

Occupational Health
and Safety Tribunal Canada



Tribunal de santé et
sécurité au travail Canada

Ottawa, Canada K1A 0J2

Citation: Maritime Employers Association v. Syndicat des Débardeurs de Montréal, Canadian Union of Public Employees, Local 375, 2010 OHSTC 9

Date: 2010-06-04
Case: 2009-22
Rendered at: Ottawa

Between:

Maritime Employers Association, Appellant

-and-

Syndicat des débardeurs de Montréal,
Canadian Union of Public Employees, Local 375, Respondent

TRANSLATION

Matter: Appeal against a direction issued by a health and safety officer under subsection 146(1) of Part II of the *Canada Labour Code*

Decision: The direction is rescinded

Decision rendered by: Ms. Katia Néron, Appeals Officer

Language of decision: French

For the appellant: Mr. André C. Giroux, Ogilvy Renault

For the respondent: Ms. Édith Laperle, Union Advisor, Canadian Union of Public Employees

Canada

REASONS

[1] This concerns an appeal brought under subsection 146(1) of the *Canada Labour Code* (the Code) by Stéphane Saucier on behalf of the Maritime Employers Association (MEA). The appeal is from a direction issued on June 22, 2009, by health and safety officer (HSO) Denis Briffaud.

[2] On September 22, 2009, I sent a letter to Roger Carré, Terminal Manager at Termont Montréal Inc. (Termont), informing him about this appeal and inviting him to submit a request to be added as a party to the affair. On October 6, 2009, Mr. Carré informed me that Termont did not wish to act as a party to the affair.

[3] This case was heard in Montreal on February 9 and 10, 2010.

Background

[4] The following is from HSO Briffaud's testimony, HSO Briffaud's investigation report and related documents, the 17 other documents filed at the hearing, and testimonies from MEA labour relations consultant Mr. Guillaume Couture, MEA health and safety director Mr. Stéphane Saucier, Termont project manager Mr. Julien Dubreuil, MEA principal labour relations consultant Mr. Jean-Pierre Langlois and longshoreman Mr. Claude Denis.

[5] This case involves the refusal of longshoremen Messrs. Paul Chartrand and Michel Dupuis to operate gantry cranes¹ as assigned on the night of June 22, 2009, at a work place operated by Termont, namely, section 68 of the Port of Montreal. To meet Termont's demand for workers and in accordance with the collective agreement,² P. Chartrand and M. Dupuis were assigned to operate gantry cranes during the final shift on June 21, 2009, that is, the night shift beginning at midnight, to unload containers from the *MSC Hailey* and load them onto trucks.

[6] Gantry crane operators work several metres above the containers being moved and must position each container on the truck within inches of accuracy; therefore, operators must pay close attention and have a clear view of crane manoeuvres, to execute them correctly and safely. Since two hands are required to operate a gantry crane, operators must also have good physical coordination. Furthermore, since it takes time to climb up to and come down from a crane cab, operators do not take breaks, so as not to interrupt operations for too long. As a result of those considerations, a gantry crane operator is replaced by another operator after having operated the crane for four hours.

[7] Moreover, each operator works with a signaller who helps with moving the containers in the ship's hold and a team of workers on the quay that helps with loading the containers onto the truck. The operator uses a radio to communicate with them. They

¹ A gantry crane is a motorized materials handling device for loading and unloading container ships.

² The collective agreement between the Maritime Employers Association and the Syndicat des Débardeurs, Canadian Union of Public Employees, Local 375 (expiring on December 31, 2008).

never place themselves under a moving container; however, they do place themselves approximately one metre to the side of the container as it approaches.

[8] While containers are being loaded and unloaded from a cargo ship such as the *MSC Hailey*, the ship operates at least one of its generators, sometimes two, in addition to its boilers, to run electrical equipment and machinery required by those living on board, as well as to keep certain containers refrigerated. Generator and boiler exhaust gases are expelled through the ship's funnels.

[9] When P. Chartrand and M. Dupuis refused to work, the wind was blowing from the southwest.³ Under those wind conditions, the smoke emanating from the ship's funnel was being blown forward over the ship, parallel to the quay. Moreover, the top of the ship's funnel was at the same height as the crane jibs, along which the crane cabs travel.

[10] That night, P. Chartrand and M. Dupuis were operating cranes 2 and 3 belonging to Termont. The cranes had been moved along their rails to the edge of the quay, near the trucks, with their jibs extending over the ship's holds, approximately 35 metres above the ground.

[11] The crane cabs of P. Chartrand and M. Dupuis were not equipped with air filtration systems to stop substances in the ship's smoke from entering. Moreover, the employees had no way of detecting harmful levels of those substances inside the cabin.

[12] Under those conditions, P. Chartrand and M. Dupuis refused to continue operating the cranes for the following reasons.

[13] The smoke that entered the cabs was sufficiently unpleasant to cause nausea and throat irritation. Knowing that another longshoreman had been poisoned while operating a gantry crane for a different employer at the port under the same wind conditions in a cab without an air filtration system, P. Chartrand and M. Dupuis believed that operating their cranes under such conditions would jeopardize not only their health, but also the safety of any person working in the ship's holds or on the quay.

[14] Having been informed about the employees' refusal to work and realizing that it was impossible to eliminate the smoke from the ship or prevent exposure to the smoke on cranes 2 and 3, Mr. Emrick Dutriaux, the Termont superintendent on duty that night, contacted the MEA for assistance. Mr. G. Couture and MEA occupational health and safety consultant Mr. Alexandre Gagnon arrived on site at approximately 1:30 a.m.

[15] G. Couture, with E. Dutriaux, the employees and their representatives, reviewed the actions that had been attempted or recommended to rectify the situation in accordance with the February 2008 MEA procedure "Operating procedure in cases of discomfort caused by smoke emanating from ships." That procedure reads as follows:

³ Southwesterly winds occur only a few times each year at the Port of Montreal; the prevailing winds are usually westerly.

As a result of the tasks they must accomplish, workers may often find themselves bothered by smoke emanating from the funnels of ships during loading and unloading operations. Following various decisions rendered by HRSDC and Transport Canada during the past number of years, through the Maritime Employers Association, port terminals undertook to establish a clear and uniform procedure relative to this problem.

Therefore, the minute the worker becomes bothered by smoke emanating from the funnel of a ship, he must **immediately** report this to his immediate superior. The company that becomes aware of such a situation must investigate and, if required, eliminate as much as possible the source of the discomfort.

In order to accomplish this, operations management must, **if possible**, opt for one or the other of the following solutions, without limiting itself to these:

- reduce the speed of the ship's engines;
- move the crane away from the source of the smoke;
- transfer the employee(s) bothered by the smoke to another work area;
- change the shift rotation to limit the length of exposure of the workers to the smoke;
- have the worker(s) wear a respirator mask;
- change the ship's direction (prow towards the east or towards the west);
- find any other solution in order to reduce the worker(s) exposure to the smoke.

