Human Resources Development Canada
Développement des ressources humaines Canada

Canada Appeals Office on Occupational Health and Safety • Bureau d'appel canadien en santé et sécurité au travail

CANADA LABOUR CODE
PART II
OCCUPATIONAL HEALTH AND SAFETY

Employees and Amalgamated Transit Union
applicant

and

Laidlaw Transit Ltd. -
Para Transpo Division
employer

and

Michel Labrecque
Health & safety officer

Decision No. 01-018
August 7, 2001

On March 11, 2001 and March 22, 2001, appeals officer Douglas Malanka held hearings in Ottawa, Ontario, to review the decision taken by health and safety officer Labrecque on January 12, 2001, that a danger did not exist for Para Transpo drivers who refused to work because of toxic mould in certain buses.

Appearances

For the Applicant:
Mr. David J. Jewitt, Counsel
Mr. Bruce Stewart, Senior Vice President, Pinchin Environmental Ltd.;
Mr. Wayne Sykora, Health and Safety Committee Member, and Driver.

For the Employer:
Ms. Rosalind Cooper, Counsel
Ms. Lydia Renton, Manager, Industrial Hygiene and Occupational Health and Safety, Water and Earth Science Associates Ltd.;
Ms. Yvonne Swant, General Manager, Para Transpo;
Mr. James Tierney, Director, Human Resources, Laidlaw Transit Ltd.

[1] This case concerns an appeal made pursuant to subsection 129.(7) of the *Canada Labour Code*, Part II, (hereto referred to as the Code or Part II). 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.

[2] Health and safety officer Labrecque submitted a report and testified at the hearing. His report will not be reproduced here but forms part of the file. I retain the following from his report and testimony.

[3] On January 11, 2001, twenty drivers at Para Transpo refused to work pursuant to subsection 128.(1) of the Code. Specifically, the drivers refused to operate Para Transpo Champion E350 Specialty Transit buses because toxic mould had been found in two of the buses, and there was reason to believe that all Champion E350 were similarly affected. By the time health and safety officer Labrecque arrived at Para Transpo to investigate the refusals to work, the number of employees refusing to work had climbed to 44. By the second day of his investigation, the number had risen to 105 employees. Some drivers who refused to work complained that they had developed sore throats and wheezing. Others complained that they had developed allergies to mould and now had to use inhalers.

[4] Subsection 128.(11) provides that, where more than one employee refuses to work for the same reason, they may designate one employee from among themselves for the purpose of the investigation by a health and safety officer. In this case, Mr. Wayne Sykora, employee member of the occupational health and safety committee at Para Transpo and driver represented the drivers who refused to work. Subsection 128.(11) reads:

> 128.(11) If more than one employee has made a report of a similar nature under subsection (9), those employees may designate one employee from among themselves to be present at the investigation.

[5] During his investigation of the refusals to work, health and safety officer Labrecque learned that driver, Verni Tanner, had written to the health and safety committee at Para Transpo in August 2000. She complained that she was allergic to mildew and felt ill when she operated buses designated as 319, 334, 336 and 339. She requested that Para Transpo address the mildew problem and assign her only to mildew free vehicles. The health and safety committee did not address Ms. Tanner's memorandum until October 2000. In November, 2000, Para Transpo

hired Water and Earth Science Associated Ltd. (WESA), an air quality specialist company, to investigate and report into the air quality complaints of three of its employees including Ms. Tanner.

[6] Health and safety officer Labrecque consulted with Ms. Eva Karpinski, an industrial hygiene engineer at Human Resources Development Canada. He provided her with the WESA reports and requested advice. On January 12, 2001, Ms. Karpinski wrote to him and made the following observations:

> 1. The air sampling results indicate that under normal driving conditions there is no danger that is expected to cause illness to a person exposed to it before the condition can be corrected. The results expressed in CFU/m^3 represent levels that are acceptable and comparable to those found in the outdoor environment. [My underline.]
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> 2. The air sampling results obtained during banging and kicking of the van roof and panels, as well as, the bulk sampling results indicate the presence of fungi. However, it has to be understood that these concentrations do not represent driver's personal exposure under routine operation. [My underline.]

