

Case No.: 2003-40

Canada Labour Code
Part II
Occupational Health and Safety

Donna Willan and
Public Service Alliance of Canada
appellant

and

Human Resources Development Canada
respondent

Decision No.: CAO-07-003

February 6, 2007

This case was decided by Katia Néron, Appeals Officer, based on the written submissions provided by the parties and the documents supplied by the health and safety officer.

For the Appellant

Craig Spencer, Counsel, Legal Services, Public Service Alliance of Canada

For the Respondent

Richard Fader, Counsel, Justice Canada, Treasury Board Secretariat

Health and Safety Officer

Darlene J. Kennedy, Labour Program, Human Resources Development Canada, London, Ontario

- [1] This case concerns an appeal filed on August 1, 2003, pursuant to subsection 129(7) of the *Canada Labour Code*, Part II (the *Code*), by Donna Willan, service delivery agent, Income Security Programs, Human Resources Development Canada (HRDC).
- [2] The appeal was filed against the decision of absence of danger rendered, on July 24, 2003, by health and safety officer (HSO) Darlene J. Kennedy, following her investigation of D. Willan's refusal to work on July 16, 2003.
- [3] I retain the following from HSO Kennedy's investigation report and the documents provided by both parties.
- [4] At the time of her refusal to work, D. Willan was working on the first floor, west side, of a federal government building in Windsor, Ontario.

- [5] The building mechanical refrigeration machinery was in the mechanical room located in the basement, along the north hall, below D. Willan's office. The mechanical room was not connected to the building air supply system. There was also one window located in the room and there was a gap of approximately 1" under the door leading to a hallway in the basement. There were stairwells in the hallway, on both the east and west ends. Both stairwells led to outside doors. The occupied space on the first floor was separated from the stairwells by doors that could only be accessed via proximity cards.
- [6] The refrigerant used at the time in the mechanical refrigeration equipment was Genetron 134a (R-134a). According to the *B52-99 Mechanical Refrigeration Code* (the B52-99), this gas holds a group A1 classification, which means having a low toxicity and no flame propagation. In addition, according to its material safety data sheet (MSDS), this refrigerant has a threshold limit value/time weighted average (TLV/TWA) of 1000 part per million (ppm) and a limit of 0.2064 kg/m³ or 12.9 lb/1000 ft³ or 6% volume. The MSDS also indicates that an acute exposure by inhalation may result in a loss of coordination, increased pulse rate and, at high levels of exposure, cardiac arrhythmia. The effects of chronic exposure are not known.
- [7] There had been five Freon leaks in the past, inside or near the building. Here is a brief historical record of these leaks.
- [8] During the weekend of April 26 to 28, 1999, an electrical contractor carried out electrical work near an outside air cooling tower located in the parking lot behind the building. During this work, he accidentally damaged a valve on the air cooling tower, thus letting Freon 12 escape. Freon 12 was the refrigerant used at the time. The accidental damage was not discovered until the following Monday, when it was estimated that approximately 77 kg of Freon 12 had escaped from the air cooling tower. Instead of simply repairing the tower, Public Works and Government Services Canada (PWGSC) and Brookfield Lepage Johnson Controls¹ (BLJC) decided to have the air cooling system converted to operate with R-134a instead of Freon 12. The converted air cooling system included two Freon compressors located in the mechanical room and a water cooled condenser located on the roof of the building.
- [9] Following this event, on March 2, 2001, HSO Fortner, HRDC, Labour Program, Southwestern District Office, London, wrote a letter to Andrian Lancop, HRDC, Windsor Central Office, in which he stated:

[...]

As you can well appreciate, on-site investigation and testing at this time concerning the dichlorodifluoromethane (Freon 12) release of April 26 to 28, 1999 would be of no value.

I have however conducted an inquiry into the situation and information gathered has revealed the following:

¹ Brookfield Lepage Johnson Controls was hired at the time by Public Works and Government Services Canada to maintain and operate the buildings owned by the federal government.

