

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

Review under section 146 of the *Canada Labour Code*,
Part II, of a direction given by a safety officer

Applicant: Pacific Coast Terminals Co. Ltd.
Represented by: Mr. J. Gibney and
Mr. Koshman

Respondent: Mr. B. Ashton, President, Local 500, ILWU

Mis-en-cause: Martin W. Davey
Safety Officer

Before: Douglas Malanka
Regional Safety Officer

Background:

In April of 2000, management at Pacific Coast Terminals Co. Ltd., (PCT) advised its health and safety committee that they planned to discontinue the practice of inspecting rail cars loaded with sulfur prior to dumping them in the Rotary Car Dumper (Dumper). The purpose of the inspection was to remove loose rail car parts or debris on the cars that could be a source of ignition in the Dumper. PCT held that the design of the Dumper precludes any possibility of sulfur dust explosion and so the inspection of rail cars is redundant and inefficient. The Committee discussed the matter at two subsequent meetings but did not agree with management. PCT then notified employees that they intended to discontinue the inspection of rail cars on September 12, 2000. They also notified safety officer Davey that a refusal to work would probably occur on that day.

On September 12, 2000, PCT instituted the change and employees Kevin J. Freistadt and David Morrow exercised the right to refuse under the *Canada Labour Code*, Part II (hereto referred to as the Code or Part II). The employees complained that loose rail car parts and debris on the rail cars are a source of ignition and will cause a sulfur fire or sulfur dust explosion in the Dumper.

Safety officer Martin Davey investigated the refusals to work on September 12, 2000. On September 26, 2000, he informed parties that a danger under the Code existed for the employees. He held that it is likely that the concentration of sulfur dust in the Dumper will be within the lower explosive limit (LEL) for sulfur dust at some point, and that loose parts and debris from rail cars could ignite the sulfur dust and cause an explosion. He held that the Dumper is a "fire hazard area" under the *Canada Occupational Safety and Health Regulations* (COSHRs) and all sources of ignition must be kept out of the Dumper. He issued a direction to PCT on September 26, 2000,

pursuant to paragraph 145.(2)(a) of the Code. The direction cited numerous provisions in the Code and COSHRs and ordered PCT to protect any person from the danger immediately.

PCT disagreed that a danger under the Code existed and requested that a Regional Safety Officer review the direction and rescind it. A hearing was held on December 14, 2000, in Vancouver.

Safety Officer:

Safety officer Davey provided a copy of his report and testified at the hearing. His report forms part of the file and will not be repeated here. I retain the following from his report and testimony.

Safety officer Davey conceded that the PCT Rotary Car Dumper is a state of the art facility for handling elemental sulfur equipped with safety systems to control airborne sulfur dust. He held, however, that the safety systems at the Dumper are subject to mechanical failure and to human error. He insisted that the Code and pursuant COSHRs provisions cited in his direction require that all reasonable precautions be taken to eliminate sources of ignition from the Dumper. He interpreted this to mean that PCT must inspect all rail cars before they go to the Dumper and remove or secure loose car parts and debris.

Safety officer Davey acknowledged that he did not measure the concentration of sulfur dust in the Dumper during his investigation of the refusals. He indicated that it is not his responsibility to prove that a sulfur dust explosion could happen. Rather, it is the employer who must prove that it could not happen.

For The Employer:

Mr. Gibney, Manager, Operations, and Mr. Koshman, V.P. Waterfront Foreman Employers Association, represented PCT. Prior to the hearing, Mr. Gibney submitted written reasons for requesting that the direction be rescinded, and a copy of a Report entitled, "Report On Human Resources Development Canada Direction To Pacific Coast Terminals Co. Ltd." prepared by Protection Engineering Inc., Vancouver, B.C.. At the hearing, he submitted three documents entitled:

- a) "Employer's Brief of Documents";
- b) "Employer's Outline of Submissions"; and
- c) "Employer's Brief of Authorities."