In all cases, be assured that port terminals and the Maritime Employers Association do everything in their power to give the workers a safe and secure working environment.

Your safety depends on it, THINK!

[16] G. Couture noted that none of the measures above were effective for preventing the exposure of the crane operators to smoke from the ship, or applicable in the opinion of the Termont representatives, or acceptable in the opinion of the employees.

[17] No analysis was performed of the nature of the substances emanating from the funnel of the *MSC Hailey* or of the exposure levels of employees operating cranes 2 and 3. The same wind conditions were forecast for the following two days.

[18] The Termont and MEA representatives maintained that there was no danger to employees, while P. Chartrand and M. Dupuis continued to refuse to work. At approximately 2:30 a.m. G. Couture contacted Transport Canada—Marine Safety to request that an HSO investigate the situation.

[19] Having arrived at the work place, HSO Briffaud heard the reasons given by P. Chartrand and M. Dupuis for their refusal to work. G. Couture then told HSO Briffaud

[20] Being aware of the health problems associated with prolonged exposure to certain substances produced by fuel combustion in cargo ship generators and/or boilers—including, according to HSO Briffaud, carbon monoxide (CO), all kinds of aromatic compounds, nitrogen oxides (NO_x) and sulphur oxides (SO_x)—HSO Briffaud was of the view that exposure to the substances emanating from the funnel of the *MSC Hailey* was, within the meaning of the Code, a danger to employees.

[21] HSO Briffaud filed the material safety data sheet (MSDS) for the product named “Bunker C,” “bunker” being a generic term for marine fuel. HSO Briffaud stated that the fuel used in cargo ship generators is a blend of diesel and Bunker C—No. 2 fuel oil, while the fuel used in cargo ship engines contains diesel and Bunker C—No. 6 fuel oil. The “Hazardous combustion products” section of the MSDS reads as follows:

Hazardous combustion products	Carbon monoxide. Nitrogen oxides. PAHs ⁴ and other aromatic hydrocarbons. H ₂ S ⁵ and sulphur dioxide (SO ₂).
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[22] Even though HSO Briffaud had found that a hazard existed, he did not post a notice of danger as set out in subsection 145(2) of the Code. HSO Briffaud stated during his testimony that he should have done so, given that he had found that there was a danger to employees.

[23] After making his finding, HSO Briffaud instead decided to investigate the steps that had been attempted or recommended to employees to try to rectify the situation.

[24] The following describes the steps and the reasons given by G. Couture to HSO Briffaud during his investigation to explain why the steps were tried but were unsuccessful, were rejected by the employees, or were recommended in the above procedure but were not applied.

[25] In accordance with the procedure above, E. Dutriaux began by asking the officer in command of the vessel to reduce the speed of the ship’s engines. However, as G. Couture stated, the engines were still running, and smoke continued to emanate from the ship’s funnel and be blown by the wind toward the crane cabs.

[26] E. Dutriaux then tried moving the cranes away from the ship’s funnels. In order to do this, the unloading plan for the *MSC Hailey* was examined. However, as G. Couture explained, since the unloading had reached the ship’s accommodations,⁶ which are close to the funnel, and since the cranes had limited travel, it was found that, even after trying

⁴ According to section 2 of the MSDS, “PAHs” means “polycyclic aromatic hydrocarbons.”

⁵ According to section 2 of the MSDS, “H₂S” means “hydrogen sulphide.”

⁶ The accommodations of the vessel consist of the crew’s quarter, wheelhouse, offices, etc.

to reposition the cranes, the cabs of cranes 2 and 3 remained exposed to the smoke during the operations.

[27] As also stated by G. Couture, E. Dutriaux then suggested that the employees shorten the length of their shift rotation from 4 hours to 60 minutes. P. Chartrand and M. Dupuis refused, claiming that the operators of cranes 2 and 3 would continue to be exposed to the smoke.

[28] E. Dutriaux also suggested that employees wear a cartridge-equipped rubber mask covering the nose and mouth. P. Chartrand and M. Dupuis refused, claiming that the mask would reduce the operator's ability to see and his ability to communicate with workers in the ship's holds or on the quay.

[29] Termont representatives did not consider it feasible to change the direction of a ship in section 68 of the Port of Montreal.

[30] On June 22, 2009, following the investigation, HSO Briffaud issued a notice of contravention under subsection 145(1) of the Code. That direction is the subject of this appeal. The direction reads as follows:

[Translation]

On June 22, 2009, the undersigned health and safety officer conducted an investigation under section 129(1) at the work place operated by _____, an employer subject to Part II of the *Canada Labour Code* and located at Termont Terminal, % MEA, the said location sometimes known as _____.

The said health and safety officer is of the opinion that the following provisions in Part II of the *Canada Labour Code* have been contravened:

125(1)(n) and 124
& Failure to observe the February 2008 operating procedure in the case of discomfort caused by smoke emanating from the *MSC Hailey*.

Therefore, you are HEREBY DIRECTED, pursuant to subsection 145(1) of the *Canada Labour Code*, Part II, to terminate the contravention no later than June 22, 2009. . . .

[31] HSO Briffaud expressed his view that the presence of hazardous substances in the cabs of cranes 2 and 3 resulting from the lack of a cab ventilation system was contrary to paragraph 125(1)(n) of the Code. He stated that his direction referred to section 124 of the Code because not attempting to change the direction of the vessel and not offering employees another type of mask is contrary to that section of the Code, as well as the MEA procedure adopted by Termont to address the danger to which employees were exposed at the time.

[32] HSO Briffaud stated that his direction referred to “[translation] Termont Terminal” because, to him, the direction applied first and foremost to Termont. The remark “[translation] % MEA” meant “care of MEA.” HSO Briffaud stated that he wrote

Issue

[33] Does HSO Briffaud's direction on June 22, 2009, pursuant to subsection 145(1) of the Code have merit?

Submissions of the parties

A) Appellant's submissions

[34] Mr. Giroux, for the appellant, argues that there was no danger to employees on the night of June 22, 2009, and that there was no breach on that night by Termont or the MEA of paragraph 125(1)(n) or section 124 of the Code, as HSO Briffaud states in his direction. In response to my questions at the hearing on that provision of the Code, Mr. Giroux also maintains that there was no breach by Termont or the MEA of paragraph 125.1(a) of the Code. In support of that argument, Mr. Giroux called S. Saucier and J. Dubreuil as witnesses. I accept the following from their testimonies on those issues.

[35] J. Dubreuil testifies that water currents are stronger along the quay in section 68 of the Port of Montreal than in certain other sections of the port, because section 68 is directly on the edge of the river, while other sections are in the docks. Therefore, to keep a vessel stable during operations, it is moored to the quay with its head facing the current. J. Dubreuil believes that that is the reason for which the direction of the *MSC Hailey* could not be changed in section 68 of the port. Doing so might have affected the vessel's stability and jeopardized the safety of the operations in progress.