- A report was forwarded to Environment Canada by BLJC as required by subsection 27(1) of the Canadian Environment Protection Act – Federal Hydrocarbon Regulations, at the time of the incident.
- As my letter of February 5, 2001 to Ms. Wanda Seegar stated, this office was not notified of this incident and an investigation was not conducted by this office.
- Freon 12, the element involved, is a colourless, almost odourless compressed or liquefied gas which is non-flammable or non-poisonous. It is over 4 times heavier than air, and has a very high evaporation rate. This being the case it would dissipate very rapidly at ground level. As the 77 kg amount was released over a 2 day period in an outdoor environment, any concentration would be very minimal. The TWA for Freon 12 is 1000 ppm.
- The intake of the HVAP is on top of the 2 storey building and approximately 50 feet away from the source.

Based on the above facts, it is my opinion that the chance of any element entering into the air supply of the building was next to impossible. If trace amounts did, they would certainly not put any of the employees' safety and health at risk. This position has been confirmed by our Industrial Hygiene Engineer in Ottawa as well as Health Canada.

[...]

- [10] On September 2000, another 2.3 kg of Freon 12 approximately leaked from a separate and unconnected air cooling unit located on the south east corner roof of the building. However, it was expected that it was unlikely that anyone had been exposed to the Freon which escaped into the atmosphere. Two months later, HRDC was informed that the system had been repaired.
- [11] On September 19, 2001, Scott Mertz, a technician with Dual Electric and Refrigeration Company conducted a routine annual inspection of the air cooling unit in the mechanical room. While he observed that the unit was starved of R-134a, he could not find any leak. He tightened some of the nuts on the Freon line to the expansion unit and re-charged the air cooling unit with approximately 41 kg of R-134a.
- [12] In connection with this, PWGSC and BLJC notified HRDC of the loss of R-134a and confirmed that the air cooling unit had been re-pressurized with approximately 41 kg of R-134a on September 19, 2001. However, PWGSC further informed HRDC that:
- R-134a posed a low risk to health and safety;
 - it was likely that the leak of R-134a had occurred over a period of time because a sudden leak would have caused the air conditioning unit to fail immediately, which was not the case. Thus any release of R-134a in the room would have been low;
 - a 1½ inch gap under the floor permitted the R-134a to escape from the room;

- both stairwells outside the mechanical room led from the basement to the exit doors to the outside of the building;
 - the doors to the outside of the building were opened frequently by the public;
 - the room was ventilated *via* an open basement window.
- [13] On September 26, 2001, Mr. Mertz returned to the mechanical room and found a leak in the capillary line of the air cooling unit, which he opined was due to vibration. He left without adding any R-134a.
- [14] On October 2, 2001, Mr. Mertz returned to the mechanical room and capped the Freon line that was leaking. He then re-charged the air cooling system with approximately 41 kg of R-134a for winter operations.
- [15] During late March and early April 2002, the cooling tower on the roof of the building was replaced by an air condenser. This involved recovering approximately 45 kg of R-134a from the system, then another 20 kg of R-134a approximately, plus some 60 kg of R-134a more. Approximately 59 kg of R-134a were not recovered, either because it remained in the old condenser or escaped to the atmosphere. How much R-134a could have been released in the atmosphere could not be estimated.
- [16] A further inspection of the machinery room was made on March 2003 by Dan Burlac, a mechanical maintenance management specialist working for PWGSC. D. Burlac's report recorded the following violations of the *B52-99 Mechanical Refrigeration Code* in the machinery room:
- no refrigerant vapour detector and no leakage alarm system were installed in the machinery room, contrary to subsection 5.2.3 of the B52-99;
 - no mechanical ventilation system was dedicated for the machinery room, contrary to section 5.2.5 of the B52-99;
 - the existing door to the mechanical room was opening inside and was not tight-fitting, contrary to section 5.2.2 of the B52-99;
 - there was no self-contained breathing apparatus near the door of the machinery room, contrary to section 8.1 of the B52-99 and to the requirements of the MSDS on the refrigerant R-134a;
 - the machinery room was not ventilated to outdoors as requested by subsection 5.2.5.2.1 of the B52-99.
- [17] Despite the above mentioned violations, the mechanical refrigeration machinery was in operation at the time of D. Willan's refusal to work.
- [18] Because D. Willan was aware of the Freon leaks and of the violations found in the mechanical room and also because she had a history of heart arrhythmia dating from 1997, she believed that the Freon gas leaked in the mechanical room could have infiltrated the first floor. To support her allegation, D. Willan stated that the vapours of the refrigerant, which are 3.5 times heavier than air, will quickly accumulate at floor level of the occupied space. Furthermore, because of the volatility of the vapours, they will

