

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

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

Applicant: Maple Leaf Mills Inc.
Calgary, Alberta
Represented by: Wayne Bellenger, and Arthur Liu

Respondents: Robert Mayer, employee; and Tony Valoroso, United Food and
Commercial Workers (UFCW)

Mis-en-Cause: Wendy Kinsey
Safety Officer
Human Resources Development Canada

Before: Serge Cadieux
Regional Safety Officer
Human Resources Development Canada

A visit of the work site took place, in the presence of the parties involved in this case, on February 22, 1994. Mr. Mayer, the employee who refused to work, and another employee of Maple Leaf Mills Inc., simulated a stacking of flour bags in a railway car. A hearing was subsequently held on February 23, 1994 in Calgary.

Background

On October 19, 1993, Robert Mayer, an employee with Maple Leaf Mills Inc., refused to work. Mr. Mayer's statement of refusal to work reads, literally, as follows:

"Refuse to load Export 50 Kg. bags 8 or 9 high as required by company, because of increased risk of injury."

The basis for the refusal to work of Mr. Mayer is that stacking 50 kg (110 lbs) bags more than seven (7) bags high per row creates such undue stress on his body that he considers it to be dangerous to his safety and health. The descriptions given at the hearing of Robert Mayer's occupation show that he is employed as an export worker whose job requires him to carry and stack 50 kg flour bags in a railway car, also known as a boxcar.

Essentially, the bags are transported from the packing area, which is on one of the upper floors of the Mill, to the boxcar via a conveyor. As the bags travel to their destination to be loaded, they are diverted mechanically onto a chute in the middle of the boxcar. Two employees work in tandem in the boxcar in such a manner that one employee stacks one-half of the car while the other employee stacks the other half. One employee positions himself under the chute and receives a bag, in the upright position, on his shoulder. The employee must then carry the bag, in that position, to one end of the boxcar and pile it in a specific manner. In the meantime, the other employee repeats the same operation, in the opposite direction, with another bag.

A boxcar is approximately 15.2 m¹ (50 feet) long. Therefore, each employee must carry the bags a distance of 7.6 m to stack the first row. The distance decreases for each subsequent row until the centre of the boxcar is reached. The pace of stacking is also proportional to the distance to be travelled by each employee. A boxcar, which is loaded by two employees, holds approximately 1000 bags when stacked at seven (7) high. One employee stacks approximately 1100 bags per 8 hour shift.

The actual stacking of the flour bags, which begins at opposite ends of the boxcar, is carried out in the following manner, for each row². Three (3) bags are dropped on the floor on one side of the boxcar, two (2) bags are dropped on the other side of the boxcar, one bag is dropped at the centre and finally one bag is dropped on each side of the centre bag to overlap it. The centre three (3) bags are consistently higher than the other bags in the row. The same process is repeated for each row. The last three bags of the seventh (7th) row cannot be dropped from shoulder height. They must be lifted by the employees, either by standing on their toes and using a movement of the body and the shoulder upwards to propel the bag on the row or by physically lifting the bags using the arms to accomplish the task. The work in question is considered a heavy manual labour job.

Robert Mayer acknowledges that he can stack bags up to seven (7) high but that stacking bags eight (8) or nine (9) high is too high and too hard on the body, whereas stacking bags ten (10) high is next to impossible. Evidently, the safety officer agreed with Mr. Mayer.

Upon completion of her investigation into the refusal to work of Robert Mayer and as a result of her findings, the safety officer issued, on November 17, 1993, a direction under paragraph 145(2)(a) of the Canada Labour Code, Part II to the employer. The direction, which is the subject of this review, reads, in part, as follows:

DIRECTION TO THE EMPLOYER UNDER PARAGRAPH 145(2)(a)

On October 19, 1993, the undersigned safety officer conducted an inquiry and an investigation following the refusal to work made by Robert Mayer in the work place operated by Maple Leaf Mills Limited (sic), being an employer subject to the Canada Labour Code, Part II,...

