

Canada Labour Code
Part II
Occupational Health and Safety

Alex Deu
represented by: David W. Dolson, Counsel
applicant

and

GlobeGround North America, Inc.
represented by: Brian P. Smeenk and
Ben Ratleband, Counsels, McCarthy,
Tétrault. LLP
respondent

Decision No. 05-002
January 7, 2005

This review was conducted via written submissions. A hearing that had been scheduled was adjourned as efforts to contact the applicant were unsuccessful.

- [1] On November 1, 2002, two Aircraft De-icing and Ramp Handling employees with GlobeGround North America Inc. (GlobeGround) refused to operate the single operator SDI de-icing vehicles they were assigned for de-icing aircrafts at L. B. Pearson International Airport (Pearson). The employees complained that the SDI de-icing vehicles that GlobeGround had purchased from SDI Aviation four years before had experienced numerous equipment failure incidents involving the brakes, the booms, the hydraulics, window glass, electronics and smoke in the bucket and were unsafe to operate. The most recent equipment failure had occurred on October 20, 2002 when the lift boom cylinder of SDI-#41 de-icing vehicle failed causing the bucket occupied by the operator to free-fall to the ground approximately two feet. The two employees also expressed concern with the numerous redesigns of the SDI de-icing vehicles to convert them from a two-person operation to a single-person operation vehicle, and with the overall quality of the workmanship.
- [2] Mr. Alex Deu, one of the employees who refused to work, also complained that a maintenance tag on the SDI-#50 de-icing vehicle assigned to him that morning indicated that there was a problem with the vehicle's brakes.

[3] Health and safety officer (HSO) Ken Manella investigated their refusals to work with HSO Gass and, despite the past mechanical problems with the vehicles, concluded that a danger did not exist for either employee. He informed them of his decision in writing on November 6, 2002 and provided them with a copy of his report entitled, "Investigation Report and Decision."

[4] In his Investigation Report and Decision report, HSO Manella cited the following facts in deciding that a danger did not exist for the employees who had refused to work:

- Following the October 20, 2002 incident when the lift boom cylinder on SDI # 41 de-icing vehicle failed, GlobeGround withdrew all of its eleven SDI de-icing vehicles from service to determine the cause of the structural failure and to have the remaining SDI de-icing vehicles inspected. GlobeGround hired Peel Truck and Trailer to remove the main boom cylinders booms and to send them to AITEC Hydraulics in Oakville, Ontario, who subsequently conducted Magnetic Particle Examinations on all eleven SDI de-icing vehicles;
- GlobeGround officials confirmed that all past mechanical failures involving the SDI de-icing vehicles had been repaired and that the solutions allowed for the safe operations of these vehicles. In addition to their regular maintenance program for the SDI de-icing vehicles, GlobeGround had implemented a new visual inspection of all SDI vehicles;
- With regard to the incident where smoke was detected in the operator's cab on one of the SDI de-icing vehicles, this was caused by a retrofit Monitor Controller part that had been mistakenly installed in the SDI de-icing vehicles to correct another overheating situation in vehicles. Unfortunately, the parts supplier sent the wrong retrofit Monitor Controller part and the mechanic installed it. Regardless of the cause, the problem was rectified;
- The maintenance tag that Mr. Deu saw on the SDI #50 de-icing vehicle assigned him when he refused to work was out of date as the brake problem indicated had already been repaired.

[5] On November 15, 2002, Mr. David Dolson, Counsel for Mr. Deu, appealed the decision of health and safety officer Ken Manella to an appeals officer pursuant to subsection 129(7) of the *Canada Labour Code*, Part II (*Code* or Part II). According to Mr. Dolson's letter, Mr. Deu was appealing the decision of HSO Manella because HSO Manella had:

- Failed to address the chronic and systemic problems with the SDI de-icing vehicles and dealt with the correction of isolated problems. In particular the SDI de-icing vehicles were designed for a two-person crew and were retrofitted to be operated by a single-person sitting in the lift.
- The booms, which were the subject of recent breakage and metal analysis, were subject to a warning that they could not be fully extended because they were too

heavy and might not retract. The employee believed that there was a design flaw that would lead to further falls that was not dealt with by the corrosion testing.