move in the perimeter areas. Then, because all the air returns were on the ceiling of the occupied space, vapours that are 3.5 times heavier than air could not be removed from low lying area without specific floor level ventilation, and none was ever used after any of the past leakages. D. Willan added that there was no ventilation system for the machinery room itself and that this room inducted directly to occupied space.

[19] Given this information, her history of heart arrhythmia dating from 1997 and the fact that, at the time of her refusal, her pulse rate was rapid and she was feeling dizzy, D. Willan believed that her symptoms were the result of continual and chronic exposure to vapours of Freon. For these reasons, she believed that there was a danger to her health in working in her office and she left the work place.

[20] D. Willan's statement of refusal to work is as follows:

Per Section 128.1 Employer continues to operate mechanical refrigeration machinery in direct contravention of CSA B52 "Mechanical Refrigeration Code" B2-99 section 5.2, 5.25.3.1, 5.2.53.2, 5.2C. Employer is aware from (latest) Mar 03 re: violations. A/C in question has history of continual/chronic leakage*.

Employer has failed to provide requested (OSH) information concerning PWGSC calculations in regard to Vapour/Density equation, footage, etc. in Memo from D. Burlac, Jun. 17/03.

I am feeling anxious re further exposure to refrigerant vapours. I have a rapid pulse rate and feel dizzy when at the work place.

Employer had failed to report leakage of Freon to occupant in past.

[21] Following her investigation, HSO Kennedy concluded that the violations of the *Mechanical Refrigeration Code* in the machinery room housing the air conditioning unit did not constitute a danger for D. Willan, who worked on the first floor of the building. The HSO based her decision on another inspection report from D. Burlac, dated June 17, 2003, which had been previously reviewed and accepted by Bob Cavan, Industrial Safety Engineer, HRDC, Labour Program. HSO Kennedy states in her decision report the following explanation given in D. Burlac's report:

[...]

Dan Burlac comments that theoretically the entire charge of refrigerant (145.14 kg or 320 lb) may leak in mechanical room and/or occupied space. Should this occur, the minimum limit of volume would not be acceptable in the mechanical room, but the minimum limit of volume would not be exceeded in the occupied space on the first floor.

[22] Based on the above, HSO Kennedy decided that there was no current hazard of exposure to R-134a for employees working on the first floor. She also concluded that it could not be stated that this potential hazard would come into being.

Appellant's arguments

- [23] I retain the following from the written arguments and the documents provided by counsel Craig Spencer on behalf of the appellant.
- [24] Counsel Spencer declared that the refusal to work filed by D. Willan on July 16, 2003 was the third one since 2001. He provided the following information regarding the two previous refusals to work made by D. Willan.
- [25] The first work refusal happened on October 26, 2001, when D. Willan and a co-employee, John Klein, exercised their right to refuse work because of the Freon leaks of September 19 and October 2, 2001. Both complained that they felt ill as a result of exposure to Freon gas or other indoor air quality hazards in their work place. An investigation into the indoor air quality was made by HSO Paul Danton, Labour Program, London Office. Following this investigation, HSO Danton rendered a decision of absence of danger for both employees.
- [26] On January 29, 2002, D. Willan and J. Klein appealed the decision of HSO Danton pursuant to subsection 129(7) of the Code. D. Willan asserted that the health and safety officer had not checked the mechanical room or her work area for air contaminants. Following his inquiry, Appeals Officer Douglas Malanka agreed in his decision² with the conclusion of HSO Danton and confirmed the HSO's decision of absence of danger.
- [27] Despite this decision, counsel Spencer stated that without a test to detect the presence of vapours at her floor level, D. Willan could only rely on her medical symptoms to refute the evidence that all leaks were restrained outside her work area.
- [28] Counsel Spencer declared that the state of the air cooling system was explained in D. Burlac's report of March 2003. As outlined at page 5 of the report, the largest air cooling unit, Copelarmatic (split), was the oldest (1970) and was retrofitted in 1999 after the first known leak of refrigerant.
- [29] Counsel Spencer also referred to page 6 of the report, which stated that
- [t]he main split cooling system is considered obsolete. The system original refrigerant Freon R-12 was replaced with R-134a in May 1999.
- [30] Counsel Spencer added that, at page 9, the report commented the effects of the refrigerant HCFC-22 in use at the time. It reads:
- [...]
Like HCFC-22, inhalation exposure above the recommended exposure limit to vapours may cause human health effects that can include temporary nervous system depression with anesthetic effects such as dizziness, headache, loss of coordination and even loss of consciousness. It is recommended to move to

