REVIEW DECISION

Re: **Review Reference #: R0232282**
Board Decision under Review: December 14, 2017

Date: **June 22, 2018**

Review Officer: **Melina Lorenz**

The employer operates a manufacturing plant. On August 3, 2017, a worker was injured when his hands and arms were caught between the heat drum and tension roller in a foil facing machine. The Workers' Compensation Board ("Board"), which operates as WorkSafeBC ("Board"), issued an August 9, 2017 inspection report with orders under section 10.3(2) and 10.4(1) of the *Occupational Health and Safety Regulation ("Regulation"),* as well as section 115(2)(e) of the *Workers Compensation Act* (*"Act"*).

The Board imposed a penalty on the employer, on December 14, 2017, for the violations of sections 10.3(2) and 10.4(1) of the *Regulation* contained in the August 9, 2017 inspection report.

The employer requests a review of the December 14, 2017 penalty order. A union and another interested party are participating, but did not file submissions. The employer filed submissions requesting that the penalty be cancelled. The Board officer provided comments at the request of the Review Division. The employer provided rebuttal submissions. All submissions and comments were disclosed in accordance with the Review Division *Practices and Procedures.*

Section 113(2.2) of the *Act* gives me authority to conduct this review. The policies in the *Prevention Manual* apply.

Issue

The issue is the penalty imposed upon the employer.

Reasons and Decision

Was there a Violation?

The Board imposed a penalty upon the employer for two of the violations contained in the August 9, 2017 inspection report. The employer did not request a review of those orders. Therefore, I do not have jurisdiction on this review to confirm, cancel or vary those orders. I will, however, consider the evidence to determine whether the factual basis for imposing the penalty exists.

Section 10.3(2) of the *Regulation* states that lockout of machinery is required if a work activity creates a risk of injury to workers from the movement of the machinery and it is not effectively safeguarded to protect workers from the risk.

Section 10.4(1) states that when lockout is required, the devices must be secured in the safe position using locks in accordance with procedures that are made available to all workers who are required to work on the machinery or equipment.

Orders issued under the above sections followed the August 3, 2017 incident in which a worker was feeding foil facing around a heat drum to apply foil to a mineral fibre mat. In the process, the worker's hands and then arms were caught between the rotating heat drum and the tension roller.

The Board officer reviewed the employer's safe work procedure ("SWP") for the task in question and noted that although pinch points, caught-in/run-in and crush injuries were noted as potential hazards for many of the job steps, nothing indicated that the machine must be locked out prior to performing these tasks. Although the officer did not state this, the evidence persuades me that the machine was also not safeguarded in a way that prevented the worker's injury from occurring.

Section 10.3(2) imposes a requirement for lockout if the work activity creates a risk of injury due to movement and the machinery is not effectively safeguarded. The facts of the worker's injury establish a violation of this section, as there was a risk of injury due to movement and the machine was not effectively safeguarded to prevent the injury that occurred. Therefore, lockout was required. There is no dispute that the machine was not locked out in accordance with section 10.4(1) at the time of the incident.

The employer submits that the worker was not following the SWP and, if he was, this injury would not have occurred. However, in my view, section 10.3(2) imposes a mandatory requirement upon an employer to lockout the machinery in accordance with section 10.4(1) if the risk of injury exists. The employer's SWP, the worker's actions, and the employer's efforts to promote a safe workplace will all be considered in my analysis of due diligence.

I find the facts to support a penalty are established on the evidence.

Criteria for Imposing a Penalty

Under section 196(1) of the *Act*, the Board has the authority to impose a penalty where the employer has failed to comply with the *Regulation*. As explained by policy item D12-196-1, *Criteria for Imposing OHS Penalties*, the Board must consider a penalty where at least one of a number of factors apply, including:

- The violation resulted in a high risk of serious injury, serious illness, or death;
- The employer previously violated the same, or substantially similar, sections of the *Act* or *Regulation*, or the violation involves failure to comply with a previous order within a reasonable time;
- The employer intentionally committed the violation; or

- The Board considers that the circumstances warrant a penalty.

The Board officer determined that this was a high risk violation and a repeat violation.

High Risk Violation

Policy item D12-196-2, *High Risk Violations*, explains that certain violations are automatically designated high risk because they regularly result in fatalities, serious injuries, and serious illnesses. Designated high risk violations generally give a worker little or no opportunity to avoid or minimize severe injury or death or occupational disease. Lockout-related violations are not designated high risk.