¹ m = meter

² The procedure for loading bags changes once the rows reach the centre of the boxcar. However, this is not a consideration in the instant case.

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

When stacking 50 kg flour bags eight and nine high into a rail car off of a conveyor the workers stack manually approximately 1100-1347 bags per 7.5 hour shift. The danger of stacking eight and nine high creates a risk of injury to employees' musculoskeletal system which contravenes section 124 of Part II of the Canada Labour Code under general duty of the employer.

Therefore, you are HEREBY DIRECTED, pursuant to paragraph 145(2)(a) of the Canada Labour Code, Part II, to protect any person from the danger no later than November 17, 1993.

Submissions for the Employer

The employer representatives are of the view that stacking bags eight (8) high is safe but agree that stacking bags ten (10) high, as it has been attempted in the past, is definitely too hard for any worker to do and consequently, it should not be done. After the refusal to work of Mr. Mayer and in consultation with the safety officer, the company hired a consultant in kinesiology (study of the mechanics of body movements) to conduct a study of the risks involved in the manual material handling occupation at Maple Leaf Mills Inc. with a view of making appropriate recommendations. The consultant's report provides conclusions relative only to employees involved in the study. The ability of Robert Mayer to perform the export duties was undetermined.

The consultant notes in her report that in order "To establish a height to which flour bags can be loaded safely, the export occupation was assessed through a direct observational method and subjective assessment." Of particular interest to this case is conclusion no.3 of the consultant's report which reads as follows:

3. Loading bags 7 high was the accepted height to which the workers would be able to load under present circumstances. However a compromise of loading 8 high was revealed. Thus with all other factors considered, loading flour bags eight high and eight across would be considered within safe limits.

During her testimony, the consultant cautiously indicated that loading flour bags one (1) or two (2) high may be more stressful on the body than loading bags seven (7) or eight (8) high, because the worker would then have to lean slightly forward and twist the body to drop off a bag. Also, with the 50 kg bags and the compression forces exercised on the body, there would be a significant difference in body stress on individuals depending on their height. For example, a short worker would be pitching the bags at seven (7) high whereas a tall worker could be dropping the bags off at eight (8) or nine (9) high. In this occupation, there is stress no matter at what height one has to drop or pitch the bags.

In order to reduce employee injuries in the export occupation the company has purchased a mechanical device (power-curve) to handle the bags. The presence of employees would still be required when the device becomes operational however, they would do little manual work.

Nonetheless, from an economic standpoint and because of their commitment to clients, the company must still ensure that bags can be stacked manually at eight (8) high per row in the event of a malfunction of the equipment.

Submissions for the Employees

The employee representatives submitted that, historically, bags were stacked seven (7) high per row. Now the company would have workers stacked them eight (8), nine (9) and ten (10) bags high. This situation has caused an increase in injuries because of the increase risks and hazards of stacking flour bags at those heights.

There is a consensus amongst employees and management that because of the increase stress on the body caused by the weight of the bags, the number of bags to be stacked in a day and the height at which they have to be stacked, the average employee, once he reaches his mid-thirties, can no longer do this job. The cumulative chronic effect on the body, by that age, has taken its toll.

Mr. Mayer is 35 years old and complains that stacking bags above seven (7) high per row is unsafe because he is no longer dropping the bag from his shoulder. Above seven (7) bags high, he has to lift the 50 kg flour bag up onto the row. In fact, the centre three (3) bags of the seventh row are higher than the row itself and must be lifted to position them onto the row. The lifting begins after seven (7) bags high and it is too strenuous on his body to lift bags beyond that height. Above that height, he is in pain.

The safety officer summarized Robert Mayer's complaint at the hearing by saying that he was feeling the pain on his body at that moment when he had to pitch the bags at eight (8) high. That moment, said the safety officer, corresponds to the situation of danger as defined in the Code.

Decision

The issue that the various parties would have me decide, in the instant case, is whether stacking bags at eight (8) high constitutes a danger, as defined in the Code, for Robert Mayer or for any other export worker. In my view, the issues that I must decide, in the instant case, are twofold and somewhat more restrictive.