[7] Health and safety officer Labrecque decided that a danger from exposure to mould did not exist for the drivers who refused to work. He met with employer and employee representatives on January 12, 2001 and informed them of his decision. He issued a direction and ordered Para Transpo to remove the mould by February 28, 2001.

[8] During the same meeting, Para Transpo told its drivers that they would be reassigned to another bus if they felt ill while operating a bus. Health and safety officer Labrecque told drivers to contact him if Para Transpo did not honour this commitment to accommodate them.

[9] Mr. Bruce Stewart, Senior Vice President, Pinchin Environmental Ltd., testified as an expert witness on moulds in the work place. His report and testimony will not be repeated here. However, I retain the following.

[10] The New York City Department of Health - Environment and Occupational Disease Epidemiology produces a guideline entitled, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments, 2000". Municipal, provincial and federal regulators in Canada generally regard the protocol as the standard of due diligence.

[11] The basis of the N.Y. Protocol is that there is no safe level for mould exposure in a workplace and that mould must be removed as soon as it is found. The Protocol recommends that, when mould is discovered, the employer must immediately inform employees in writing of the types of mould found, the symptoms associated with the mould, and of the remediation measures to remove the mould. It further states that

any person experiencing symptoms should be advised to consult with a physician who will review the information regarding the mould present and decide if the person should see a specialist in environmental and occupational health and safety medicine. The specialist will determine if the symptoms experienced by the employee are related to the work place and suggest what action is needed to protect the health and safety of the employee.

[12] The American Congress of Industrial Government Hygienists (ACIGH) does not publish a Threshold Limit Value (TLV) for mould and does not expect to develop one soon. This is because a mouldy environment can include multiple species of mould, because sampling methods for moulds are weak, and because the science is uncertain as to whether people are reacting to the spores or to other components present in mould. In addition, the impact that mould has on the health of a person depends on numerous factors. These include, the type of mould present, the individual susceptibility of the person exposed thereto, the concentration of the mould present and the duration of exposure.

[13] Adverse health effects caused by moulds generally fall into one of three groups. These include allergic responses, toxic effects and fungal infections. According to Mr. Stuart, approximately 10 to 15 per cent of the general adult population have a higher sensitivity to mould and will, at some point, experience an allergic reaction. These individuals may have other allergies or existing respiratory conditions including asthma or other lung diseases. When exposed to mould, they may experience an allergic sensitization and immune responses such as allergic rhinitis, asthma, or eczema. Other more serious reactions are possible but they are less common. Once a person develops a mould allergy, the person reacts immediately to the next exposure.

[14] Anyone may suffer toxic effects if exposed to a high concentration of toxic mould. Toxic effects may cause flu-like symptoms such as fatigue, headache, fever, and muscle ache. Inhalation of toxic spores may also lead to or exacerbate immunologic (allergic) reactions or cause infections.

[15] The risk of fungal infections is rare and generally limited to severely immune compromised individuals and can only be determined on an individual basis. Immune compromised individuals include organ transplant recipients, those with AIDS or leukemia, or those receiving chemotherapy. Fungal infection can result in coughing, coughing up blood, weight loss, bone pain, chills and headache. Fungal infections can also lead to the worsening of underlying conditions such as asthma or cystic fibrosis.