The document entitled, "Employer's Brief of Documents" included;

- i. Report entitled, "PCT SULFUR DUST STUDY MARCH, APRIL 1992" prepared by the Air Quality Group, British Columbia Research Corporation, Vancouver, B.C.;
- ii. Report entitled, "PACIFIC COAST TERMINAL SULPHUR DUST STUDY, JUNE - JULY, 2000, prepared by the Occupational & Environmental Risk Management Group, B.C. Research Inc., Vancouver, B.C.;

- iii. Copy of Report entitled, "Report On Human Resource Development Canada Direction To Pacific Coast Terminals Co. Ltd." prepared by Protection Engineering Inc., Vancouver, B.C.;
- iv. Report entitled, "AN ANALYSIS OF THE EXPLOSION HAZARD DURING SULPHUR DUMPING AT PACIFIC COAST TERMINALS ," prepared by Genesis Engineering Inc.;
- v. Letter from DR. P.D. CLARK , DIRECTOR OF RESEARCH , ALBERTA SULPHUR RESEARCH LTD. on the subject of "Sulfur Dust Study Reports"; and,
- vi. Series of Photos of Rotary Car Dumper.

The documents are not reproduced here, however, I retain the following from them and from the testimony of Mr. Gibney.

Mr. Gibney testified that the Rotary Car Dumper is built and designed for handling elemental sulfur safely. He said that PCT has dumped approximately one-half million rail cars without incident since commissioning the Dumper in 1989. He testified that a computer controls the operation of the Dumper and ensures that the safety systems are operating before a rail car is dumped. For example, the computer verifies the rail car is positioned and clamped in place as soon as a car enters the Rotary Car Dumper. The computer then verifies that the dust suppression system and the dust collection system are operating before the rail car is rolled and dumped.

After safety officer Davey issued his direction to PCT, the Company hired Genesis Engineering Inc. to review sulfur dust concentrations at the PCT Dumper and to comment on the risk of a sulfur dust explosion. They also hired Protection Engineering Inc. to review and provide technical and profession comment on the direction issued by safety officer Davey. PCT then asked Alberta Sulphur Research Ltd. to review and comment on the Reports from Genesis Engineering Inc. and Protection Engineering Inc.. The experts from all companies consulted agreed that the risk of a sulfur explosion is essentially non-existent if the Dumper is properly maintained and operated because of the high concentration of water in the Dumper.

In response to questioning from Mr. Ashton, Mr. Gibney insisted that it was unlikely that the water sprayers on the dust suppression system could become plugged because of the water pressure in the system. He also stated that the sulfur dust would still be wetted even if 6 or 7 of the sprayers became clogged as speculated by Mr. Ashton. He explained that the sprayers atomize the water that mixes with the air around the rail car being dumped.

Mr. B. (Bill) Glendinning, Acting Manager of Maintenance and Engineering testified on behalf of PCT. He testified that PCT maintains and services the Dumper in accordance with a computerized preventative maintenance program established by the manufacturer of the Dumper. The computerized preventative maintenance program automatically generates work orders for the inspection and maintenance of the Dumper. Employees at PCT then carry out the work on a priority basis. Mr. Glendinning added that millwright employees inspect the Dumper every day before dumping operations commence, and wash the whole system down after 3 or 4 trains have been dumped. He also clarified that the spray bar for the dust suppression system is equipped with two sensors that consist of a flow switch and a pressure switch. Therefore, dumping operations can not proceed unless the system is pressurized and water is flowing. He insisted that PCT does not override the safety devices in order to continue dumping. He reasoned that it takes the same

amount of time to override a switch as to repair it. He affirmed that he is not aware that PCT has ever operated the Dumper without water to the sprayers.

For Employees:

Mr. R. Ashton, President, Local 500, International Longshore Workers' Union, represented employee interests at the hearing and presented two witnesses.

Mr. Kulmohan Vandher, a regular plumber with PCT for 12 years, testified on behalf of employees. He said that dumping operations have continued when 3 to 6 of the sprayers on the dust suppression system have been clogged. He confirmed that the Dumper is inspected daily and that sprayers are repaired during scheduled maintenance inspections and as required. He testified being aware that the Dumper had been operated once without water at the spray bar, but admitted that he did not observe the event.

