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

165 Hôtel de Ville, Hull, Quebec, K1A 0J2 – Fax : (819) 953-3326

Canada Labour Code
Part II
Occupational Health and Safety

Todd Genereux
applicant

and

Department of National Defence
Respondent

Decision No. 05-028
June 23, 2005

This case was heard by Appeals Officer Richard Lafrance, in Victoria, B.C., on November 16, 2004.

Appearances

For the applicant
Todd Genereux, Ammunition Technician, Department of National Defence (DND), Canadian Forces Ammunition Depot, Rocky Point, B.C.
Brad Fraser, Ammunition Technician, DND
Terry Anderson, Ammunition Technician, DND
R. Wayne Purdy, Ammunition Technician, DND
Robert Cromwell, Ammunition Technician, DND

For the respondent
Ted Davies, Acting Superintendent, DND
James Allin, Senior Supervisor, DND
Louise McConnel, Warrant Officer, DND

Health and safety officers (HSO)
Lori Donald, Labour Program, Human Resources and Skills Development Canada (HRSDC), Vancouver, B.C.
Vince Smith, Labour Program, HRSDC, Vancouver, B.C.

[1] This case concerns an appeal made on October 31, 2003 by Todd Genereux, pursuant to subsection 129 (7) of the *Canada Labour Code* (the *Code*), of a decision of absence of danger rendered by health and safety officer Lori Donald on October 29, 2003 following the employee's refusal to work.

[2] Todd Genereux was asked by his supervisor to clean covered walkways at the Canadian Forces Ammunition Depot, in Rocky Point, B.C. He refused to work because he believed that it was dangerous to clean the walkways because they were contaminated by bird and rodent feces as well as asbestos and lead.

[3] T. Genereux's statement of refusal to work stipulated the following:

> I refused under *Canada Labour Code* Part II due to concerns to health and safety of cleaning hazardous waste.

[4] I retain the following from HSO Donald's investigation report of the work refusal and testimony at the hearing.

[5] In her report, HSO Donald stated:

- T. Genereux expressed concerns regarding the possibility of contracting the Hantavirus Pulmonary Syndrome (HPS)[1] because of the presence of rodent feces and carcasses on the walkways.

- T. Genereux also objected to cleaning these walkways because paint, allegedly containing lead and asbestos, was flaking off their structure. He maintained that the paint flakes were being crushed into a powder by vehicles that were driven on the walkways. He thought that it was a danger because he could inhale this powder and thus be exposed to lead and asbestos.

- In all, he was not convinced that he was provided with the proper respiratory protective equipment given the level of contamination.

- In addition, he stated that he was not adequately trained to perform this work in a safe manner.

[6] HSO Donald confirmed that when she visited the area of concern, she noted that there was a fair amount of bird and rodent feces mixed with paint chips and other debris on the ground.

[7] HSO Donald indicated that she had two concerns with regard to the situation:

- possible exposure to the Hantavirus, because of the presence of bird and rodent feces;

- possible exposure to lead and/or asbestos that may have been present in the paint chips.

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[1] A pamphlet posted at the Rocky Point Depot, states, on page 1, Introduction: "Hantavirus Pulmonary Syndrome, or HPS, is a severe illness caused by a virus found in rodents especially Deer Mice. – The first time HPS was found in Canada was very recently, in the middle of 1994, when three cases were reported in British Columbia. However, the disease is considered extremely rare – as of June 1994 only 76 people have ever been reported to have HPS in all of North America. The disease is fatal about 60 per cent of the time.

[8] HSO Donald verified in the employer's training records that T. Genereux had been fit tested for half face respirator. The record also indicated that T. Genereux had received training on respiratory protection, work place spill response, environmental awareness and asbestos.

[9] HSO Donald further testified that T. Genereux was provided with personal protective equipment to do the work, *i.e.* a half face respirator with HEPA type filters, goggles, disposable coveralls, boots and gloves. He was also instructed to wear that equipment when cleaning the walkways.

[10] HSO Donald further declared that upon verification with a Labour Program industrial hygienist and other sources[2], she was satisfied that the work procedure put in place by the employer (see Appendix A) was the proper protocol to protect the employees from exposure to the Hantavirus. This procedure required the use of personal protective equipment to clean up feces, bird and mice carcases. As well, a bleach solution was used to spray and soak the feces and carcases before handling them.