² *D. Willan and J. Klein and Human Resources Development Canada (M. Janosik)*, [2005] C.L.C.A.O.D. No. 21, Appeals Officer Douglas Malanka, Decision 05-021, May 11, 2005.

fresh air. An effect that occurs with most hydrocarbons and halocarbons at high concentrations is that the human heart can become sensitized to adrenalin (cardiac sensation). It is recommended to move to the fresh air and do not use drugs that could increase the risk of cardiac problems.

- [31] Counsel Spencer also pointed out that D. Willan asserted that not only she but several employees in her work place had reported at the time similar medical symptoms related to irregular heart beat.
- [32] Following this first refusal to work, Freon leak tests were conducted in the basement mechanical room on October 30, 2001, November 14, 2002, June 16, 2003 and again during the annual leak testing on September 30, 2003. No leaks were detected.
- [33] D. Willan filed a second refusal to work on May 15, 2003, after she experienced symptoms that suggested she might be reacting to the refrigerant. She was sent home.
- [34] According to counsel Spencer, D. Willan believed that HSO Kennedy, who had been designated at the time to investigate the situation, did not investigate until five weeks after the refusal to work. D. Willan was told to stay home during that period and when HSO Kennedy did visit the site, D. Willan did not accompany her.
- [35] Counsel Spencer added that D. Willan explained her reported symptoms by the fact that no testing was done in her work area.
- [36] However, following this second refusal to work, HSO Kennedy received, on June 2, 2003, an assurance of voluntary compliance (AVC) from the employer, HRDC, whereby the entire air conditioning system would be leak tested by a qualified person and a qualified person would determine whether the requirements of section 7.10 - Mechanical Room Requirements, of the *Mechanical Refrigeration Code* were being met.
- [37] In response to the AVC, D. Burlac issued a second report, dated June 17, 2003, on which HSO Kennedy based her decision of absence of danger. D. Burlac wrote in his report:

Theoretically the entire charge of refrigerant (145.14 kg or 320 lb) may leak in the mechanical room and/or occupied space. The minimum limit of the volume to meet the values mentioned in Table 1 would be: $145.14 \text{ kg} / 0.2064 \text{ kg/m}^3 = 703.2 \text{ m}^3$ (=24830 ft³) and is not acceptable for the mechanical room (approx. 8100 ft³). This volume meets the requirements of B52-99 for the occupied space on the first floor which is approx. 168000 ft³.

- [38] The covering email that preceded D. Burlac's report and which was sent on June 6, 2003 by Leigh Campbell, PWGSC, also stated:

I am providing, for your information and use, a copy of the report prepared by Dan Burlac of our MMS Section addressing the interpretation of current codes and practices as they relate to the machine room in the basement of the subject building.

The items identified by the HRDC Labour Inspector have been confirmed as items requiring action. In fact, these were initially reported by MMS following an inspection in March of this year. As the deficiencies were not considered life threatening or a direct contravention immediate action was not required. It should be noted that the correction of these deficiencies will not have any direct impact on tenant employees occupying this facility. The Code requirements in this instance are for the safety of technicians accessing this secure area.

In an attempt to satisfy all parties, PWGSC and our services provider BLJC will undertake to upgrade this room to current standards. We will begin by having BLJC develop the plans and specifications and order of magnitude estimate to work. If the HRDC Labour inspector insists that it is essential to complete the work in an expeditious fashion we will divert funding from other projects to address this matter.