The first issue to be decided, given the circumstances of this case, is whether the condition feared by Mr. Mayer, assuming it is a danger as he alleges it to be, is one that entitles him to exercise the right to refuse to work under the Code. The second issue to be decided, in the event that Robert Mayer was entitled to exercise that right under the Code, is whether the condition feared by him constitutes a danger as defined in the Code.

1. Was Robert Mayer entitled to refuse to work?

Under normal circumstances, refusing to carry bags and stack them at a certain height, on the basis that this activity constitutes a danger, would not entitle Robert Mayer to refuse to work under the Code. There are cases, under the Code, where refusing to work in dangerous circumstances is not permitted.

Paragraph 128(2)(b) of the Code is quite explicit in those cases. It provides as follows:

128. (2) An employee may not pursuant to this section refuse to use or operate a machine or thing or to work in a place where
- (a) the refusal puts the life, health or safety of another person directly in danger; or
 - (b) the danger referred to in subsection (1) is inherent in the employee's work or is a normal condition of employment. (emphasis added)

Therefore, as long as the normal conditions of employment of Robert Mayer have not changed, he would not be entitled to refuse to do the job for which he has been hired. I believe that a normal condition of employment is, in the absence of specific guidelines in the legislation respecting manual material handling, a standard which is set by the industry over time. It should also be, in my view, a standard that is widely recognized throughout the industry as being reasonable.

At Maple Leaf Mills Inc., stacking 50 kg flour bags at seven (7) high was the norm. The employee representatives submitted uncontradicted evidence that, historically, they were stacking bags at that height. The employees of Maple Leaf Mills Inc. readily accepted that condition and as such, it was perceived as reasonable. It is only when the company introduced a new policy of stacking bags ten (10) high that Robert Mayer objected on the basis that it was unsafe to stack them at that height.

It should be noted that when Robert Mayer refused to stack bags at ten (10) high, the safety officer was not involved in the resolution of that refusal. After investigating into the matter, the company lowered its requirement of stacking bags from ten (10) high to nine (9) high. Robert Mayer refused to stack the bags at nine (9) high because he could not stack them at eight (8) high, at which time the safety officer was called in to investigate. Therefore the normal conditions of employment of Robert Mayer had changed. Also, rather than allowing those new conditions to become, de facto, the new norm, as other employees appear to have done, he refused to work. Consequently, it is because of these changes that, in my opinion, Robert Mayer was entitled to exercise the right to refuse to work.

2. Was there a danger to Robert Mayer when he refused to work?

Mr. Mayer is an export worker whose job requires him to carry bags and stack them in a specific manner. It is generally agreed that this occupation is a heavy manual labour job. An undeniable consensus has developed in this industry, whereby there will be a point in time where export workers will be unable to do the job because of the strain caused by the work and its cumulative effect on the body.

Stacking flour bags at seven (7) high is part of an export worker's job to the extent that it can be done as safely as possible and in the manner prescribed. It is a strenuous activity which the parties have come to accept, whether rightly or wrongly, will most likely result in after-effects on

the body. However, carrying and stacking those bags without safeguards is not part of Robert Mayer's job. Just as a fire fighter would not be asked to combat a fire without proper equipment and training, Mr. Mayer should not be asked to do his job without proper instruction, training and equipment. Relying only on brute force to handle heavy material is neither reasonable nor acceptable.

Danger is defined in the Code as follows:

"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.
(emphasis added)

Robert Mayer states emphatically that stacking bags above seven (7) high is terribly painful and concludes that it is unsafe and dangerous. Evidently, his contention can easily be interpreted as self-serving unless it can be shown otherwise. In this respect, I must look at the legislation to determine which measures had to be taken by the employer to protect Robert Mayer. If the appropriate measures were taken, then it becomes almost impossible to substantiate Robert Mayer's contention that he was in a situation of danger. Conversely, in the absence of safety measures, Robert Mayer's contention is, in my view, substantiated.