[36] S. Saucier testifies that complaints about exposure to smoke blown by the wind from ships into crane cabs have existed for many years—in fact, ever since employers started using gantry cranes to load and unload containers at the Port of Montreal. It is for that reason that the MEA, on behalf of employers at the port, developed the procedure described above. S. Saucier states that the MEA created the procedure on the basis of methods developed by those companies over the years in an attempt to limit the exposure of crane operators to smoke.

[37] S. Saucier filed the report from the 2002 investigation referred to by G. Couture in support of the claim that there was no hazard at the time of HSO Briffaud's investigation. The report is entitled “[translation] Air Quality Study: Ship Funnel Smoke in Crane Cabs During the Loading and Unloading of Containers at the Port of Montreal for the Racine Company.” The document is signed by the president of the consulting firm that conducted the study, who holds a BSc in Chemistry.

[38] In the second paragraph on page 1 of the report, the author writes the following:

[Translation]

The purpose of this study is to assess the air quality in the crane during the simulation of a worst case scenario. . . .

[39] As explained in the third paragraph on page 1 of the report and as stated by S. Saucier, to simulate a worst case scenario, a gantry crane cab was positioned in the path of the smoke from a vessel, approximately 8 m from the vessel's funnel, that is, as close as possible to it. In addition, the engines were accelerated to maximum speed. The cab window facing the funnel was opened completely and the opposite window was opened 4 cm. S. Saucier believes that the worst case scenario for the exposure of a crane operator to smoke emanating from a ship would be to have the crane operator go back and forth between the vessel and the quay (where there is no smoke) to load or unload the containers on a ship, and take approximately 90 seconds to pick up or put down a container.

[40] In the third paragraph on page 1 of the report, the choice to take measurements of carbon monoxide (CO) and total volatile organic compounds (VOCs) is explained as follows:

[Translation]

Measurements of significant chemical parameters for air quality were taken . . .

[41] In item 2.1 on pages 2 and 3 of the report, entitled "[translation] Carbon Monoxide," which describes the method used and results obtained for CO, seven readings were taken inside the cab at 10-minute intervals over a one-hour period.

[42] In item 2.1 on page 2 of the report, health problems associated with exposure to CO are described as follows:

[Translation]

Carbon monoxide (CO) is an asphyxiant gas that hinders respiration by destroying red blood cells. At low concentrations, it can cause headaches and nausea. At higher concentrations, it can cause shortness of breath and heart problems, which may lead to death by asphyxiation. . . .

[43] Item 2.2 on page 4 of the report, entitled "[translation] Volatile Organic Compounds," states that a sample of the total VOCs in the air inside the cab was taken over a one-hour period.

[44] S. Saucier testifies that Bunker, which, as S. Saucier and HSO Briffaud have stated, is the fuel used in ships, gives off hydrocarbons containing a variety of pollutants. S. Saucier and the author of the 2002 study state that the total VOCs, representing all of the pollutants, were measured because the American Conference of Governmental

⁷ had not set standards for such complex combinations of hydrocarbons.

[45] On page 6 of the report, the author concludes:

[Translation]

Although the levels of carbon monoxide and volatile organic compounds found in the smoke should not present a health hazard, the fact that crane operators experienced nausea and headaches from the smoke emanating from ships is sufficient reason to want to improve the situation. The situation . . . may hamper their work and increase the risk of an accident. As well, other components of the smoke that were not examined may change our assessment of the dangerousness of the smoke. For example, . . . the smoke from ships may contain other pollutants such as sulphur oxides and nitrogen oxides, depending on the composition of the fuel.

[46] S. Saucier has filed three documents that specify the ACGIH threshold limit values (TLVs) for CO, nitrogen monoxide or nitric oxide (NO) and sulphur dioxide (SO₂), as well as their potential effect on the health of a person exposed to them. The documents read as follows:

Carbon Monoxide

...
**American Conference of Governmental Industrial Hygienists (ACGIH)
Threshold Limit Value (TLV): 25 ppm⁸ . . . TWA⁹**

...
Potential symptoms: Headaches; tachypnea; nausea; weakness, dizziness, confusion, hallucinations; cyanosis; . . . angina; syncope

Health Effects: Asphyxiation, Chemical anoxia¹⁰

Nitric Oxide

⁷ The American Conference of Governmental Industrial Hygienists is an organization of industrial hygienists in U.S. government agencies. The regulatory provisions of the ACGIH publication *Threshold Limit Values and Biological Exposure Indices* form part of the Code. The publication specifies limits for exposure to chemical substances and physical agents, called “threshold limit values (TLVs),” that must not be exceeded, as well as a list of biological exposure indices (I am referring to the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*, paragraph 10.19(1)(a) of the *Canada Occupational Health and Safety Regulations* and paragraph 8.22(1)(a) of the *Marine Occupational Safety and Health Regulations*).

⁸ Measure of concentration by volume. The concentration is expressed in parts of vapour or gas per million parts of contaminated air by volume (at 25°C, 760 torr), for example, 1 cm³ of the substance per million cm³ of contaminated air (I am referring to the last page of the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*, under “Endnotes and Abbreviations”).

⁹ “TLV-TWA” is the abbreviation for “threshold limit value—time-weighted average,” which is the time-weighted average concentration for a normal 8-hour workday and a 40-hour workweek to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (see definition of “TLV-TWA” on page 4 of the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*).

¹⁰ The 2009 *Le Petit Robert* describes anoxia as a drop in the amount of oxygen delivered by the blood to the tissues.

**American Conference of Governmental Industrial Hygienists (ACGIH)
Threshold Limit Value (TLV): 25 ppm . . . TWA**

...
Potential symptoms: Eye, nose, throat, wet skin irritation; cough, shortness of breath, pulmonary edema (may be delayed); methemoglobinemia,¹¹ cyanosis; headache; abdominal pain, nausea; confusion, drowsiness, convulsions, unconsciousness.

Health Effects: Irritation—Eyes, Nose, Throat, . . . ; Methemoglobinemia . . . ; CNS effects . . . ; Delayed lung damage . . .

Sulfur dioxide

[...]

**American Conference of Governmental Industrial Hygienists (ACGIH)
Threshold Limit Value (TLV): 2 ppm . . . TWA; 5 ppm . . . STEL¹²**

...
Potential symptoms: Eye, nose, throat irritation; rhinorrhea, nosebleeds; choking, coughing, shortness of breath,¹³ chest pain, pulmonary edema, cyanosis; reflex bronchoconstriction; eye, skin burns; . . . asthma; chronic bronchitis.

Health Effects: Irritation—Eye, Nose, Throat, . . . ; Respiratory effects—Bronchoconstriction, pulmonary edema, reactive airways dysfunction syndrome . . . ; Suspect reproductive effects

...

[47] S. Saucier states that the maritime employers at the Port of Montreal, including Termont, knowing that smoke from ships was causing nausea among the gantry crane operators, agreed to reduce the exposure of the workers to the smoke by adopting the MEA procedure and arranging to install positive-pressure air filtration systems in the cabs of their cranes.