[16] Mr. Stuart held that Ms. Lydia Renton or Ms. Karpinski depended too heavily on the air sampling conducted by WESA technicians for concluding that a danger did not exist for drivers. He held that air sampling is a four-minute snap shot of the air

quality in a bus and may not represent the levels of mould present in the bus over a complete work shift. In addition, he submitted that air sampling can significantly under-report the presence of stachybotrys chartarum spores because the spores lose their viability or ability to germinate to form a colony of mould growth, within weeks of drying. While the spores are not viable and, therefore, not detected by viable sampling, the stachybotrys chartarum spores retain their allergic and toxic properties and so are still of importance to health. For this reason, he contended that the absence of spore trap tests in WESA's air quality assessment may have seriously understated the potential hazard from the mould. He opined that the photographs of infested boards taken from the buses suggest a very high level of mould infestation in the buses. He stated that the "too numerous to count" results in air samples taken by WESA showed that mould behind the panels had a pathway into the interior of the buses. (See paragraph 24.)

[17] Ms. Lydia Renton testified for Para Transpo as an expert witness on moulds. Her reports to Para Transpo on behalf of WESA are included in the file but will not be reproduced here. I retain the following from her reports and testimony.

[18] Para Transpo hired WESA in November 2000, to determine if illnesses reported by three of its drivers were due to mould, mildew or diesel fumes in its Champion E350 Vans. WESA conducted routine air sampling tests on three of the Champion E350 buses on November 29, 2000. During the testing, the driver simulated worst case driving conditions related to potholes, cornering, and engine speed idling. During some of the sampling, WESA technicians banged and kicked against roof and side panels the length of the buses.

[19] The next day, November 30, 2000, WESA technicians dismantled and removed the front cowling area of the cab of one of the buses. The headliner measuring approximately 5 feet by 4 feet had water damage and visible mould growth at the outside edges where it contacts the fiberglass cowling. Water damage and mould infestation was also found behind side and rear panels. Technicians conducted air sampling near the damaged headliner and took bulk samples of the mould for culturing and fungal identification.

[20] Ms. Renton alerted Para Transpo on December 2, 2000, that mould existed in the Champion E350 buses. She advised them that water was seeping into the buses through a seal on the main horizontal roof joint of the Champion E350 van tested and creating an environment capable of supporting fungal growth. She indicated that the seepage occurred because the water seal on the bus was poorly designed and because Para Transpo had not maintained the seal properly. She concluded that the entire fleet of Champion E350 vans was potentially affected. Ms. Renton estimated that the mould infestation included from 10 to 30 per cent of the plywood panels in the buses.

[21] In the same letter, Ms. Renton opined that there did not appear to be a health risk for drivers sufficient to require a cessation of operations until buses were remedied. She reasoned that the health effects reported by drivers were consistent with the expected numbers in the general population, that there was no visible mould growth on exposed working surfaces inside the buses, and that the WESA air sampling tests confirmed that ventilation rates in the bus is adequate. She added that the regular opening of the relatively large doors on the buses to pickup and discharge passengers ensures significant fresh air exchange rates.

[22] Ms. Renton testified at the hearing that she also informed the local regional medical officer of health of the finding of mould in the buses because the buses were used for transporting special needs people whose immune systems may be compromised. On December 3rd a public health inspector looked at the mould infestation and listened to plans to remedy the buses. The inspector did not place any limitations on Para Transpo relative to passengers.

[23] Para Transpo then requested WESA to conduct information sessions for their drivers. WESA provided eight information sessions on December 4th and 5th, 2000, attended by approximately 60 employees. During the sessions that lasted for approximately 1 to 2 hours, Ms. Renton advised employees of the types of mould found in the buses and the possible health symptoms related to them. She recalled telling employees to see their physician and a specialist in environmental and occupational health and safety medicine if they had, or were currently experiencing, symptoms related to mould. She made written documents available, but observed that only a few participants took copies.

[24] On December 7, 2000, WESA formally reported to Para Transpo on the results of the microbial air sampling conducted in three of the buses on November 29, 2000. Ms. Renton wrote that the air quality in the two buses tested compared with outside air and was acceptable. She acknowledged that air sampling taken when technicians banged on the roof and side panels of the buses showed colony-forming units too numerous to count and that “too numerous to count” findings normally suggest a very mouldy environment. She insisted, however, that banging on roof and wall panels does not represent normal bus operations. She also noted that no visible mould was found on exposed working surfaces in the bus and that the concentration of mould measured in the air sampled was not excessive. She cautioned Para Transpo that she could not comment on the toxigenicity or non-toxigenicity of the mould found in the buses until speciation results were available in approximately 3 weeks.