- The SDI de-icing vehicles were obviously only used in icy and inclement conditions. The flow meters could not be read from the vehicles and the operators had to exit the vehicles on often slippery pads and with other traffic to read the flow meter. The Betas¹ had flow meters that could be read by the operator without leaving the vehicle.
- The brakes “jerked” on a regular basis and pitched the occupants of the lifts or failed completely on a regular basis.
- The cabs of the vehicles leaked allowing water to reach electronics.

[6] In his submission, Mr. Dolson maintained that HSO Manella should have ordered a comprehensive review of the SDI de-icing vehicles by an independent engineer addressing all of the safety concerns raised by employees including the braking system, the safety of the lifts, electronics and smoke in the bucket.

[7] In a subsequent letter dated January 12, 2003, Mr. Dolson referred to a notice that Mr. Kelvin Williamson, General Manager, GlobeGround Central De-icing Facility, had posted to employees. Among other things, the notice advised GlobeGround staff that the Engineering Company Draker had completed its independent inspection of one of the SDI de-icing vehicles and concluded that:

...there are no significant structural deficiencies which by itself would cause the unit to be unsafe.” They did make note of areas that will be included in our Preventative Maintenance program. Draker has accepted the original SDI boom certification. Draker recommended a design audit be conducted to incorporate vehicle enhancements. Our next step is to address this recommendation.

[8] Mr. Dolson argued that there was no evidence that GlobeGround ever ordered the design audit recommended by Draker. Instead, GlobeGround appears to have addressed occurrences after they occurred. This, he held, was the essence of Mr. Deu’s complaint that persistent numerous flaws rendered the SDI de-icing vehicles unsafe.

[9] Following Mr. Dolson’s appeal on behalf of Mr. Deu, GlobeGround submitted a response which included a book of documents. The documents were essentially copies of documents that GlobeGround had provided to HSOs Manella and Gass during their investigation. I have considered all the documents and they form part of the record.

[10] One of the documents was a history of maintenance prepared by GlobeGround’s Manager of Maintenance regarding the SDI de-icing vehicles. The maintenance record showed indeed that there had been numerous incidents and problems related to key safety

¹ Another brand of de-icing vehicles.

components on the SDI de-icing vehicles after the vehicles were purchased by GlobeGround and the conversion undertaken.

- [11] However, GlobeGround also submitted copies of documents that addressed the conversion of the SDI de-icing vehicles from a two-person operation to a single-person operation, the measures taken by GlobeGround to address the maintenance incidents and Mr. Deu's complaint the morning of his refusal to work that a maintenance tag on the SDI de-icing vehicle to which he was assigned indicated a problem with the brakes.
- [12] With regard to the conversion of the SDI de-icing vehicles from a two-person operation to a single-person operation, Mr. Smeenk summarized that GlobeGround had purchased the eleven SDI de-icing vehicles from SDI Aviation (SDI), a company which manufactured ground support equipment including aircraft de-icing equipment. Of the eleven SDI de-icing vehicles supplied to GlobeGround starting on May, 1999, two of the units were certified by SDI Aviation for single person operation.
- [13] In the two years that followed GlobeGround engaged SAFERO, a builder of de-icing equipment in the province of New Brunswick, to convert its remaining nine SDI de-icing vehicles from a two-person operation to one. The modifications were completed and certified by certified mechanics. A copy of the SAFERO report was submitted.
- [14] In June of 2001, Advanced Welding Technologies Inc. completed a welder quality test record and advised GlobeGround that visual inspection of the components was acceptable. A copy of the record was submitted.
- [15] On October 20, 2002 there was the failure of the lift boom on SDI #41 de-icing vehicle which caused the bucket occupied by the operator to free-fall to the ground approximately two feet. GlobeGround submitted a document entitled *Daily Shift Report* dated October 20, 2002, which confirmed that GlobeGround had immediately removed all eleven SDI de-icing vehicles out of service following the failure of the boom. GlobeGround then hired AITEC Hydraulics to determine the cause of the failure. AITEC confirmed that three of the SDI de-icing vehicles had passed and three of the vehicles had failed due to failures in adhesion welds. The remaining units were to be tested.
- [16] On October 28, 2002 Mr. Williamson posted a note to all employees to advise that four of the SDI de-icing vehicles had then passed and would be returned to service that day. The notice also advised employees that GlobeGround would make a presentation to them on October 29, 2002 regarding the recent SDI de-icing vehicle problems. A copy of the presentation and of the inspection reports was made available to employees to review prior to the meeting.
- [17] GlobeGround met with employees on October 29, 2002 and informed them regarding the incidence of smoke in the SDI de-icing vehicle operator cab, and the failure of the lift boom of SDI-41 de-icing vehicle on October 20, 2002. In the presentation, GlobeGround assured employees that the failure of the monitor control part that caused the smoke in the operator cab had been established and addressed. With regard to the boom failure on SDI-41 de-icing vehicle, GlobeGround informed employees that six of the eleven SDI