[48] As S. Saucier states, since those systems have been installed, there have been no cases of gantry crane operators experiencing discomfort or refusing to work as a result of smoke from ships.

[49] S. Saucier states that air filtration systems have been installed in the cabs of the 15 gantry cranes in use at the Port of Montreal. S. Saucier also states that the 2008 MEA procedure above is no longer used.

[50] Given the above, Mr. Giroux argues that, in this case, it was not for the MEA to show that there was no danger to employees within the meaning of the Code on the night of June 22, 2009, or that Termont or the MEA had not contravened the Code on that night. Mr. Giroux believes that, since the investigation by an appeals officer is *de novo*, it

¹¹ The 2009 *Le Petit Robert* describes methemoglobin as oxidized hemoglobin, in which the iron molecule, converted to its ferric state, can no longer bond with oxygen.

¹² “TLV-STEL” is the abbreviation for “threshold limit value—short-term exposure limit,” which is the maximum concentration permitted for a continuous 15-minute exposure period (see definition of “TLV-STEL” on page 4 of the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*).

¹³ The 2009 *Le Petit Robert* defines “dyspnée” [the term used in the original French version of this decision] as difficulty in breathing or shortness of breath.

is for me to view the circumstances of this case and then render my decision. In support of his argument, Mr. Giroux refers to the decision of the Federal Court in *Canadian Freightways Ltd v. Canada (Attorney General)*.¹⁴ At paragraphs 26 and 27 of her decision in that case, Dawson J. writes:

26. These authorities suggest that the hearing into an appeal of a discretion is in the nature of a de novo hearing where the appeals officer is to view all of the circumstances and then make a decision.

27. In the present case, the appeals officer relied upon an irrelevant provision to require the applicant to assume the burden of proving that the Regulations were not breached. In so doing, the officer erred

[51] Mr. Giroux maintains that, in rendering my decision, I must consider only the evidence that is before me. On the basis of the findings of the 2002 study and the fact that, on the night of June 22, 2009, neither the nature of the combustion products from the funnel of the *MSC Hailey* nor the concentration of those substances in the cabs of cranes 2 and 3 were determined, Mr. Giroux maintains that HSO Briffaud had no grounds to conclude that there was a danger to employees or that the Code had been breached on that night, just as I now have no grounds to make those conclusions.

[52] For those reasons, Mr. Giroux alleges that HSO Briffaud's direction regarding the contravention should not have been issued and that I should rescind it.

[53] If, despite the arguments above, I were to find that there was a danger to employees or that the Code had been breached on the night of June 22, 2009, Mr. Giroux claims that I should then identify the Termont or MEA representative to whom a direction pursuant to the Code should be addressed.

[54] Mr. Giroux refers me to the Federal Court decision of Yves de Montigny J. in *Maritime Employers' Association v. Syndicat des Débardeurs, C.U.P.E. Local 375*¹⁵ and the Federal Court of Appeal decision of Robert Décary J.A. in the same case.¹⁶ On the basis of those decisions, given that the MEA, being an employer's association, is considered an "employer" as defined in subsection 122(1) of Part II of the Code and may be subject to certain duties when, for example, it acts with regard to those duties on behalf of a maritime employer that it represents, Mr. Giroux maintains that, to decide this matter, I must identify the individual at Termont or the MEA who assumed the duties of an "employer" under the Code on the night of June 22, 2009.

[55] Mr. Giroux maintains that Termont assumed those duties in this case, and not the MEA, and therefore only Termont could have been given a direction pursuant to the Code. In support of that argument, Mr. Giroux called J. Dubreuil, G. Couture and MEA

¹⁴ *Canadian Freightways Ltd v. Canada (Attorney General)* [2003] F.C.J. No. 552.

¹⁵ *Maritime Employers' Association v. Syndicat des Débardeurs, C.U.P.E. Local 375*, 2006 FC 66, Yves de Montigny J., January 24, 2006.

¹⁶ *Maritime Employers' Association v. Syndicat des Débardeurs, C.U.P.E. Local 375*, 2006 FCA 360, Robert Décary J.A., November 6, 2006.

principal labour relations consultant Mr. Jean-Pierre Langlois to testify. I accept the following from their testimonies and from the document filed with regard to this issue.

[56] G. Couture testifies that E. Dutriaux called him on the night of June 22, 2009, to ask him to go help and support E. Dutriaux in E. Dutriaux's investigation of P. Chartrand and M. Dupuis' refusal to work.

[57] J. Dubreuil testifies that, before he became project manager at Termont, he was the Termont superintendent, a position he had also held for a number of years at Logistec.¹⁷

[58] J. Dubreuil states that the role of the superintendent is to manage the loading and unloading of ships on behalf of the company.

[59] J. Dubreuil states that it is the superintendent who decides on the equipment, machinery and procedures required to carry out a given operation.

[60] J. Dubreuil states that superintendents of companies at the Port of Montreal may request assistance and advice from MEA representatives on issues involving, among other things, longshoremen refusing to work, as occurred on the night of June 22, 2009.

[61] J. Dubreuil states, however, that it is for the superintendents of those companies to decide whether or not to apply the solutions recommended in the MEA procedure referred to above. J. Dubreuil refers to the fact that it was E. Dutriaux, the superintendent acting on behalf of Termont, who requested that the vessel reduce the speed of its engines, who had the cranes moved to try to avoid the smoke plumes and who had the authority to decide to change the ship's direction or recommend that employees change their shift rotation or transfer employees to another work area, just as it was Termont that supplied the masks provided to the employees.

[62] J.-P. Langlois has filed the collective agreement between the employers of the Port of Montreal, including the MEA, the employers' association to which they belong, and the longshoremen of the Syndicat des Débardeurs, Canadian Union of Public Employees (C.U.P.E.), Local 375, to which P. Chartrand and M. Dupuis belong.

[63] Clause 1.02 of the collective agreement states that the collective agreement has been established by the MEA on behalf of the employers. J.-P. Langlois testifies that that was done following a Canada Labour Relations Board¹⁸ decision that, pursuant to section 34 of the Code,¹⁹ appointed the MEA as the employer representative of the maritime employers operating in the Port of Montreal and elsewhere, to establish, on their behalf, collective agreements with the unions of the longshoremen whom they employed.

¹⁷ Logistec is also a maritime employer.

¹⁸ Now known as the Canadian Industrial Relations Board

¹⁹ See Part I of the Code for more information.

[64] Accordingly, clauses 1.04, 1.05 and 1.06 of the collective agreement state that the longshoremen belonging to the union referred to above are employed as set out in the collective agreement by the maritime employers operating throughout the Port of Montreal area to load and unload ships.

[65] However, as set out in clause 8.04 of the collective agreement and as stated by J.-P. Langlois, it is the MEA that, through its dispatch centre, assigns longshoreman to the various work places of the maritime employers of the port according to the employers' manpower orders, which are submitted daily, and according to the associated clauses of the collective agreement.