[25] On January 9, 2001, WESA reported to Para Transpo that the bulk samples taken on November 29, 2000, confirmed the presence of stachybotrys chartarum, a toxic mould. Stachybotrys chartarum is implicated in allergic symptoms such as sinusitis, respiratory effects, flu like symptoms, headache, malaise and rashes. The report

stated, however, that the identification of toxic mould in two of the nine samples taken from one of the buses was dubious. Ms. Renton explained that stachybotrys chartarum is a relatively uncommon mould with spores that do not become easily airborne. She added that, despite the questionable presence of the spores, the absence of stachybotrys colonies in both the air and bulk sampling is consistent with the low viability of stachybotrys. She also noted that the trichoderma harzianum found in the bulk samples did not appear in the air samples. She reiterated in her report that Para Transpo could continue to operate their fleet while individual vans were remedied.

[26] In his summation, Mr. Jewitt argued that I should decide that a danger existed for the employees who had exercised the right to refuse on January 11, 2000. He held that the evidence shows that individuals react differently to moulds and there are no safe dose standards for reliably predicting if an employee will be injured. He insisted that a determination of danger cannot be made until a physician and a specialist in environmental and occupational health and safety medicine have assessed an employee and determined if a relationship exists between the exposure and the adverse health effects suffered by that employee. Since this was not done, he held that there was no basis for health and safety officer Labrecque to decide that there was no danger for the employees.

[27] Mr. Jewitt further submitted that the extent of mould infestation in the buses was exceptional and that at least one form of toxic mould existed in all Champion E350 vans. He referred Mr. Stuart's evidence that contradicted Ms. Renton's claim that the stachybotrys chartarum was not viable and, therefore, not harmful. According to Mr. Stuart, the release of toxic moulds via spores is elevated when the mould stops being viable. Mr. Jewitt dismissed the offer Para Transpo made on December 5th and 6th, 2000, and repeated on January 11th, 2001, that drivers experiencing adverse health effects due to mould could request another bus. He said that only one bus had been remediated on the day of the refusal and so there was no other safe bus. He further argued that drivers had experienced health symptoms and had already been exposed to the mould for an extended period of time.

[28] Ms. Cooper argued that I should uphold the decision of health and safety officer Labrecque that a danger did not exist for drivers who refused to work. She pointed out that both expert witnesses and the New York Protocol agree that mould is found everywhere indoors and outdoors. She held that moulds affect approximately 10 to 15 percent of the general population and this generally includes people with allergies, bronchitis, hay fever and those with compromised immune systems. She held that the most common symptoms of exposure to moulds usually disappear after the exposure to moulds stops.

[29] She stated that the N.Y. Protocol advises that mould must be removed from a place as soon as it is found, but it does not state that it is necessary to evacuate people while the mould is removed. Instead, the N.Y. Protocol advises that the decision to evacuate a person must be based on the results of medical evaluations. She added that a danger did not exist for Para Transpo employees experiencing symptoms because Para Transpo went beyond the N.Y. Protocol and instructed all its drivers that they did not have to operate any bus that was making them feel ill. She added that a danger did not exist for employees free of symptoms because there is no reasonable expectation that they would suffer injury or illness.

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[30] The role of an appeals officers following an appeal of a health and safety officer's decision made pursuant to subsection 129.(7) is to inquire in a summary way and without delay into the decision and to vary, confirm or rescind it as the case may be. Subsections 146.1(1) of the Code 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
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> (*a*) vary, rescind or confirm the decision or direction; and
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> (*b*) issue any direction that the appeals officer considers appropriate under subsection 145(2) or (2.1).