Mr. Revindra Naresh testified that he was employed at PCT as an electrician for 26 years but left the Company about 6 months ago. He maintained that, on various occasions, PCT ordered employees to override the pressure sensor on the dust suppression system and operate the Dumper without water to the sprayers. He also contended that PCT operated the Dumper in the past with only one fan operating in the dust collection system.

Summations:

Mr. Koshman provided argument for PCT. He insisted that the issue before me is whether there is a risk of a sulfur dust explosion at the Dumper and not whether there is a risk of fire. He said that PCT knows that sulfur is very flammable and has measures in place to deal with this possibility.

He argued that the facts do not establish that the concentration of sulfur dust in the Dumper could exceed the LEL for sulfur dust, or that parts and debris on the rail cars could initiate a sulfur dust explosion. He argued that, for a danger under the Code, there must be a reasonable expectation that an explosion will occur at the Dumper, and not just a likelihood or possibility. He added that all the companies consulted by PCT agree that the dust suppression and collection systems prevent the concentration of sulfur from exceeding the LEL for sulfur in the Dumper, and prevent any source of ignition from igniting the dust. He noted that safety officer Davey had not consulted any experts before rendering his decision of danger.

He also referred to past decisions of the Canada Industrial Relations Board (formally the Canada Labour Relations Board) The decisions cited¹ establish that a danger under the Code must be real, immediate and serious. The jurisprudence also establishes that the hazard or condition must not be normal or inherent to the work, and that the right to refuse work provisions in the Code must not be

¹ Canada Industrial Relations Board (formerly Canada Labour Relations Board (CLRB) Decisions cited:

1. Scott C. Montani and Canadian National Railway, (1994), CLRB di No. 1089;
2. Ronald Clavet and Via Rail Canada Inc., (1996), CLRB di no. 7;
3. D.D. Krulitsky and Canadian National Railway, (2000), CIRB di no. 72;
4. Bell Canada and Communications Workers of Canada, (1984) CLRB, di no. 469.

used to settle labor relation issues. He asked that I objectively assess the evidence and rescind the direction.

Mr. Ashton submitted a written brief and asked that I confirm the decision of safety officer Davey. He argued that I should give little weight to the engineering Reports because the conclusions are based on 15 minute sample collections. He insisted that 15 minute sampling does not represent an entire shift or the dust levels that are possible during summer or winter when the sulfur in the rail cars is much drier.

He referred to the material safety data sheet (MSDS) produced by Sultran Ltd. and the Log Book maintained at PCT. He pointed out that the MSDS specifies that contact is to be avoided between sulfur and any spark source. He held that the Log Book confirms that crews often find and remove loose rail car parts and debris while inspecting the rail cars.

Mr. Ashton proffered several accident reports that reported incidences of fires at the Dumper. He insisted that the reports show that sulfur fires have occurred at PCT despite the touted safety features on the Dumper to preclude fire and explosion. He also insisted that incidents confirm that the computerized maintenance procedures at PCT are not infallible. Finally, he reminded me of testimony by Mr. Naresh that PCT operated the Dumper when sprayers were clogged or not operating, and one of the fans in the dust collection system was not operating.

Reason For Decision:

Issue(s):

The issue that I must decide is whether a danger from the explosion of sulfur dust in the Dumper existed for employees at the time of the safety officer investigation of the employee refusals to work. If I decide that a danger under the Code existed, I then must decide whether it is necessary to vary the direction in any way.