Section 14.47 of Part XIV (Materials Handling) of the Canada Occupational Safety and Health Regulations (the Regulations) imposes minimum requirements upon the employer. That provision is intended to ensure that some measures are taken to protect the safety and health of employees involved in manual material handling. It provides:

14.47 Where an employee is required to lift or carry loads in excess of 10 kg manually, the employee shall be instructed and trained by the employer

- (a) in a safe method of lifting and carrying the loads; and
- (b) in a work procedure appropriate to the conditions of the work place and the employee's physical condition.

In my opinion, Maple Leaf Mills Inc. has not complied with the minimum requirements prescribed under the Regulations. For example, the Regulations make reference to "a safe method of lifting and carrying the loads", the assumption being that a method for carrying the 50 kg flour bags has been developed or is being used and that it ensures that the bags can be lifted and carried safely. Considering that there are risks involved in stacking the said bags at all heights, as noted by the consultant, a specific method would have to be developed which would take into consideration the numerous factors involved in the carrying and stacking of those 50 kg flour bags. Obviously, instruction and training would be paramount to this activity to make the employee aware of the risks involved in handling materials manually. In addition to the above, a work procedure that takes into consideration each employees' physical condition is also prescribed. In my view, none of the above prescribed measures were taken.

The export workers have reported that the only training they have received is on-the-job training from co-workers or supervisors. Most importantly, no consideration was ever given to developing a working procedure that would be appropriate to the employee's physical condition. I believe that such consideration is essential in this type of work.

In my view, the work that Robert Mayer was asked to do i.e. stack 50 kg flour bags above seven (7) high, could not be accomplished in a safe manner given the conditions under which and the manner in which it had to be accomplished. Furthermore, when Robert Mayer refused to work, he was justified to do so because he was being injured at the moment he had to stack the bags above seven (7) high. Hence, Robert Mayer was in danger when he refused to work.

This ruling should not be seen as an attempt to set industry standards respecting manual material handling. On the contrary, I strongly believe that it is up to the industry to achieve this goal, in consultation with its partners, primarily because of the numerous factors that directly impact on this activity. It appears that the company has taken some steps to achieve this goal by involving an expert into the matter. I would also suggest that this matter be discussed at the safety and health committee level, with a view of proposing solutions and making appropriate recommendations. The safety and health committee established under the Code is, in my opinion, this industry's true partners when it comes to safety and health.

I will vary the safety officer's direction to limit the application of the direction to Robert Mayer because it has been shown that his conditions of employment have changed, as noted earlier, and because the minimum requirements of the Regulations were not complied with in his case. While it could be argued that risks exist when stacking 50 kg flour bags at all heights, Robert Mayer maintained that he was in danger only after stacking those bags above seven (7) high, therefore the direction will reflect this restriction as well as the need for safeguards when stacking the bags at that height.

At this point in time, I believe that I cannot extrapolate my ruling to other Maple Leaf Mills Inc. export workers since I lack the necessary information to determine the employer's compliance with section 14.47 of the Regulations as it applies to export workers in general. However, the employer is under notice that the absence of prescribed measures in the export occupation would go a long way, in the future, to support a finding, by a safety officer, of a contravention of the Code and the Regulations.

Therefore, for all the above reasons, I HEREBY VARY the direction given on November 17, 1993, by safety officer Wendy Kinsey to Maple Leaf Mills Inc. by replacing the third paragraph of the direction with the following two paragraphs

"When stacking 50 kg. flour bags above seven (7) high into a rail car off of a conveyor Mr. Robert Mayer stacks manually approximately 1100 bags per 8 hour shift without having been instructed and trained in a safe method for carrying and stacking flour bags and in a work procedure appropriate to his physical condition, all of which creates a condition likely to result in injury to himself.

Section 124 and paragraph 125(q) of Part II of the Canada Labour Code and section 14.47 of Part XIV (Materials Handling) of the Canada Occupational Safety and Health Regulations."

AND by removing the reference, in the fourth paragraph of the direction, to "any person" and replace that expression by "Robert Mayer".
Decision rendered on April 7, 1994

Serge Cadieux
Regional Safety Officer