- [39] Following this, counsel Spencer declared that no AVC was received by the Labour Program with respect to the repairs to the refrigeration plant and, presumably, the same equipment that was mentioned by D. Burlac in his June 10, 2003 report continued to cool the building through the summer of 2003.
- [40] Counsel Spencer declared that on July 16, 2003, D. Willan reported again a rapid pulse rate and feeling dizzy. Given these symptoms, she continued to suspect that the vapours were reaching her work area through the ventilation system. Because the refrigerant is heavier than air, she speculated that the vapours were gathering at the floor level and by the peripheral walls and that her symptoms were possibly due to continual / chronic exposure to Freon in the work place. Working close to a wall, she trusted her symptoms rather than calculations based on the total cubic space of the work area. She filed her third refusal to work.
- [41] Counsel Spencer added that prior to the decision of absence of danger rendered by HSO Kennedy on D. Willan's third refusal to work on July 16, 2003, there had been no on-site inspection or, in spite of D. Willan's reported symptoms, no testing conducted to determine whether or not the R-134a refrigerant was present in her work area.
- [42] Even though counsel Spencer indicated that the contested work place is no longer occupied by D. Willan, he stated that D. Willan and her medical practitioners believed that the employee's personal health problems detailed above are attributable to her exposure to gas released from the refrigerant system and that D. Willan hoped to ensure through this appeal that no other workers is exposed to a similar risk.

Respondent's Arguments

- [43] Counsel Richard Fader responded to counsel Spencer's written submissions on behalf of HRDC. I retain the following from his written submissions.

- [44] Counsel Fader first stated that there was no danger in the work place at the time of D. Willan's refusal to work. Furthermore, he stated that, at the time, there was no basis in checking for refrigerant vapours at floor level.
- [45] To support this position, counsel Fader referred to a letter written by Greg Keyes, Account Manager for BLJC, on June 24, 2003. G. Keyes confirmed that, following D. Willan's third refusal to work, a refrigerant test was conducted on June 16, 2003 in all comfort related refrigeration equipment servicing the first floor of the contested building. No leaks were identified. His letter reads in part as follows:
- [...] This letter is to confirm that a refrigerant leak test was conducted on Monday, June 16, 2003 at the above facility.
- Using an electronic leak detection device Trane Service Agency's Refrigeration Mechanic, Michele Lebrun, conducted assessments of all comfort related refrigeration equipment servicing the 1st floor of the building. During this inspection no leaks were identified.
- [46] Counsel Fader also referred to the *Correctional Service of Canada and Dwight Guthro*³ decision, where paragraph 25 reads:
- [...] The three paragraphs, 128(1) (a), (b) and (c), demonstrate that one element is absolutely essential when refusing to work: the employee who refuses must, while at work at his post, be exposed to the existing or potential hazard that he claims represents a danger for him or for other employees. In other words, the employee must be "directly facing" the alleged danger while at his post.
- [47] Based on the above and on the fact that no leak had occurred at the time, counsel Fader stated that the existing or potential hazard that D. Willan claimed represented a danger to her or to other employees was not present at the time of her refusal.
- [48] In addition, counsel Fader submitted an email written, on June 6, 2006, by Amy Desjardins, Manager Corporate Services, HRDC, Windsor, where Ms. Desjardins confirmed that a Freon detector had been installed on February 3, 2004 and that no alarm signal had been triggered since.
- [49] Counsel Fader also pointed out, as conceded by counsel Spencer, that D. Willan no longer works in the work place. As a result, she is no longer exposed to the impugned condition while at work.
- [50] Counsel Fader added that the Federal Court of Appeal has recently confirmed, in *Douglas Martin and Public Service Alliance of Canada and Attorney General of Canada*⁴, that

³ *Correctional Service of Canada and Dwight Guthro*, [2004] C.L.C.A.O.D. No.16, Appeals Officer Michèle Beauchamp, Decision 04-016, April 6, 2004

⁴ *Douglas Martin and Public Service Alliance of Canada and Attorney General of Canada*, 2005 FCA 156, May 6, 2005.

appeal hearings under the Code are *de novo*. Therefore, he said, the issue in the present case is whether or not there is, as of today, a danger in the work place or distinct violations of the Code. As neither D. Willan nor anyone in her department currently works at the work place, counsel Fader believes that the matter is now moot.