Applicable Legislation:

- Subsection 122.(1) of the Code which reads:

“122. (1) In this Part, "danger" means any hazard or condition that could reasonably be expected to cause injury or illness to a person exposed thereto before the hazard or condition can be corrected;”

- Section 145.(2)(a) of the Code which reads:

“145.(2)(a) Where a safety officer considers that the use or operation of a machine or thing or a condition in any place constitutes a danger to an employee while at work,

(a) the safety officer shall notify the employer of the danger and issue directions in writing to the employer directing the employer immediately or within such period of time as the safety officer specifies

(i) to take measures for guarding the source of danger, or
(ii) to protect any person from the danger; and”

- Subsection 146.(3) of the Code which reads:

“146.(3) The regional safety officer shall in a summary way inquire into the circumstances of the direction to be reviewed and the need therefor and may vary, rescind or confirm the direction and thereupon shall in writing notify the employee, employer or trade union concerned of the decision taken.” [My underline.]

Rationale:

To decide if I agree with safety officer Davey that a danger from the explosion of sulfur dust in the Dumper existed for employees at the time of his investigation, I must consider the definition of danger in the Code and applicable jurisprudence as it existed before the Code was amended on September 30, 2000. This is because the refusals occurred before the amendment date. I must then consider the facts in the case in light of the legislation and jurisprudence.

The PCT brief cites past CLRB decisions that interpret danger under the Code. They will not be repeated here, but they do establish that the danger must be real, as opposed to being hypothetical. In addition, they establish that a person must be about to be injured or made ill then and there unless something is done immediately, and that the impending injury or illness must be serious. The citations also establish that the danger must exist at the time of the safety officer’s investigation, and that the danger provisions in the Code cannot be used to settle a long standing labour relations dispute. I concur with these principles.

With regard to the case before me, the presence of metal debris on the electromagnet located after the Dumper confirms that metal debris passes through the Dumper despite the inspection of rail cars by PCT. This is because metal debris is sometimes buried within or under the load of sulfur and is not detectable by inspecting the exterior of the rail cars. Since the possibility of metal debris entering the Dumper via the sulfur is omnipresent, the Dumper must be designed, constructed, operated and maintained to preclude the concentration of dust from exceeding the LEL or prevent a source of ignition from causing an explosion, or both.

In this regard, PCT engaged the Air Quality Group of the British Columbia Research Corporation in March/April, 1992, and the Occupational and Environmental Risk Management Group of the B.C. Research Inc. in June/July 2000, to evaluate the risk of explosion of a sulfur dust explosion in the Dumper. The Air Quality Group measured sulfur dust concentrations over a month period in 1992 and determined the maximum sulfur dust concentrations at six locations within No. 3 Dumper. During the period, PCT handled four different sulfur products. The Air Quality Group concluded that:

“...the normal handling of sulfur should not present an explosion hazard within the No. 3 Car Dumper...” [My bold.]

The BC Research Inc., Occupational and Environmental Risk Management Group, conducted a similar study in June and July of 2000. The tests showed higher concentration of sulfur dust than the testing in 1992, and determined that the maximum sulfur concentration measured at the Dumper was 0.263 g/m³ for Rotoform sulfur.

Their Report concluded:

“Based on the sampling results, observations and discussions with employees, no recommendations are made at this time.” [My bold.]

After safety officer Davey issued his direction, PCT hired Protection Engineering Inc. to review and provide technical and profession comment on the direction. In its study, Protection Engineering Inc. reviewed and observed the operation of the Rotary Car Dumper facility at PCT including the dust removal and dust suppression systems. The Company also surveyed the hazard, chemistry and effects of accumulation related to sulfur, and referenced the British Columbia 1998 Fire Code. Protection Engineering Inc. reported the following conclusions:

“The Sulphur Handling Facility of PCT are within safety industry standard practices. There is no significant potential risk of a sulphur dust explosion with the dust suppression system (fog nozzles), dust collection system (wet scrubbers), and subsequent wet chemical treatment (surfactant - dust binding agent with 80 % water) being provided in this facility. With this equipment and treatment in place, the formation of an ignitable or explosive dust cloud is kept below the explosive limits, even below 20 % of the Lower Explosive Limit. This has been validated not by pilot of prototype testing but by full scale in-situ analyses within the operating facility itself. Not only is the dust concentration very low, it was found supersaturated with water from 22 to 52 % range compared to 0.5 to 1% moisture of bulk sulphur material as received. As a result, there is only an insignificant amount of airborne dust in the air that is not suppressed and collected, but this dust is heavily laden with moisture and as a result, settles, agglomerates, hardens and cakes in due time. [My underline.]