[66] Article 3 of the collective agreement states that the management and operation of facilities, machinery and equipment, as well as operations management, is the responsibility of each maritime employer. On the basis of that article, J.-P. Langlois states that the employers provide not only for the control of their work place and the operations and tasks carried out by the longshoremen, but also for the maintenance of equipment, machinery (such as gantry cranes) and tools used by the longshoremen. Moreover, it is the employer that controls the use of equipment, machinery and tools by longshoremen once they have been dispatched to the employer's work place.

[67] On the basis of that evidence, Mr. Giroux maintains that, on the night of June 22, 2009, Termont, which at the time was employing P. Chartrand and M. Dupuis in its work place, and those acting on Termont's behalf, such as Termont's superintendent, had sole authority over the work to be completed by the employees and the cranes that the employees were using. Mr. Giroux also maintains that the situation on June 22, 2009, was not one in which the MEA, acting on behalf of Termont, assumed any duty set out in the Code. Mr. Giroux believes that Termont alone could intervene in the operation in question and decide to make changes deemed appropriate under the circumstances.

B) Respondent's submissions

[68] Ms. Laperle, for the respondent, acknowledges that the MEA does not control the work places at the port, but maintains that the MEA cannot avoid the duties of an employer as set out in the Code. Ms. Laperle believes that those duties must be assumed jointly and severally by the employers and the MEA. In support of that argument, Ms. Laperle refers to the decision of the Federal Court in *Maritime Employers' Association v. Syndicat des Débardeurs, C.U.P.E. Local 375* above and the definition of "employer" in subsection 122(1) of the Code. Ms. Laperle also refers to the fact that MEA representatives do intervene when decisions are made regarding the health and safety of longshoremen, as occurred when P. Chartrand and M. Dupuis refused to work on June 22, 2009.

[69] In support of P. Chartrand and M. Dupuis' refusal to wear cartridge-equipped masks or continue operating their cranes on the night of June 22, 2009, even in rotation with other crane operators, Ms. Laperle called C. Denis to testify. I accept the following from his testimony.

[70] C. Denis testifies that he has been a longshoreman at the Port of Montreal since 1986. During that time, he has been a gantry crane operator for eight years and has also worked as a signaller.

[71] C. Denis states that he tried, while operating a crane, the kind of cartridge-equipped mask that was provided to P. Chartrand and M. Dupuis on June 22, 2009. C. Denis states that, as a result of the cartridges and the fact that the mask completely covered the lower part of his face, he could no longer see the container being moved, and the signaller could no longer hear what he was trying to say over the radio. Not being able to see his manoeuvres clearly and not being able to communicate with his co-workers in the ship's hold or on the quay, which is crucial to performing the work of a crane operator safely, C. Denis refused to continue wearing the mask.

[72] C. Denis also states that a gantry crane operator uses the window at his feet to ensure the correct manoeuvring and positioning of each container in the ship's hold or on the truck, approximately 35 metres below. Since the crane operator is a number of metres above the containers being moved and each container must be placed on the truck within inches of accuracy, the operator must focus completely on and be able to clearly see the manoeuvres being performed. C. Denis further states that both hands are used to work the controls of a gantry crane. C. Denis therefore believes that good physical coordination is essential. C. Denis states that, for those reasons, a responsible crane operator will not operate a crane while having headaches, nausea or tremors. Having experienced it himself, C. Denis believes that, when a crane operator starts to have those symptoms, he feels unwell and can no longer concentrate or operate the crane safely. Even though, to C. Denis' knowledge, such an accident has never occurred when smoke from a ship has entered a crane cab, he believes that working in such conditions creates the risk that a crane operator will feel those symptoms and have difficulty manoeuvring the crane, potentially causing injury to workers in the ship's hold or on the quay, for example, when the containers move to within 1 metre of those workers or are stacked improperly on the ship or truck.

[73] On the basis of that evidence and the fact that the smoke from the *MSC Hailey* was entering the crane cabs, Ms. Laperle maintains that, even if the symptoms that P. Chartrand and M. Dupuis claim to have had when they refused to work were to have no long-term effect on their health, the two workers acted responsibly by refusing to operate their cranes under those conditions. Ms. Laperle believes that their actions prevented a situation in which their reflexes would have been affected, potentially resulting in injury to those working in the ship's holds or on the quay.

[74] For those reasons, Ms. Laperle argues that the HSO Briffaud's direction on June 22, 2009, should be upheld and should be addressed to Termont and the MEA.

Reply

[75] In reply to Ms. Laperle's argument that Termont and the MEA should be held jointly and severally responsible with respect to an employer's duties under the Code, Mr. Giroux maintains that de Montigny J., in the Federal Court decision *Maritime*

[76] Mr. Giroux further believes that there is no evidence to show that there was a risk of an accident involving workers in the ship's holds or on the quay, because no accident has ever occurred as a result of smoke from a ship entering a crane cab.

Analysis

[77] To decide this case, I must answer the following question:

- Was it justifiable to issue a notice of contravention under subsection 145(1) of the Code regarding paragraph 125(1)(n) and section 124 on the ground that the procedure to control the exposure of workers to the smoke from the *MSC Hailey* was not observed on the night of June 22, 2009?

[78] In his testimony, HSO Briffaud acknowledges that he should have issued a notice of danger on June 22, 2009, since he had determined that there was a danger to employees. Subsections 145(2) and (3) regarding notices of danger that can be issued under the Code read as follows:

145(2) If a health and safety officer considers that the use or operation of a machine or thing, a condition in a place or the performance of an activity constitutes a danger to an employee while at work,

(a) the officer shall notify the employer of the danger and issue directions in writing to the employer directing the employer, immediately or within the period that the officer specifies, to take measures to

...

(ii) protect any person from the danger; and;

(b) the officer may, if the officer considers that the danger or the hazard, condition or activity that constitutes the danger cannot otherwise be corrected, altered or protected against immediately, issue a direction in writing to the employer directing that the . . . machine . . . in respect of which the direction is issued not be . . . operated until the officer's directions are complied with, but nothing in this paragraph prevents the doing of anything necessary for the proper compliance with the direction.

...

145(3) If a health and safety officer issues a direction under paragraph (2)(a), the officer shall affix or cause to be affixed to or near the place, machine or thing in respect of which the direction is issued, or in the area in which the activity in respect of which the direction is issued is performed, a notice

[Emphasis added]

[79] Since HSO Briffaud had determined that there was a danger to employees on June 22, 2009, I am of the opinion that he should have issued a direction under subsections 145(2) and (3) of the Code.

[80] I do not see the necessity to determine what the direction might have contained or to whom it might have been addressed, now that it has been more than 11 months since the events related to this case occurred and now that the situation appears to have been rectified.

[81] In my opinion, the issues in this case deal with the application of paragraphs 125(1)(n) or 125.1(a) of the Code, as well as section 124, on the night of June 22, 2009, specifically, whether or not the provisions of the Code were breached on that night. Therefore, my analysis of this case will examine those issues.