- [51] Counsel Fader also argued that because neither D. Willan nor anyone in her department still works in the building and because D. Willan said that she was continuing her appeal in the hope that, through it, the other federal workers who still occupy the building will not be exposed any longer to the alleged risk, this appeal could not simply be considered as an appeal procedure allowed under subsection 129(7) of the Code. Counsel Fader believed that such an approach would be inconsistent with and difficult to understand given the intent of subsection 129(7) of the Code, because the parties most directly affected, *i.e.* the employees still at the work place and the department affected, are not parties to the appeal.
- [52] Counsel Fader added that it is trite law under the Code that an employee cannot refuse to work on behalf of other employees.
- [53] To support this position, counsel Fader referred to paragraph 40 of the *Mary Gray*⁵ decision made by the Canada Industrial Relations Board (CIRB). It reads:

As for Ms. Gray's concern for others working aboard car 8501, section 128(1)(b) of the Code provides that an employee's refusal to work must be based upon a reasonable belief that a condition exists in the work place that constitutes a danger to the **refusing employee**. If crew members on car 8501 heading to Toronto were advised of Ms. Gray's work refusal, the requirements of section 129(3) were complied with, and it was up to those other employees to decide for themselves whether or not to accept that work.

[emphasis added]

Analysis and decision

- [54] There are two issues to be addressed in this case. The first issue is whether or not D. Willan's appeal is admissible under subsection 129(7) of the Code. This is because D. Willan no longer works in the building and because her appeal was based on her concerns for the others federal employees who still occupy the building.
- [55] If I find that I have the authority to inquire into the case, then I must decide on the second issue, which is whether or not HSO Kennedy erred when she decided that a danger did not exist at the time of her investigation of D. Willan's refusal to work.
- [56] To decide these matters, I have to consider the circumstances of the case, the factual evidence, the jurisprudence submitted and the relevant legislation.

⁵ *Mary Gray and Via Rail Canada Inc.*, CIRB Decision no. 21, Board File 18926-C, June 28, 1999.

[57] With regard to the first issue, I find for the following reasons that I must proceed with my inquiry in the case.

[58] The circumstances where an employee may exercise his or her right to refuse to work are found in subsection 128(1) of the Code. It reads:

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

[emphasis added]

[59] I understand paragraph 128(1)(b) to mean that when an employee's refusal to work is based upon the belief that a condition exists in the work place that constitutes a danger, that danger can only concern the refusing employee, and the refusing employee cannot refuse to work if the dangerous condition concerns other employees.

[60] In the present case, D. Willan refused to work based on her belief that her symptoms were due to an alleged condition existing in the place that constituted a danger to her. She refused to work because she believed there was a danger to her and she had the right to do it pursuant to paragraph 128(1)(b).

[61] In addition, pursuant to subsection 146.1(1) of the Code, where an appeal is brought under subsection 129(7) following a health and safety officer's decision of absence of danger, the appeals officer shall inquire into the circumstances of the decision. There is no mention that the refusing employee's appeal is inadmissible if the employee no longer works in the work place and the appeal is based on concerns for the other federal employees still occupying the work place. Subsection 146.1(1) reads:

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).

[62] Furthermore, subsection 129(7) reads:

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.