Visual observation attests the fact that the level of airborne dust is not significant during dumping operation as visibility of the surroundings within the dumper building remained clear. An explosion is prevented in the dust collection system since it employs a wet scrubber system keeping the sulphur particles wet and in water solution. The air atmosphere within the rotary dumper building is kept moist; ambient air is supersaturated with water as a result of water fog application, where most of the micron-sized water particles evaporate to the atmosphere. This condition cools the building including the exposed equipment and keeps any sulphur accumulation or dust in suspension moist.

Preventative maintenance is conducted regularly to wash out sulphur dusts deposited in structures within the building. These deposits are removed

through washing using water hoses. A magnetic separator is provided to remove metallic debris that is associated in the bulk sulphur material.

The potential occurrence of a sulphur explosion because of the presence of metal debris is effectively mitigated and substantially prevented due to the controlled operating conditions during dumping operations. These mitigating operations and conditions are as follows: [My underline.]

- the sudden displacement of air in the hoppers,
- the smothering effect of tonnes of bulk sulphur falling down to the hoppers,
- the water fogging and wetting of internal surfaces of the hoppers,
- the negative pressure being applied on top of the hoppers from the dust collection system,
- the surfactant (80% water) sprayed at discharge chutes after the hopper.

At the end of the Report Protection Engineering concluded:

In summary, there may be fire occurrences in this facility as sulphur is a combustible material, but a sulphur dust explosion is a remote possibility.” [My underline and bold.]”

PCT then commissioned Mr. Gordon J. Esplin, senior engineer with Genesis Engineering Inc. to review and comment on the Air Quality Group Report and the Occupational & Environmental Risk Management Group Report.

In his Report, Mr. Esplin, P.Eng, confirmed that the LEL for dry sulfur, ignited by a hot metal source, is 15-20 grams of dry dust per cubic meter of air (15-20 g/m³.) He added that:

“If water is present either in the form of a film of water on the surface of the sulphur dust particles and/or existing as a water mist or spray, then the temperature of the oxidation reaction will be reduced.” and

“If enough liquid water is present (greater than 4 grams of water per gram of sulphur dust), the oxidation process will be physically impossible.” [My underline.]

Mr. Esplin explained the concentration of sulfur dust is measured with a Hi-Vol sampler. The sampler collects the dust on a pre-weighed filter over a 15 minute period and the result is the average dust concentration in g/m³ over a 15 minute period at that particular location. He stated that,

“The actual, instantaneous dust concentration at that location will be higher or lower than the average measured concentration.” and

“...there is no accurate instrumentation available that measures instantaneous dust concentration.”

He explained that:

“Computer modeling indicates that the maximum instantaneous concentration may exceed the average value by up to 10 -20 times.” and,

“At 20 times the maximum average value (0.263 g/m³), this would represent a maximum instantaneous sulphur dust concentration of 5.26 g/m³. This value is 30 percent of the LEL for dry sulphur dust ignited by a hot metal source.”

Mr. Esplin went on to state that:

“There are 27 nozzles, at a flow of 1.6 g/pm spraying water onto the sulphur as it is being dumped. Some of the spray droplets will adhere to the surface of the sulphur product and sulphur dust particles, while the balance will exist as a water mist, which mixes with the sulphur dust particles. Since sulphur particles have a larger surface area per unit mass than does the sulphur product, a disproportionate amount of the water adhering to the sulphur will adhere to the dust particles. Therefore, as a first approximation we assume that all of the spray water either adheres to dust particles or exists as a mist. All of this water must be evaporated for an explosion to occur. There is a total of 43.2 gpm (163,000 grams per minute) of water sprayed into a flow of 1,460 cubic meters per minute of ventilation air. Therefore the concentration of water is 112 grams water per cubic meter of air, or $112/5.26 = 21$ grams water per gram of sulphur dust under the worst dust conditions.”