[82] Paragraph 125(1)(n) of the Code deals with the specific duty of an employer to ensure that the ventilation in a workplace under its complete authority meets the prescribed standards. The paragraph reads as follows:

125(1) Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer . . .

(n) ensure that the levels of ventilation, lighting, temperature, humidity, sound and vibration are in accordance with prescribed standards.

[Emphasis added]

[83] To decide whether or not paragraph 125(1)(n) of the Code applies in this case, I must refer to the prescribed standards.

[84] To that end, I must identify the regulation under the Code that applies to the circumstances of this case.

[85] Having reviewed all of the regulations, I find that the *Marine Occupational Safety and Health Regulations* (MOSH Regulations) apply to the operations in question to be performed on the night of June 22, 2009.

[86] Paragraph 1.4(c) of the *Canada Occupational Health and Safety Regulations* (COHS Regulations) states that the COHS Regulations do not apply in respect of “employees employed on ships”; paragraph 1.3(c) of the MOSH Regulations states that the MOSH Regulations apply in respect of “employees employed in the loading or unloading of ships.”

[87] On the night of June 22, 2009, the task of P. Chartrand and M. Dupuis, as well as the signallers on the ship and other workers on the quay, was precisely to unload the *MSC Hailey*.

[88] I shall refer to the MOSH Regulations as the regulations that apply in this case in respect of paragraph 125(1)(n) of the Code.

[89] Paragraph 8.7(a) of Part VIII of the MOSH Regulations sets out the provisions regarding the ventilation system that must be provided when an employee is exposed to a hazardous substance. The paragraph reads as follows:

8.7 Every ventilation system used to control the concentration of an airborne hazardous substance shall be so designed, constructed and installed that

(a) where the airborne hazardous substance is a chemical agent, the concentration of the airborne hazardous substance does not exceed the values and percentages prescribed in sections 8.22 and 8.23 . . .

[Emphasis added]

[90] In addition, paragraph 8.22(1)(a) of Part VIII of the MOSH Regulations reads as follows:

8.22(1) No employee shall be exposed to a concentration of

(a) an airborne chemical agent . . . in excess of the value for that chemical agent adopted by the American Conference of Governmental Industrial Hygienists in its publication *Threshold Limit Values and Biological Exposure Indices for 1986-1987*;

. . .

[Emphasis added]

[91] As I understand it, when a ventilation system is installed to control the concentration of an airborne substance at a work place, the system must be designed, constructed and installed so that the exposure limit values specified in the ACGIH standards for that substance are not exceeded.

[92] However, there was no ventilation system in the crane cabs in question on the night of June 22, 2009.

[93] Given that fact, I find that HSO Briffaud erred when he indicated in his direction that paragraph 125(1)(n) of the Code had been breached on the night of June 22, 2009. Since there was no ventilation system in the crane cabs in question, the regulatory requirements associated with that provision could not be verified.

[94] Employers have two other duties under the Code relating to controlling hazardous substances in the work place. The provisions are found in paragraphs 125.1(a) and 125.1(f) of the Code. They read as follows:

125.1 Without restricting the generality of section 124 or limiting the duties of an employer under section 125 but subject to any exceptions that may be prescribed, every employer shall, in respect of every work place controlled by the employer and, in respect of every work activity carried out by an

employee in a work place that is not controlled by the employer, to the extent that the employer controls the activity,

(a) ensure that concentrations of hazardous substances in the work place are controlled in accordance with prescribed standards;

...

(f) where employees may be exposed to hazardous substances, investigate and assess the exposure in the manner prescribed . . .

[Emphasis added]

[95] As I understand it, when employees are exposed to hazardous substances in a work place, the hazardous substances must be controlled in accordance with prescribed standards and employee exposure to the substances must be investigated and assessed in the manner prescribed.

[96] On the basis of the results of the 2002 study, Mr. Giroux maintains that none of those provisions of the Code were breached on the night of June 22, 2009.

[97] To gain an understanding of the prescribed standards associated with paragraphs 125.1(a) and 125.1(f) of the Code, I shall refer to the MOSH Regulations, for the same reasons as above.

[98] Sections 8.3 and 8.4 of Part VIII of the MOSH Regulations read as follows:

8.3 (1) Where there is a likelihood that the safety or health of an employee in a work place is or may be endangered by exposure to a hazardous substance, the employer shall, without delay,

(a) appoint a marine chemist²⁰ or other qualified person²¹ to carry out an investigation; and

²⁰ Section 1.1 of the MOSH Regulations defines “marine chemist” as follows:

“marine chemist” means a qualified person who

(a) is a graduate of a post-secondary educational institute who

(i) has successfully completed courses in chemical engineering,

(ii) has successfully completed a general course with a major in chemistry, or

(iii) has obtained a fellowship in the Chemical Institute of Canada; and

(b) has at least three years experience in chemical or engineering work after he has satisfied the requirements of paragraph (a), of which 150 working hours were spent under proper supervision in ship board work involving the testing of tank vessels and other vessels in the application of gas hazard control standards; (*chimiste de la marine*).

²¹ Section 1.1 of the MOSH Regulations defines “qualified person” as follows:

“qualified person” means, in respect of a specified duty, a person who, because of his knowledge, training and experience, is qualified to perform that duty safely and properly; (*personne qualifiée*).

(b) notify the safety and health committee or the safety and health representative, if either exists, of the proposed investigation and of the name of the marine chemist or other qualified person appointed to carry out that investigation.

(2) In the investigation referred to in subsection (1), the following criteria shall be taken into consideration:

(a) the chemical, biological and physical properties of the hazardous substance;

(b) the routes of exposure to the hazardous substance;

(c) the effects on health of exposure to the hazardous substance;

(d) the state, concentration and quantity of the hazardous substance handled;

(e) the manner in which the hazardous substance is handled;

(f) the control methods used to eliminate or reduce exposure to the hazardous substance;

(g) the value, level or percentage of the hazardous substance to which an employee is likely to be exposed; and

(h) whether the value, level or percentage referred to in paragraph (g) is likely to

(i) exceed that prescribed in section 8.22 or 8.23 or Part V, or

(ii) be less than that prescribed in Part IV.

8.4 On completion of the investigation referred to in subsection 8.3(1) and after consultation with the safety and health committee or the safety and health representative, if either exists, the marine chemist or other qualified person shall set out in a written report signed by that person

(a) the person's observations respecting the criteria considered in accordance with subsection 8.3(2); and

(b) the person's recommendations respecting the manner of compliance with sections 8.6 to 8.25.

[Emphasis added]

[99] As I understand it, when there are hazardous chemical substances in a work place that are likely to pose a risk to the safety and health of an employee, as was the ground for P. Chartrand and M. Dupuis' refusal to work on the night of June 22, 2009, the employer must, without delay, have a marine chemist or qualified person conduct an investigation in respect to employee exposure to the substances and assess the exposure in accordance with the requirements above and the standards set by the ACGIH in its publication *Threshold Limit Values and Biological Exposure Indices for 1986-1987*.