de-icing vehicles were sent for an inspection by magnetic particle inspection following the failure. The inspections confirmed three of the SDI de-icing vehicles had failed and three had passed. GlobeGround assured employees that no SDI de-icing vehicle would be returned to service until it passed. GlobeGround further informed employees at the presentation that it was initiating a new inspection schedule to ensure that the welds on the booms did not separate and that this would be added to the current maintenance program. Employees were then invited to express their concerns or comments.

- [18] On October 30, 2002, GlobeGround posted a letter to staff regarding further action that would be taken as a result of their comments following the October 29, 2002 presentation. In the letter, GlobeGround informed employees that two additional actions would be initiated in addition to the cylinder weld tests that were ongoing. The first was a quarterly structural inspection (QSI) of seven structural areas of the SDI vehicle that would be conducted within one week on the SDI de-icing vehicles already returned to service and then every three months thereafter. An inspection form had been developed for this. The second action was GlobeGround's assurance that "snags" or "minor problems that do not impact on the operation or safety of the vehicle" would be addressed in a timely manner.
- [19] Finally, GlobeGround submitted a maintenance form entitled *Active Work Orders* dated October 31, 2002 which confirmed that the brakes on SDI #50 de-icing vehicle, the vehicle assigned to Mr. Deu the morning of his refusal to work, were checked in single-person operation mode and found to be satisfactory;
- [20] In his arguments on behalf of GlobeGround, Mr. Brian Smeenck, Counsel, McCarthy, Tétrault, LLP, held that the evidence establishes that all repairs and modifications to SDI de-icing vehicles had been done by licensed mechanics in conjunction with applicable experts. He held that the evidence also shows that GlobeGround immediately removed the SDI de-icing vehicles from service until the cause of the boom failure had been determined and repaired. In addition, the evidence proved that GlobeGround kept employees informed regarding the repairs and consulted with them regarding their continued use of the SDI de-icing vehicles. Following employee input, GlobeGround implemented the above mentioned QSI program as a supplement to its regular maintenance program for the SDI de-icing vehicles. Mr. Smeenck further stated the GlobeGround has addressed safety issues concerning SDI de-icing vehicles immediately and directly. In addition, GlobeGround has continually sought to improve the design of the SDI de-icing vehicles and, in this regard, has remained in contact with the manufacturer of the SDI de-icing vehicles to secure their approval of any changes to the SDI de-icing vehicles to ensure their safe operation.

[21] In response to the four points that Mr. Deu raised in his appeal of the decision of HSO Manella, Mr. Smeenk stated that:

- GlobeGround had provided HSOs Manella and Gass with a history of maintenance incidents related to the SDI de-icing vehicle fleet. Therefore Mr. Deu was incorrect in his argument that HSO Manella had failed to address the chronic and systematic problems with the SDI de-icing vehicles;
- On the subject of Mr. Deu's contention that the booms cannot be fully extended because they are too heavy and might not then retract, Mr. Smeenk stated that the failure of the cylinder eye during the October 20, 2002 incident had nothing to do with the full extension of the boom. Testing conducted by qualified persons clearly demonstrated that the weld was at fault and this problem was addressed by GlobeGround. The proximity switches limiting the extension of the boom inner cylinder were installed to avoid previous situations where the boom did not extend. Moreover, licensed mechanics carry out QSI in seven areas to ensure that the SDI de-icing vehicles are meeting standards and the inspection reports are reviewed by the maintenance supervisor;
- With regard to the requirement to exit the vehicle to read the flow meter, Mr. Smeenk responded that employees have been trained on the procedure and have been informed of the hazards and cautions for avoiding injury;
- Concerning Mr. Deu's contention that the brakes jerk on a regular basis and pitch the occupant of the lifts or fail completely on a regular basis, Mr. Smeenk countered that there were two incidents in which the brakes in the original configuration failed. However, this problem was resolved when the Ford braking system was modified. The Ford system was now used as the primary stopping system for dynamic operation and the Ford Park brake system was now used for static braking. The brake system is now a fail-safe system that immediately comes on if anything goes wrong. As far as the brakes being "jerky", GlobeGround conceded that the brakes are "sensitive" but this is a matter of experience; and,
- The problem of water getting into the cab was caused when water or rain entered through upper windows of the vehicles which were cracked. The cracked glass was repaired and there were no further complaints in this regard. Aside from this, ice and snow can get inside the cab during winter when the operators open the doors. However, there had not been any failures due to electrical shorts in the operators' cabs.

[22] In his arguments, Mr. Smeenk cited the following jurisprudence that was considered in my decision:

- *Welbourne and Canadian Pacific Railway Company*, Decision No. 01-008, dated March 22, 2001, by Appeals Officer Serge Cadieux;
- *Brunet v. St. Lawrence & Hudson Railway Company Limited* Decision No. 1239, dated December 22, 1998 by Veronique Marleau, Canada Labour Relations Board (now the Canada Industrial Relations Board);
- *Canadian National Railway Company and Suzanne M. Manaire*, Decision No. 106, dated February 5, 2001, by J. Paul Lordon, Canada Industrial Relations Board;
- *Pierre Brulé, Gaétan Poulin, Claude Bécharde and Gilles Tourigny and Canadian National Railway Company*, Decision No. 2, dated February 18, 1999, by Michele A. Pineau, Canada Industrial Relations Board;
- *Attorney General of Canada and Ken Fletcher, Claude J. Gallant, Fred W. Johnson, L.P. Leblanc, Philippe Leclerc, James A. McCleod, Steven J. Richard and J. R. Heber*, Federal Court Decision 2002 FCA 424, dated November 5, 2002, by J. A. Desjardins, J.A. Décary and J. A. Noël; and
- *Howard Page and Correctional Services Canada*, Decision No. 01-015, dated May 23, 2001, by Appeals Officer Serge Cadieux.

[23] Mr. Smeenk held that in the present case, the concerns raised by Mr. Deu were hypothetical and speculative. He maintained that GlobeGround had amply demonstrated that it vigorously maintained the SDI de-icing vehicles and promptly addressed any mechanical problems that arose with the vehicles and informed employees of the resolutions in an open and frank manner. Since all of the concerns of Mr. Deu had been addressed prior to his refusal to work, Mr. Smeenk held that, if Mr. Deu continued to have concerns, they were no more than speculation.

[24] Finally, he stated that HSOs Manella and Gass had conducted a thorough investigation of Mr. Deu's refusal to work in that they had examined the procedures and rules, did coupling tests and consulted with Transport Canada before concluding that a dangerous situation did not exist. He held that there was no basis for varying or rescinding HSO Manella's decision.

Decision

[25] The issue in this case is whether or not a danger existed for Mr. Deu at the time of HSO Manella's investigation of Mr. Deu's refusal to work. For deciding this I have considered the definition of danger in the *Code*, the jurisprudence cited by Mr. Smeenk and the specific facts in the case.

[26] "Danger" is defined in section 122(1) of the *Code* which reads:

"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.