- [63] For these reasons, I believe that D. Willan had the right to bring her appeal pursuant to subsection 129(7) and, therefore, I find that her appeal into the decision of HSO Kennedy is admissible.
- [64] Given this determination, I will now inquire into the second issue, which is whether or not HSO Kennedy erred when she decided that a danger did not exist for D. Willan at the time of her investigation.
- [65] Subsection 122(1) of the Code defines “danger” as follows:
- “danger” means any existing or potential hazard or condition or any current or future activity that could reasonably be expected to cause injury or illness to a person exposed to it before the hazard or condition can be corrected, or the activity altered, whether or not the injury or illness occurs immediately after the exposure to the hazard, condition or activity, and includes any exposure to a hazardous substance that is likely to result in a chronic illness, in disease or in damage to the reproductive system.
- [66] To find that a danger existed in the work place, I must first determine the circumstances under which the existing or potential hazard or condition could reasonably be expected to cause illness to D. Willan before the hazard or condition could be corrected. Then, I must determine if the circumstances existed at the time of HSO Kennedy’s investigation or if there was a reasonable possibility that they would occur in the future.
- [67] In the present case, the alleged hazard or condition was exposure to the Freon gas used in the air cooling system installed in the mechanical room.
- [68] D. Willan argued that Freon gas leaked continually or could leak from the air cooling system and infiltrated her work area on the first floor. According to D. Willan, this was evidenced by the Freon leaks that occurred in the past, by the violations found to the *Mechanical Refrigeration Code* in the mechanical room and by her physical reaction to the leaks.
- [69] With regard to D. Willan’s allegation that Freon gas leaked continually or could leak from the air cooling unit in the mechanical room and that it infiltrated or could infiltrate her work area, there is no evidence before me that, despite the violations found in the mechanical room, the two past events of R-134a release from the air cooling unit in the mechanical room, in September and October 2001, had caused continual exposure to gas vapours in D. Willan’s work area, or that there was a possibility that Freon had been released at the time in the mechanical room and infiltrated her work area or could be released in the future.

- [70] On the contrary, the evidence shows that the mechanical room was not connected to the building air supply system. In addition, no leak was detected in the involved air cooling system on July 16, 2003 and it was not expected that there would be any in the future. Furthermore, there is no evidence before me to refute the written conclusions provided by a qualified person that the deficiencies found in the mechanical room had no impact on tenant employees occupying the facility and did not constitute a risk for the health of these employees.
- [71] I will also refer to D. Burlac's March 2003 report, which mentions that to experience cardiac arrhythmia, a person has to be exposed to high concentrations of R-134a vapours. Furthermore, the report points out that "inhalation exposure above the recommended exposure limit to vapours of this gas may cause human health effects that can include temporary nervous system depression with anesthetic effects such as dizziness, headache, loss of coordination and even loss of consciousness."
- [72] However, as previously mentioned, the fact is that no Freon leak was detected on the day of the employee's refusal of work. I will add that the documents provided by the appellant did not convince me that D. Willan's symptoms were the result of continual exposure to Freon in her work area, especially when there is no evidence before me to refute the opinion provided in writing by D. Burlac, a qualified person, that there was no reasonable possibility that this condition had existed in the past in D. Willan's work area nor that it could reasonably be expected in the future.
- [73] Therefore, I find that, at the time of HSO Kennedy's investigation, vapours of Freon did not constitute an existing or potential hazard for D. Willan that could, in the circumstances, be reasonably expected to result in an illness to her.
- [74] For these reasons, I agree with HSO Kennedy's decision that a danger did not exist for D. Willan at the time and I confirm her decision to this effect.

Katia Néron
Appeals Officer

Summary of Appeals Officer's Decision

Decision No.: CAO-07-003

Appellant: Donna Willan and
Public Service Alliance of Canada

Respondent: Human Resources Development Canada

Key Words: Freon leaks, potential hazard, inhalation exposure

Provisions: *Canada Labour Code*, 128.1
Canada Occupational Health and Safety Regulations

Summary:

A service delivery agent employed by Human Resources Development Canada refused to work in her work area because she was aware of Freon leaks that had occurred in the past coming from the air cooling unit located in the mechanical room located in the basement of the building, below her office. Because she was also aware that several violations of the *B52-99 Mechanical Refrigeration Code* had been found in the involved mechanical room and because she had a history of heart arrhythmia and the fact that, at the time, her pulse rate was rapid and she was feeling dizzy, she believed that the Freon gas leaked in the mechanical room could have infiltrated the first floor and that her symptoms were the result of continual and chronic exposure to vapours of Freon.

The health and safety officer who investigated the refusal to work decided that a danger did not exist at the time of her investigation.

The Appeals Officer agreed with the decision of the health and safety officer that a danger did not exist and confirmed her decision to this effect.