[11] HSO Donald also verified with T. Genereux's supervisor, James Allin, that he was knowledgeable with the work procedures as well as with the equipment required to do the work safely.

[12] HSO Donald indicated that paint samples had been analysed by two different sources[3] and both of them found that, even though there was lead and asbestos present in the paint chips, their concentration was below the legal limits.

[13] HSO Donald confirmed that she observed people walking on the paint flakes or driving over them and this had reduced the paint flakes to small pieces. However, in her opinion, it was highly improbable that the paint flakes could be broken down to such a fine powder as to render them airborne.

[14] HSO Donald noted that T. Genereux and the employer stated at the time of her investigation that the walls were not subject to sanding or grinding which could generate a high level of dust.

[15] Regardless of the above, HSO Donald noted that employees were instructed to wear a half face respirator equipped with HEPA filter cartridges when sweeping up the paint flakes.

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[2] The World Health Organization, Health Canada and the BC Centre for Disease Control.
[3] HRDC Industrial Hygiene Laboratory and North West Environmental Group Ltd.

[16] HSO Donald rendered her decision of absence of danger based on the premise that the employer had implemented what was recommended by a recognized health and safety organisation, the Formation Health Services Unit of the B.C. Workers Compensation Board[4]. In her view, the employer provided T. Genereux with the proper level of supervision, appropriate procedure, adequate training and personal protective equipment required to protect him from the risk associated with exposure to the Hantavirus and to lead and/or asbestos.

[17] The applicant, T. Genereux, introduced a number of co-workers as witnesses. He presented as well a number of documents to provide evidence on the issue at hand. I retain the following from these testimonies and documents.

[18] With regard to the cleanliness of the walkways, the witnesses estimated that the degree of contamination by bird and rodent feces ranged from somewhat contaminated to heavily contaminated.

[19] The witnesses indicated that they had not received specific training on hazardous material cleanup, decontamination and disposal procedures.

[20] One of the witnesses acknowledged that the information on the Hantavirus was posted in various areas, including the stores where employees got their equipment.

[21] A few witnesses mentioned that they vaguely remembered some discussions with their supervisor about the HPS issue as well as some directions being given to read information material on it.

[22] Witnesses had vague recollections of safety briefings being held about various health and safety issues. Those briefings were given by an industrial health nurse. However, as they were not mandatory, attendance was very low.

[23] In summary, T. Genereux asserted that the following hazards constituted a danger for him and asked that I rescind the decision of HSO Donald that there was no danger for him:

- the walkways had not been cleaned or maintained for over fourteen months and there was a heavy accumulation of bird and rodent feces and of paint chips containing lead and asbestos;

- the instruction and training he received to clean the walkways did not specifically address the cleanup, decontamination and disposal of hazardous materials and of lead and asbestos. Nor was the instruction in writing;

- the half face respirator provided to him was inadequate and he should have been provided with a powered air-purifying or air supplied respirator for cleaning up the heavy accumulation of rodent droppings; and

[4] In a document dated July 31, 2000.

- his supervisor was not adequately trained in cleanup, decontamination and disposal procedures for hazardous materials and with regard to the proper personal protective equipment appropriate to the work.

[24] T. Genereux finally argued that the danger referred to was not a normal condition of employment, even if the danger of being exposed to the Hantavirus was mentioned in the work description. The accumulation of excrement and carcasses of rodents far exceeded what could have been construed as "normal."

[25] The employer representative, T. Davis, introduced witnesses as well as documents to provide evidence on the issue at hand. I retain the following from these testimonies and documents.

[26] Warrant Officer McConnell confirmed that rodent feces were present on the premises but she believed that it did not constitute a heavy accumulation of rodent feces.

[27] WO McConnell further confirmed that there was an insufficient budget to maintain the walkways and control the vegetation as a prevention measure to decrease the movement of rodents. She confirmed that vegetation control was usually done at least once during the summer.

[28] WO McConnell held that to her knowledge, there had always been some kind of pest control since 1993. This was done either by the employees or by contractors. As well, she confirmed that on September 19, 2003, an integrated pest control program had been initiated with the assistance of an outside contractor.