[27] In this case, Mr. Deu refused to work because he held that:

- the maintenance notice on SDI #50 de-icing vehicle to which he was assigned indicated that the brakes were faulty and faulty brakes constituted an existing hazard that could reasonably be expected to cause him injury before the hazard could be corrected;
- the chronic and systematic mechanical problems confirmed that the operation of SDI de-icing vehicles was unsafe and thereby constituted a potential hazard that could reasonably be expected to cause him injury before the hazard could be corrected; and
- Mr. Deu later contented that the brakes on the SDI de-icing vehicles were "jerky" and constituted a potential hazard that could reasonably be expected to cause injury before the hazard could be corrected because the brakes caused the boom to pitch the occupants of the lift or fail completely.

[28] With regard to Mr. Deu's complaint that the operation of SDI-50 de-icing vehicle constituted a danger because a maintenance note on the unit indicated that there was a problem with the brakes, the undisputed evidence was that the brakes on unit had been verified prior to Mr. Deu's refusal to work and the work order tag had been left on the vehicle by error. Therefore, the brakes were operational and did not constitute a hazard that could reasonably be expected to cause injury to him before the hazard was corrected. Of course, Mr. Deu would not have been aware of these facts at the time of his refusal to work.

- [29] Regarding Mr. Deu's complaint that the chronic and systematic mechanical problems showed that the operation of SDI de-icing vehicles was unsafe, the evidence was insufficient to establish this. While the history of mechanical problems submitted by the Maintenance Manager at GlobeGround confirmed that there had been numerous mechanical problems related to key safety components on the SDI de-icing vehicles, the evidence established that GlobeGround had acted immediately to address the problems and that, by August 2002, GlobeGround was satisfied that the SDI de-icing vehicle fleet was ready for the up-coming winter.
- [30] There was no evidence that GlobeGround took short cuts with regard to the safety of its vehicles or that it permitted maintenance or enhancement work to be done by unqualified persons. To the contrary, GlobeGround submitted evidence from qualified persons attesting to the safety of the vehicles.
- [31] I was impressed by GlobeGround's efforts to keep its employees informed regarding the status of the SDI de-icing vehicle fleet and to consult with them regarding their feedback and suggestions. GlobeGround not only consulted with its employees, but acted on their suggestions as evidenced by the implementation of the QSI program.
- [32] Taking all of this into account and the fact that GlobeGround had what appeared to be an effective maintenance program, I am not persuaded that the mechanical problems of the past confirmed that the operation of SDI de-icing vehicles was unsafe and constituted a potential hazard that could reasonably be expected to cause injury to Mr. Deu before the hazard could be corrected.
- [33] On the subject of Mr. Deu's complaint that the brakes on the SDI de-icing vehicles were "jerky" and constituted a potential hazard because they caused the boom to pitch the occupants of the lift or fail completely, GlobeGround responded that the operation of the brakes can be jerky but that this decreases with operator experience. I did not receive any evidence from Mr. Deu that disputed GlobeGround's position or that proved Mr. Deu did not possess the necessary experience to operate the SDI de-icing vehicles safely. Therefore, I must conclude from the evidence that a danger did not exist for Mr. Deu in this regard.
- [34] Based on the above rationale and GlobeGround's response to the remaining issues that Mr. Dolson raised in his November 15, 2002 letter of appeal, I am satisfied that HSO Ken Manella decision was reasonable and correct in the circumstances. I therefore confirm his decision that a danger did not exist for Mr. Deu.

Douglas Malanka
Appeals Officer

Summary of Appeals Officer's Decision

Decision No.: 05-002

Applicant: Alex Deu

Respondent: GlobeGround North America, Inc.

Key Words: Refusal to work, aircraft de-icing equipment, chronic mechanical problems, brakes, steering, drive system, lift boom, operator cab, other modifications and enhancements.

Provisions: *Code* 128, 129, 146
Regulations

Summary:

The operator of an aircraft de-icing machine refused to work because a notice on the machine indicated that the brakes on the de-icing vehicle he was assigned needed to be examined, because the brakes on that particular model of de-icing vehicle were jerky and because there had been numerous mechanic problems in the past associated with that particular model of de-icing vehicle. Following his investigation of the refusal to work the health and safety officer decided that a danger did not exist for the employee.

Following a review of the appeal by employees, the appeals officer agreed with the decision of the health and safety officer that a danger did not exist for the employee and confirmed the decision of the health and safety officer.