He concluded in this Report that,

- “The sulphur dumping operation can only occur if water sprays are operational. These not only reduce dust levels but also quench any explosive reaction before it can start.
- The maximum possible dust concentration within the sulphur Dumper is approximately 5.3 g/m³. This is only 30 percent of the LEL reported (15-20 g/m³) for dry sulphur dust ignited by a hot metal source, which is a surrogate for the sparks produced when a piece of tramp iron strikes another metal surface.”
- “The presence of the water sprays provides in the order of 21 grams water per gram of sulphur dust, which is 5 times more water than the amount of water required to suppress any conceivable form of sulphur combustion from any form of ignition. With this amount of water spray present sulphur dust explosions are impossible.” [My underline and bold.]

PCT forwarded a copy of all of its Reports to Dr. P.D. Clark, Director, Alberta Sulphur Research Ltd. for comment. He concurred with the conclusions of Protection Engineering Inc. and Genesis Engineering Inc. that the risk of a sulfur dust explosion is essentially non-existent. He also confirmed that the two sulfur dust studies conducted at PCT show that the dust levels are well below the limits which could cause a sulfur dust explosion either by spark or by hot ignition source.

Based on the studies and reviews presented, and in the absence of facts to the contrary, I must conclude for the types of sulfur handled at PCT when British Columbia Research Corporation and the B.C. Research Inc. conducted their sulfur dust studies, that the design, construction and operation of the Dumper is capable of maintaining the concentration of sulfur dust in the Dumper below the LEL for sulfur, and of preventing a source of ignition in the Dumper from igniting the sulfur dust. This, of course, applies only as long as the dust suppression and dust collection systems in the Dumper are maintained and operated properly. It is also contingent on dust accumulations being washed down before they can accumulate and create a hazard, and surfactant being sprayed onto the sulfur on the conveyor belt below the Dumper.

I additionally find that a danger of explosion of sulfur dust did not exist at the time of the investigation of the refusals to work by safety officer Davey. I conclude this because there was no evidence that the concentration of sulfur dust present in the Dumper at the time of the safety officer investigation exceeded the LEL for sulfur. In addition, there was no evidence that the dust suppression or dust collection systems were not operating properly at the time of the investigation. Moreover, there was nothing to show that the surfactant was not being sprayed on the sulfur below on the conveyor belt or that there were accumulations of sulfur dust in the Dumper.

I heard evidence that the Dumper has operated with up to 7 sprayers on the dust suppression system clogged, that the dumper has been operated in the past with only one fan in the dust collection system operating, and that the wash down of the Dumper may not be carried out as frequently as suggested by PCT. However, safety officer Davey did not indicate any of these as a factor on the day of the refusals to work. In my opinion, the danger feared by employees on that day was more hypothetical than real, was not immediate and did not exist at the time of the safety officer's investigation. That being the case, a danger under the Code did not exist.

That stated, I must commend safety officer Davey for his efforts. Because metal debris can enter the Dumper in the sulfur, the Dumper must be designed, constructed, operated and maintained to deal with the debris in a manner that precludes the risk of a sulfur dust explosion. While there was no evidence that the dust suppression system or dust collection system were being improperly maintained or operated the day of the refusals to work, there were suggestions, as indicated above, that maintenance and operation of the Dumper and its safety systems may not always be as Mr. Gibney held to exist. Since these safety systems are critical to the safe operation of the Dumper, I would recommend that PCT immediately verify that maintenance and operating procedures necessary to safe guard against a sulfur dust explosion in the Dumper are followed and in effect at all times.

Decision:

For the reasons indicated, I HEREBY RESCIND the direction that safety officer Davey issued to Pacific Coast Terminals Co. Ltd., on September 26, 2000, pursuant to subsection 145.(2)(a) of the Code.

Decision rendered April 10, 2001.