[29] WO McConnell testified that after T. Genereux's work refusal, an in-house hazardous material cleanup team cleaned the walkways, using the same procedure as the one posted in the depot and used by the employees. The team eventually stopped doing it, as they believed that this was not a hazardous material issue, but rather a normal house cleaning issue.

[30] Senior supervisor J. Allin explained the work procedure for cleaning up rodent feces and removing carcasses of mice and birds. According to this procedure, employees were required to wear the provided protective equipment, *i.e.* coveralls, boots, gloves, half face respirator, etc. and use a 10% bleach solution to soak the rodent feces and carcases before cleaning them up. If required, the supervisor called a contractor to pick up and dispose of the carcases found in the work place.

[31] J. Allin commented on the fact that he had had many discussions in the past with T. Genereux concerning the cleaning of the walkways and the equipment that was required to do so. T. Genereux was of the opinion that the full face air supplied respirator would offer more protection and should be used.

[32] J. Allin believed that T. Genereux was fully knowledgeable about the cleaning procedures and the personnel protective equipment required to do the work safely.

[33] Even though he had not specifically been trained to do hazardous material cleanups, J. Allin thought that he was fully capable of supervising the work to be done. He believed that he knew enough about the procedures and the required equipment to make sure that the job was done safely.

[34] T. Davis introduced the document that the employer had posted in various areas of the workplace. This document describes the Hantavirus risk control program, including the procedures to handle contaminated waste.[5] I retain the following from the document:

> Introduction, paragraphs 1 and 2
> Hantavirus infection is caused by a virus that is found in some rodents, especially deer mice in Canada and the United States. The virus is rarely transmitted to people, but when it is, the virus can cause severe illness – even death.
>
> People can contract the disease when they breathe the virus that is found in the urine, saliva, or droppings of infected rodents. Hantavirus infections usually occur in rural or semi rural areas where workers are more likely to contact infested rodents or their droppings.
>
> Paragraph 1, page 3
> Most rodents are normally found in rural and semi rural areas, generally not in urban centres. However, many rodents are highly adaptable and can be found in homes as well as commercial and industrials buildings. As such, the B.C. Ministry of Health – the provincial authority on communicable disease – has declared hantavirus to be potentially present in all of B.C.

[35] T. Davis believed that the necessary requirements to adequately prepare and protect the employees for the intended cleaning task were in place. He asked that I confirm the decision of HSO Donald.

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[36] The issue to be decided in this case is whether HSO Donald erred when she decided that a danger did not exist for T. Genereux at the time of her investigation. To do this, I must consider the definition of danger found in the *Code* and the facts in the case.

[37] 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

[5] *A Hantavirus Risk Control Program for Employers and Workers*, BC Workers Compensation Board, January 1996.

> 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[.]

[38] In the present case, T. Genereux alleged that the Hantavirus constituted a hazard that, in the circumstances, could reasonably be expected to cause him injury or illness before the hazard could be corrected. The circumstances alleged by T. Genereux were the following:

- the walkways had not been cleaned or maintained for more than fourteen months;
- there was a heavy accumulation of bird and rodent feces and of paint chips containing lead and asbestos;
- the training and instruction he had received to do the work was inadequate;
- the personal protective equipment was inappropriate in respect of the Hantavirus;
- his supervisor, J. Allin, was not trained in cleanup, decontamination and disposal procedures for hazardous materials and with regard to the proper personal protective equipment appropriate to the work.

[39] With regard to the risk posed by the Hantavirus, the pamphlet posted at Rocky Point depot confirmed that:

- HPS is a severe illness caused by a virus found in rodents and that the disease is fatal in approximately sixty percent of the time;
- the Hantavirus is rarely transmitted to people, but when it is, it can cause severe illness and even death;
- people can contract the disease when they breathe the virus found in the urine, saliva, or droppings of infected rodents;
- Hantavirus infections usually occur in rural or semi rural areas where workers are more likely to be in contact with infested rodents or their work place; and
- the B.C. Ministry of Health, which is the provincial authority on communicable disease, had declared Hantavirus potentially present in all of B.C.

[40] Given these facts, I conclude that exposure to the Hantavirus constituted a hazard.