[100] I point out, however, that the knowledge on the health effects of various hazardous substances on workers identified so far by the ACGIH has advanced since 1987, and the standards set by the ACGIH have changed to reflect those developments. As a result, the ACGIH has released new editions of *Threshold Limit Values and Biological Exposure Indices* over the years.

[101] For example, the limit value not to be exceeded “TLV-TWA” in 1986 for carbon monoxide was 50 ppm and the limit value not to be exceeded “TLV-STEL” was 400 ppm. Today, there is no longer a value “TLV-STEL” for that substance, and the value “TLV-TWA” has been cut in half from 50 to 25 ppm.²² As a reminder, “TLV-TWA” stands for “threshold limit value—time-weighted average,” which is the time-weighted average concentration for a normal 8-hour workday and a 40-hour workweek to which nearly all workers may be repeatedly exposed, day after day, without adverse effect; “TLV-STEL” stands for “threshold limit value—short-term exposure limit,” which is the maximum concentration permitted for a continuous 15-minute exposure period.

[102] The COHS Regulations have been amended to account for those changes, but the MOSH Regulations have not. In particular, paragraph 10.19(1)(a) of Part X of the COHS Regulations and paragraph 8.22(1)(a) of the MOSH Regulations, which set out provisions regarding the control of hazardous substances in the work place, read as follows:

COHS Regulations	MOSH Regulations
10.19 (1) An employee shall be kept free from exposure to a concentration of	8.22(1) No employee shall be exposed to a concentration of
(a) an airborne chemical agent, other than grain dust or airborne chrysotile asbestos, in excess of the value for that chemical agent adopted by the American Conference of Governmental Industrial Hygienists, in its publication entitled <u><i>Threshold Limit Values and Biological Exposure Indices</i></u> , dated 1994-1995, as amended from time to time;	(a) an airborne chemical agent, other than grain dust, in excess of the value for that chemical agent adopted by the American Conference of Governmental Industrial Hygienists in its publication <u><i>Threshold Limit Values and Biological Exposure Indices for 1986-1987</i></u> ;

[Emphasis added]

²² I am referring to page 12 of the 1985-1986 edition and page 18 of the 2008 edition of the ACGIH publication *Threshold Limit Values and Biological Exposure Indices*.

[103] The two provisions are identical except that the COHS Regulations, which were last updated in 2002, uses the drafting technique of incorporation by reference, which incorporates the subsequent amendments of reference material.

[104] Since the two provisions are the same and have the same objective, it is likely that the Governor in Council will make the MOSH Regulations (last amended in 1995) uniform with the COHS Regulations the next time the MOSH Regulations are updated.

[105] For purposes of my analysis to assess the 2002 study, I shall therefore apply the ACGIH standards in the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*, which was the most recent edition at the time of the events in question.

[106] On pages 18, 34, 43, 44 and 53 of that publication, the exposure limit values never to be exceeded for carbon monoxide, sulphur dioxide, nitrogen monoxide, nitrogen dioxide and hydrogen sulphide, as well as the critical effects (TLV[®] Basis²³) for which the values have been adopted, are as follows:

[Translation]

Substance	ADOPTED VALUES		
	TWA	STEL	TLV [®] Basis
Carbon monoxide	25 ppm	—	Carboxyhemoglobinemia ²⁴
Sulphur dioxide	(2 ppm) ²⁵	(5 ppm)	Irritation of upper and lower respiratory tract
Nitrogen monoxide	25 ppm	—	Hypoxia ²⁶ [. . .]; a form of nitrosylhemoglobin in the blood; irritation of upper respiratory tract
Nitrogen dioxide	3 ppm	5 ppm	Irritation of upper and lower respiratory tract
Hydrogen sulphide	(10 ppm)	15 ppm	

[107] In my view, the fact that the ACGIH has set standards for the above substances means that a worker’s level of exposure to each substance can be measured.

[108] As well, I note in the above table that sulphur dioxide and nitrogen dioxide have a low value never to be exceeded “TLV-STEL” of 5 ppm.

²³ I am referring to page 73 of the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*.

²⁴ Carboxyhemoglobin is a molecule that is formed when carbon monoxide and hemoglobin combine. The combination prevents oxygen from binding to hemoglobin, which is defined in the 2009 *Le Petit Robert* as the protein in red blood cells that transports oxygen.

²⁵ On the last page of the 2008 edition of *Threshold Limit Values and Biological Exposure Indices*, under “Endnotes and Abbreviations,” parentheses are used to indicate that amendments to the adopted values for the substance have been proposed.

²⁶ The 2009 *Le Petit Robert* describes hypoxia as anoxia, or a drop in the amount of oxygen delivered by the blood to the tissues.

[109] Page 4 of the ACGIH publication explains that the TLV-STEL of a substance is the maximum concentration permitted for a continuous 15-minute exposure period so long as (1) there are no more than four such periods per day; (2) at least 60 minutes elapse between exposure periods; and (3) the daily value “TLV-TWA” of the substance is not exceeded.

[110] I would add that, under the provisions on page 84 of the same publication, under “Application of the Additive Mixture Formula,” when two or more substances have similar toxicological effects on the same organ or system in the human body, the ACGIH has developed a formula to adjust the assessment of the concentration levels of airborne substances.

[111] As the above table and the documents filed by S. Saucier show, sulphur dioxide (SO₂) and nitrogen dioxide (NO₂), like nitrogen monoxide (NO), have similar effects on the upper respiratory tract, and the exposure limit values of the two substances are low. As well, both CO and NO reduce the ability of hemoglobin to bind with oxygen in the blood.

[112] According to page 107 of the ACGIH publication, polycyclic aromatic hydrocarbons (PAHs) also have biological exposure indices.

[113] On the basis of the material safety data sheet produced by HSO Briffaud, the symptoms experienced by the crane operators exposed to smoke from ships throughout the years and the potential health effects of the substances, I find that P. Chartrand and M. Dupuis were likely to have been exposed on the night of June 22, 2009, to all the hazardous substances in the above table, in addition to polycyclic aromatic hydrocarbons (PAHs) and other aromatic hydrocarbons.

[114] The evidence shows that only CO measurements and a sample for total volatile organic compounds (VOCs) were taken in the 2002 study.

[115] Given that basis, subsection 8.3(2) of the MOSH Regulations and the contents of the report from the 2002 study, I am of the view that the study should have determined whether or not, following a 15-minute exposure period, the TLV-STELs specified by the ACGIH for sulphur dioxide or nitrogen dioxide were exceeded, just as the study should have accounted for the similar toxicological effects of hazardous substances potentially found in smoke from ships and assessed them in the manner prescribed by the ACGIH standards, which was not done.

[116] I am far from satisfied that a few individual measurements of CO and one air sample for total volatile organic compounds (VOCs) taken within a one-hour period, without considering all the above factors identified by the ACGIH, were representative of the exposure of the crane operators to all the hazardous substances emanating from the funnel of the *MSC Hailey* on the night of June 22, 2009.

