**Heard by:** Michèle Beauchamp  
Appeals Officer  
Human Resources Development Canada

**KEY WORD:** No danger

### **PROVISIONS:**

Code: 129(7), 146

### **SUMMARY**

Roger Perron, a mechanic at the Department of National Defence's Longue Pointe workshop depot, refused to work because he was afraid of being exposed to depleted uranium while working on military vehicles that had arrived from Kosovo.

The health and safety officer performed radiation tests with negative results. After consulting an engineer from the HRDC Labour Branch's Technical Services Unit, who analysed the information available on the subject of depleted uranium, as well as the sampling methods used by the health and safety officer and DND and the results obtained, the health and safety officer came to the conclusion that Mr. Perron's work did not represent any danger within the meaning of Part II of the *Canada Labour Code*.

In accordance with the Labour Program engineer's conclusion because it is based on scientifically verifiable technical analysis, the appeals officer confirmed the health and safety officer's decision that no danger existed.