[31] The issue I must decide in this case is whether a danger from exposure to mould existed for Para Transpo drivers who refused to operate the Champion E350 buses on January 11, 2001. If I decide that a danger under the Code existed, I must then issue a direction pursuant to subsection 145.(2) of the Code. To decide this matter, I must consider the definition of danger in the Code, the facts in the case, and any applicable case law.

[32] Looking first at the legislation, the term "danger" is defined in section 122.(1) of the Code 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;

[33] According to Mr. Stuart, mould can cause injury or illness to a person exposed thereto as a result of an allergic reaction, toxic effect or fungal infection. While this confirms that mould can constitute a hazard in the work place, it alone does not establish that the mould in the buses constituted a danger under the Code.

[34] In the unreported decision of appeals officer Serge Cadieux in the case of Darren Welbourne and the Canadian Pacific Railway Company, Decision No. 01-008, dated March 22, 2001, appeals officer Cadieux wrote the following in paragraphs *19 and 20*:

> [19] The existing or potential hazard or condition of the current or future activity referred to in the definition must be one that can reasonably be expected to cause injury or illness to a person exposed thereto before the hazard or condition can be corrected or the activity altered. Therefore, the concept of reasonable expectation excludes hypothetical or speculative situations. [My underline.]
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> [20] The expression "*before the hazard or condition can be corrected*" has been interpreted to mean that injury or illness is likely to occur right there and then i.e. immediately[1]. However, in the current definition of danger, a reference to hazard, condition or activity must be read in conjunction to the existing or potential hazard or condition or the current or future activity, thus appearing to remove from the previous concept of danger the requisite that injury or illness will likely occur right there and then. In reality however, injury or illness can only occur upon actual exposure to the hazard, condition or activity. Therefore, given the gravity of the situation, there must be a reasonable degree of certainty that an injury or illness is likely to occur right there and then upon exposure to the hazard, condition or activity unless the hazard or condition is corrected or the activity altered. With this knowledge in hand, one cannot wait for an accident to happen, thus the need to act quickly and immediately in such situations. [My underline.]

[35] That is, for a danger to exist under the Code, there must be a reasonable degree of certainty that an injury or illness is likely to occur right then and there unless the hazard or condition is corrected or the activity altered. For deciding if a reasonable degree of certainty exists, it is necessary to examine the specific facts in the case.

[36] With regard to fungal infections from moulds, Mr. Stuart testified that the risk of fungal infections is rare, generally limited to severely immune compromised individuals, and can only be determined on an individual basis. He indicated that immune compromised individuals include those with AIDS, leukemia, receiving chemotherapy or are organ transplant recipients. In this case, there was no evidence that the immune system of any of the drivers was compromised. That

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[1] *Brailsford v. Worldways Canada Ltd. (1992), 87 di 98 (Can. L.R.B.)*
Bell Canada v. Labour Canada (1984), 56 di 150 (Can. L.R.B.)

being the case, I conclude that it is not reasonable to expect that exposure to the mould found in Champion E350 buses could cause injury or illness to any of the drivers as a result of fungal infection.

[37] Regarding injury from exposure to toxic mould, Mr. Stuart submitted that anyone may suffer toxic effects if exposed to a high concentration of airborne toxic mould. While he did not define the term “high concentrations”, I am not convinced that a high concentration of airborne mould existed on the buses for three reasons. First, the mould infestation found in the buses was sandwiched between the exterior walls and the interior panels of the vehicles. Secondly, airborne toxic mould appeared in air samples taken in the buses when WESA technicians pounded on the wall and ceiling of the van. While the finding of airborne toxic mould showed that a path existed for the toxic mould to make its way into the interior of the affected buses under specific conditions, I do not consider the pounding on vehicle panels to simulate normal operations of the buses. In fact, when the air quality test was repeated in the same bus without pounding on the walls and ceiling, no toxic mould was found in the air sampling. Furthermore, I tend to agree with Ms. Renton’s position that any concentration of airborne mould in the air would have been diluted by the frequent opening of the bus doors to pickup or discharge passengers.