D. Malanka
Regional Safety Officer

IN THE MATTER OF THE CANADA LABOUR Code
PART II - OCCUPATIONAL SAFETY AND HEALTH

DIRECTION TO EMPLOYER UNDER SUBSECTION 145(2)(a)

On September 12th, 2000 the undersigned safety officer conducted an inquiry following the refusal to work made by Kevin J. Freistadt and David Morrow in the work place operated by PACIFIC COAST TERMINALS CO. LTD., being an employer subject to the Canada Labour Code, Part II, at FOOT OF MURRAY STREET, P.O. BOX 37, PORT MOODY, B.C., the said work place being sometimes known as PCT.

The said safety officer considers that a condition in any place constitutes a danger to an employee while at work:

On September 12, 2000 Pacific Coast Terminals removed the job function of the individuals who inspected rail cars and collected debris that could be an ignition source in the dumper. This job was normally performed before the rail cars entered the rotary dumper.

An explosion in this building could be catastrophic. It is likely that dust conditions in a part of the rotary dumper building could be within the explosive limits of that material at some point during the dumping operation and this building, therefore, meets the definition of "fire hazard area". It is reasonable to expect that all sources of ignition be kept out of the building during dumping operations and that, in fact, this is required. The sources of ignition in question are metals and other materials or loose rail car components found on rail cars that may enter the dumper building during the indexing and rotary operation. See the accompanying investigation report.

I accept the refusals of Mr. Morrow and Mr. Freistadt as being correct and find that operating the dumper without ensuring potential ignition sources, such as metal debris or loose metal rail car components, are removed from the rail cars thus allowing these potential ignition sources into the dumper building during dumping operations is a condition that constitutes a danger to the employee.

Canada Labour Code

124

125(a)(o)(p)(s)(t)(u)

125.1(a)(b)

Canadian Occupational Safety and Health Regulation:

2.1
2.12(2)
10.8
10.9
17.11(1)

Therefore, you are HEREBY DIRECTED, pursuant to paragraph 145(2)(a) of the Canada Labour Code, Part II to protect any person from danger immediately.

Issued at Surrey, this 26th day of September 2000.

Martin W. Davey
Safety Officer
BC5841

To: PACIFIC COAST TERMINALS CO. LTD.
PACIFIC COAST TERMINALS CO. LTD.
FOOT OF MURRAY STREET
P.O. BOX 37
PORT MOODY, B.C.
V3H 3E1

SUMMARY OF REGIONAL SAFETY OFFICER DECISION

Applicant: Pacific Coast Terminals Co., Ltd.

Respondent: International Longshore Workers' Union

KEY WORDS

Rotary Car Dumper, design, construction, operation, maintenance, (sulphur) sulfur dust, explosive dust, flammable, rail car inspection, metal debris, source of ignition, dust suppression system, dust collection system, surfactant, wet scrubber, fans, spray bar, spray nozzles, danger.

PROVISIONS

Code: 122.(1), 145.(2)(a), 146.(3)

SUMMARY

Management at Pacific Coast Terminals Co. Ltd., (PCT) advised its health and safety committee that they planned to discontinue the practice of inspecting rail cars loaded with sulfur prior to dumping them in the Rotary Car Dumper (Dumper). The purpose of the inspection was to remove loose rail car parts or debris on the cars that could be a source of ignition in the Dumper. PCT held that the design of the Rotary Car Dumper precludes any possibility of sulfur dust explosion and so the inspection of rail cars is redundant and inefficient. On September 12, 2000, PCT instituted the change and employees Kevin J. Freistadt and David Morrow exercised the right to refuse under Part II. The employees complained that loose rail car parts and debris on the rail cars are a source of ignition and will cause a sulfur fire or sulfur dust explosion in the Dumper. Safety officer Martin Davey investigated the refusals to work on September 12, 2000 and informed parties on September 26, 2000, that a danger existed for the employees. He ordered PCT to protect any person from the danger immediately.

Following his review, the Regional Safety Officer decided that a danger under the Code did not exist because there was not evidence that the danger feared by employees was real, immediate, or present at the time of the investigation by safety officer Davey. The Regional Safety Officer rescinded the direction.