[41] T. Genereux alleged that there was an abnormally heavy accumulation of bird and rodent feces and paint chips containing lead and asbestos on the walkways. This allegation was supported by HSO Donald's statement that the area had not been cleaned for approximately fourteen months and that she had observed a fair amount of bird and rodent feces mixed

with paint chips. It was further supported by a witness for T. Genereux, who testified that the degree of contamination by bird and rodent feces ranged from a somewhat to a heavy contamination.

[42] In the absence of evidence that quantified the degree of contamination, I can only conclude that the concentration of bird and rodent feces exceeded what might normally be found.

[43] With regard to the paint chips containing lead and asbestos, the evidence was that two different reliable sources, HDRC Industrial Hygiene Laboratory and the North West Environmental Group, confirmed that lead and asbestos were present in the paint. However, their concentration did not exceed the set legal limits. HSO Donald further demonstrated that it was unlikely that the painted wall had been sanded or that traffic was sufficient to cause an accumulation of lead and asbestos dust in the air.

[44] Therefore, I conclude from this that lead and asbestos was present, but not in a concentration sufficient to constitute a hazard that could reasonably be expected to cause injury or illness to an exposed person before the hazard could be corrected. Moreover, employees were required to wear personal protective equipment appropriate to those hazards.

[45] T. Genereux also alleged that the instruction and training he received from his employer relatively to cleaning the walkways did not specifically address the cleanup, decontamination and disposal of hazardous materials and was not in writing. However, HSO Donald testified that she had confirmed from the employer training records that T. Genereux had been instructed and trained on respiratory protection, work place spills and environmental awareness. HSO also testified that a Labour Program hygienist had reviewed the procedures and advised her that the decontamination procedures using chlorine and the personal protective equipment provided by the employer were adequate.

[46] Furthermore, T. Davis testified that the employer had posted a document in the work place which described the hazards and the procedures to handle and dispose of the waste.

[47] In addition, WO McConnell testified that their specially trained hazardous material team had cleaned the walkways following T. Genereux's refusal to work using the same procedures and equipment that T. Genereux had been provided with. They subsequently held that the cleanup was nothing more than normal house cleaning.

[48] Based on this evidence, I find that the work procedures and training provided to T. Genereux by the employer were appropriate in the circumstances.

[49] With regard to T. Genereux's allegation that the respiratory equipment provided to him by his employer for the work was inadequate, I similarly find that it is not supported by the facts, for the following reasons.

[50] First, according to the evidence given by HSO Donald, the Labour Program hygienist had advised her that the protective equipment provided to T. Genereux for the work was appropriate. Second, the special hazardous materials team used the same equipment when they carried out the cleaning.

[51] Although T. Genereux alleged that the accumulation was heavy and that according to the posted procedure this would require a full face powered air supplied respirator, no measurable, tangible evidence was presented to me at the hearing. As well, it was clearly established that the paint was not being sanded or grinded. Therefore, no excess dust was generated, which would have been another condition for requiring the use of a powered air supplied respirator. Consequently, although the accumulation exceeded what could normally have been be found, I believe that there was no need for that type of respirator and that the half face respirator provided along with the other PPE was adequate to protect the employee.

[52] Finally, I was satisfied by the evidence that J. Allin, T. Genereux's supervisor, was knowledgeable regarding the proper procedures and protective equipment required to carry out the work safely.

[53] In my opinion, the evidence in this case does not support the allegation that the Hantavirus, in the circumstances connected with the work, constituted a hazard that could reasonably be expected to cause illness or injury to T. Genereux.

[54] Therefore, for the above mentioned reasons, I confirm the decision of HSO Donald that a danger did not exist for T. Genereux at the time of her investigation.

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Richard Lafrance
Appeals Officer

Appendix 1

Clean-up of Rodent-contaminated Areas

The following procedure is to be applied when cleaning up small quantities of rodent droppings:

1. Clear all unnecessary workers from the area.

2. Ventilate the area by opening windows and doors, if possible.

3. Wear a respirator with a HEPA filter if you are involved in clean-up – for clean-up, wearing a HEPA respirator is *mandatory*.

4. Wear plastic or rubber disposable gloves.

5. Spray the debris with disinfectant solution to soak the material. Avoid using a stream of water – this may create aerosols.