[38] In terms of allergic reactions to mould, Mr. Stuart testified that approximately 10 to 15 per cent of the general adult population have a higher sensitivity to mould and at some point may experience an allergic reaction to mould. However, he agreed that it is important that an expert in environmental and occupational health and safety medicine confirm that a casual link exists between the mould and the injury or illness experienced by the person.

[39] When health and safety officer Labrecque investigated the refusals to work by Para Transpo drivers, some complained of feeling ill. Mr. Stuart contended that health and safety officer Labrecque should have involved medical experts in his investigation to determine if the health complaints of drivers who refused to work were linked to the mould in the buses before deciding that a danger did not exist for the drivers. While I would agree that health and safety officers have a duty to investigate a refusal to work thoroughly, and that it may have been instructive if officer Labrecque had surveyed the drivers, it must be recalled that a health and safety officer is not authorized under the Code to force employees to submit to medical tests or to consult with a physician or a specialist in environmental and occupational health and safety medicine for confirming that their illness is linked something in the workplace

[40] Health and safety officer Labrecque decided that a danger did not exist because the concentration of airborne mould in the buses was similar with ambient levels in outdoor air and it was not reasonable to expect that the mould could cause injury or illness to a driver before it could be removed. Based on my review, I conclude, on

the balance of probability that his decision was both reasonable and correct. In my opinion, the concentration of airborne mould in the buses was not sufficiently high to create a reasonable expectation that a driver exposed thereto could be injured or made ill before the mould was removed. In addition, there was no evidence to establish that the illness reported by any driver who refused to work was linked to mould found in the buses.

[41] During the information sessions that WESA held on December 4th and 5th, 2000 to inform drivers that mould was found in the Champion E350 buses, Para Transpo told its drivers that they would be immediately reassigned to another bus if they felt ill while operating a bus. I note with interest and some weight that drivers, including the three known to be allergic to mould, seem to have accepted the accommodation by Para Transpo up until the approximate time that WESA confirmed that toxic mould was identified in some of its samples. Initially, 20 drivers refused to work and the number rose to 105 by the next day. This suggests to me that the refusals to work may have been linked to the finding of toxic mould in the samples.

[42] For the reasons stated herein, I confirm the decision of health and safety officer Labrecque that a danger did not exist for the drivers who refused to work on January 11, 2001.

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Douglas Malanka
Appeals Officer

SUMMARY OF APPEALS OFFICER DECISION

Decision No.: **01-018**

Applicant: Amalgamated Transit Union

Employer: Laidlaw Transit Ltd. - Para Transpo Division

KEY WORDS: mould, toxic mould, stachybotros actra, Champion E350 Specialty buses, interior panels, air quality test results, New York Protocol, untreated wooden panels, refusal to work, danger, reasonable expectation of injury or illness.

PROVISIONS:

Code: 122.1, 128.(1), 128.(11), 129.(7), 146.1(1), 145.(2), 145.(2.1)

SUMMARY:

On January 11, 2001, 20 drivers at the Para Transpo refused to work pursuant to subsection 128.(1) of Part II. Specifically, the drivers refused to operate Champion E350 Specialty Transit buses operated by Para Transpo because toxic mould had been found in two of the buses and there was reason to believe that all Champion E350 were similarly affected. By the time health and safety officer Labrecque arrived at Para Transpo to investigate the refusals to work, the number of employees refusing to work for the same reason climbed to 44. By the second day of his investigation, the number had risen to 105 employees.

Upon review, the appeals officer decided that there was insufficient evidence to show that the mould found in Champion E350 buses could reasonably have been expected to cause injury or illness to a driver exposed thereto before it was removed. He confirmed the decision of health and safety officer Labrecque that a danger did not exist for the drivers who refused to work on January 11, 2001.