[117] Rather, the evidence before me is that, on the night of June 22, 2009, no assessment of the nature of the hazardous substances emanating from the funnel of the *MSC Hailey* and the level of exposure to those substances of employees operating cranes 2 and 3 was carried out.

[118] Given the evidence and the complaints over the years of the crane operators working under the same conditions as those on the night of June 22, 2009, I am of the opinion that paragraphs 125.1(a) and 125.1(f) of the Code, and subsections 8.3(1) and 8.3(2) of Part VIII of the MOSH Regulations were breached at the time of HSO Briffaud's investigation, and not paragraph 125(1)(n) of the Code.

[119] In his testimony, HSO Briffaud states that he believed that section 124 of the Code was breached on the night of June 22, 2009, because no attempt had been made to change the direction of the *MSC Hailey* and no other type of mask had been provided to employees, which he believed constituted a failure to observe the procedure developed by the MEA and adopted by Termont to address the exposure of crane operators to hazardous substances from the funnels of ships.

[120] Section 124 of the Code deals with the general duty of an employer to ensure the health and safety of its employees. The section reads as follows:

124. Every employer shall ensure that the health and safety at work of every person employed by the employer is protected.

[121] J. Dubreuil testified that changing the direction of the *MSC Hailey* was not feasible in section 68 of the Port of Montreal because of the strong currents in that part of the port. J. Dubreuil also stated that, for that reason, attempting to change the ship's direction might have affected the ship's stability and jeopardized the safety of the operations in progress.

[122] Given that evidence, I am of the opinion that HSO Briffaud erred in issuing a notice of contravention pursuant to section 124 of the Code on the ground that no attempt had been made to change the direction of the *MSC Hailey*.

[123] However, I am of the view that that preventive measure should not have been included in the procedure drafted by the MEA and adopted by Termont.

[124] In my opinion, preventive measures against employee health and safety risks should not be suggestions. Rather, the measures should be specific and should be decided upon after having identified and assessed the known or foreseeable risks associated with the operations in question, taking into account the special characteristics of each work place in which the operations are carried out. Moreover, they should be based on tests or real-world experience that demonstrates their effectiveness.

[125] Furthermore, not only was changing the direction of a ship moored in section 68 of the port not feasible during loading or unloading, because it might jeopardize the safety of the operations, but also both reducing the speed of the *MSC Hailey*'s engines

[126] As for the fact that the cartridge-equipped mask was the only type of mask provided to P. Chartrand and M. Dupuis to control their exposure to the smoke entering their cabs, C. Denis testimony has convinced me that the cartridge-equipped mask reduces the crane operator's field of vision with respect to moving containers and prevents the operator from communicating in an audible manner with workers approximately 35 metres below in the ship's holds or on the quay.

[127] The issue is to determine whether or not another kind of mask should have been provided to employees on the night of June 22, 2009.

[128] Paragraph 125(1)(l) of the Code reads as follows:

125(1) . . .

(l) provide every person granted access to the work place by the employer with prescribed safety materials, equipment, devices and clothing;

[Emphasis added]

[129] For the reasons given above, I shall refer in this case to the MOSH Regulations to gain an understanding of the prescribed requirements associated with that provision of the Code.

[130] Sections 10.1 and 10.2 of Part X of the MOSH Regulations, which deal with provisions regarding protection to be provided to employees, read as follows:

10.1 Where

(a) it is not reasonably practicable to eliminate or control a safety or health hazard in a work place within safe limits, and

(b) the use of protection equipment may prevent or reduce injury from that hazard.

every person granted access to the work place who is exposed to that hazard shall use the protection equipment prescribed by this Part.

10.2 All protection equipment

(a) shall be designed to protect the person from the hazard for which it is provided; and

(b) shall not in itself create a hazard.

[Emphasis added]

[131] From this, I take that protection equipment must be provided to employees when it is not possible to eliminate or control an employee safety or health hazard in a work place within safe limits or when the equipment may prevent or reduce injury from that hazard. Furthermore, equipment that is provided must not in itself create a hazard.

[132] According to the findings of the report filed by S. Saucier regarding the 2002 study, the exposure of a crane operator to hazardous substances from the funnel of a ship created the risk that they might experience nausea or headaches, which could not only hamper their work but also increase, as the study's author writes, the risk of an accident during operations. The testimony of C. Denis, an experienced crane operator, supports that assertion.

[133] Moreover, employees were not provided with a means of detecting harmful levels of hazardous substances in the crane cabs.

[134] Furthermore, as was recommended to P. Chartrand and M. Dupuis by Termont representatives on June 22, 2009, the procedure drafted by the MEA and adopted by Termont suggested allowing crane operators to work in rotations shorter than four hours with no assessment to determine whether or not, during a rotation, an operator might experience nausea or headaches while operating a crane.

[135] As HSO Briffaud testified, and since no assessment was done of the workers' exposure to hazardous substances in their crane cab, it seems reasonable to me that the Termont representatives should have considered providing another kind of mask on the night of June 22, 2009, given the crane operators' need to maintain a clear view of the moving containers and clear communication with workers in the ship's holds and on the quay.

[136] However, I am of the opinion that failing to do so is contrary, for the reasons given above, to paragraph 125(1)(l) of the Code and the associated provisions of the MOSH Regulations described above more so than to section 124.

[137] I would add that, given the requirements of those provisions and complaints from crane operators over the years, choosing such protection equipment should have been considered well before June 22, 2009, and the type of equipment chosen should have been specified in a clear preventive procedure, as well as control technology such as ventilation systems that are now installed in crane cabs along with automatic warning or detection systems, which, I should point out, are prescribed under section 8.8 of Part VIII of the MOSH Regulations.

[138] Since the 15 gantry cranes in use at the Port of Montreal are now equipped with a ventilation system that appears to have rectified the situation and the procedure drafted by the MEA is no longer used, I do not see the necessity now to amend the direction issued on June 22, 2009, by HSO Briffaud so that it reflects the points above.

[139] However, I strongly recommend that the employers at the Port of Montreal that have gantry cranes arrange for the ventilations systems in the cabs of their cranes to be

[140] I also recommend that, in the future, before adopting a procedure to protect the health and safety of the longshoremen whom they employ, they ensure that the procedure complies with the provisions set out in the Code and associated regulations.

[141] Moreover, I recommend that, before decisions are made to implement preventive measures for the health and safety of longshoremen, tests be conducted to verify their effectiveness.

[142] As for the MEA, I recommend that it no longer develop preventive measures without first identifying and assessing the known or foreseeable risks to the health and safety of longshoremen with respect to the operations in question, taking into account the special characteristics of the various work places in which the operations are carried out, in accordance with the provisions of the Code and its regulations.

Decision

[143] For these reasons, the direction issued by HSO Briffaud on June 22, 2009, pursuant to subsection 145(1) of the Code is rescinded.

Katia Néron
Appeals Officer