6. Scoop up the material. Dispose of all contaminated material in double plastic bags. Seal the bags. Label them to identify the contents and handle the bags in a manner that will avoid puncturing the bags. Bags of waste may be disposed of by burying them in a hole that is at least two feet deep or by incinerating them. Contaminated material may also be disposed of with regular garbage as long as the amount of material can be safely treated by being soaked in a disinfectant solution and the material is in double plastic bags.

7. Wipe or mop surfaces with a solution of disinfectant and detergent.

8. Decontaminate and remove personal protective equipment and clothing in accordance with the *Decontamination Procedure*.

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The following procedure is to be applied when there is evidence of significant rodent activity, for example, when cleaning up a large amount of rodent droppings, or when handling materials significantly contaminated with rodent droppings:

1. Clear all unnecessary workers from the area.

2. Ventilate the area by opening windows and doors, if possible.

3. Wear a half-mask air-purifying respirator equipped with HEPA filters. The respirator must be used and maintained in accordance with a respirator program.

4. Wear plastic or rubber disposable gloves.

5. Wear disposable coveralls made of a material that will resist the penetration of dust particles and that ensures a snug fit at the wrists and ankles.

6. Wear rubber boots or disposable shoe covers when footwear contamination is likely.

7. Wear eye or face protection to prevent aerosols from coming into contact with the mucous membranes of the eye.

8. Clean rodent droppings and other directly contaminated waste by first spraying the debris with a disinfectant solution to soak the material (avoid using a stream of water because this will generate aerosols), then collect the material in one of the following ways:

   - Vacuum with a vacuum cleaner equipped with a HEPA filter. Do not use other types of vacuums – including *wet;* dry types – because they may disperse the virus throughout the work area. (Always wear a half-mask respirator when using a vacuum to collect rodent droppings and other potentially contaminated waste.)

   - If the material is soaked through to the point of run-off, use a scoop or shovel to carefully move the material into a plastic disposal bag.

9. Wipe or mop surfaces with a solution of disinfectant and detergent.

10. Dispose of all contaminated material in double plastic bags. Seal the bags. Label them to identify the contents and handle the bags in a manner that will avoid puncturing the bags. Bags of waste may be disposed of by burying them in a hole that is at least two feet deep or by incinerating them. Contaminated material may also be disposed of with regular garbage as long as the amount of material can be safely treated by being soaked in a disinfectant solution and the material is in double plastic bags.

11. Decontaminate and remove personal protective equipment and clothing in accordance with the *Decontamination Procedure.*

Respirator Selection and Maintenance

For potential hantavirus exposure, use only respiratory protective equipment that is equipped with HEPA-type filters.

Select the respirator according to the following table:

Respirator Type	Use
Disposable HEPA mask	General clean-up, handling, and maintenance activities for which there is known or probable rodent contamination, but there are not heavy accumulations of droppings.

Respirator Type	Use
Half-face Air-purifying, Rubber or Silicone, Reusable	Cleaning up rodent-contaminated areas where there is an accumulation of droppings and excess dust is not being generated, or where the handling of rodents, alive or dead, is uncommon.
Powered Air-Purifying (PAPR) or Air-Supplied respirators	Cleaning up heavy accumulations of rodent droppings where excess dust may be generated.

Fit-testing

When a worker is first issued a respirator, he or she must be fit-tested with that respirator, using an accepted protocol (such as that in CSA Standard 294.4-93). Fit testing ensures that the respirator fits properly and provides an effective seal with the face for the wearer.

Summary of Decision

Decision No.: 05-028

Applicant: Todd Genereux

Respondent: National Defence Canada

Key Words: Refusal to work, Hantavirus, lead, asbestos, paint, respirator, mouse, rodent, procedure, personal protective equipment, work procedure

Provisions: *Code* 129(7)
Regulations N/O

Summary:

The applicant appealed a decision of no danger rendered by health and safety officer following his refusal to work based on his concerns regarding the possibility of contracting the Hantavirus Pulmonary Syndrome because of the presence of rodent feces and carcasses on the walkways that he was to clean, as well as of paint allegedly containing lead and asbestos flaking off the structure of the walkways.

The appeals officer confirmed the decision of absence of danger because the employee had been provided with personal protective equipment to do the work, such as a half face respirator with HEPA type filters, goggles, disposable coveralls, boots and gloves, he had received training on respiratory protection, work place spill response, environmental awareness and asbestos and there was adequate rodent control measures.