The policy outlines sets out the following criteria to determine whether other violations are high risk:

1. the likelihood of an incident or exposure occurring; and
2. the likely seriousness of any injury or illness that could result if that incident or exposure occurs.

The Board has also issued Guideline *G-D12-196-2 High Risk Violations,* which states that ineffective de-energization, lockout, or safeguarding will likely be a high risk violation. However, the two criteria above must still be applied in determining whether a non-designated violation is high risk. The Guideline states that the following should be considered:

> When considering the *likelihood of an incident or exposure occurring*, some of the factors that may be considered are:
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> - The number of workers exposed.
> - The potential hazards that are present in the particular work or task being performed.
> - Whether the hazard has been effectively controlled (ineffective controls usually result in one or more violation orders under the *Regulation* or *Act*).
> - The circumstances that increase the likelihood of a worker coming into contact with the hazard.
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> When considering the *likely seriousness of any injury or illness*, some of the factors that may be considered are
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> - Whether, in circumstances where an incident or exposure occurs, any resulting injury or illness is likely to be serious, or even fatal, due to the nature of the violation.
> - Additional conditions or circumstances at the workplace that would increase the potential outcome of a serious injury, serious illness, or death once the worker is exposed to the hazard.

The first criterion to consider is the likelihood of an incident or exposure occurring during the process of feeding the foil facing around the heat drum. The employer's SWP identified the hazardous points of operation (pinch point between the heat drum and the tension roller and heat from the heat drum), but did not require lockout.

The photographs included with the penalty package show that the foil facing machine is a large piece of industrial machinery. The heat drum and tension rollers rotate during the usual operation of the machine. The employer had a railing around the machine which limited, but did not completely prevent, worker access to the machine.

The SWP in place at the time of the incident stated that the foil rolls are fed over a heated drum, which presses and glues the foil to the mineral fibre mat. The procedure for starting the foil wrap was to turn on the drum rotation and the burner about 20 to 30 minutes prior to starting the run. Workers were advised to keep hands and fingers clear of the heat drum. Workers were to lower the crush roller at the oven exit so that it crushed the fibre mat approximately 50% or as specifications required.

The next step was to feed the foil. The worker was to push the end of the foil through the slot in the deck until it was within reach from the floor. Potential hazards included pinch points and caught-in/run-in. Preventative concerns noted that working near the moving conveyer and rotating heat drum required attention to run-in points.

The employer stated that, according to the SWP, the heat drum was to be turned on and rotating about twenty or thirty minutes prior to feeding the foil down from the mezzanine floor above. The drum would not heat up if it was not rotating. There were occasions when the foil did not line up correctly on the drum. Two managers stated that the operator would then take a three foot long tool and reach in with the tool and guide the foil into the correct position on the heat drum. This was done from the catwalk behind the railing in front of the machine, with the drum heated and rotating. The use of the tool was not described in the SWP, but the employer said that this was the way that workers were trained to perform this task.

At the time of the incident, the worker decided for unknown reasons to set the equipment up three hours prior to the run. He did not turn on the heat to the heat drum, so it was cold and the glue would not warm up. When the foil did not line up correctly, he leaned over the railing in front of the machine and used his hands, rather than a tool, to correct the position of the foil. The employer states that the worker performed this task differently from the way that he was trained and put himself too close to the moving parts.

There is also some indication that the worker may have slipped, contributing to the incident. The first aid report dated August 7, 2017 stated that the worker was feeding the foil between the heat drum and swing arm, when he slipped and his right hand got pinched between the two rollers. This slip was not noted in the employer's incident investigation report ("EIIR"), so it is unclear if the worker did not report this during the employer's investigation or whether it was not considered to be a significant factor in the incident. I consider a slip as a possible contributing factor to the incident.

The task in question was performed by one worker at a time, and placed involved a risk of injury to that worker. In the Report for Administrative Penalty, the Board officer stated that the task was performed every few days. He stated that the worker was required to keep his hands at the hazardous point of operation in order to feed the foil machine. I accept the employer's evidence that its general process was to use a tool for this task, which did not require a worker to keep his or her hands at the hazardous point of operation. However, this process was not followed when the incident occurred.

I note that the employer was aware of the hazard (which was identified in the SWP) and had taken some steps to mitigate the hazard. The employer had a railing around the machine and had developed a SWP. However, the fact remained that workers were expected to perform a task that would bring them close to if not directly within the hazardous points of operation without locking the machine out. The risk was not effectively controlled.

Given the lack of effective controls, the risk of an incident in which a worker came into contact with the moving parts remained present. According to the evidence, the risk of injury would have been much reduced if the worker had followed the SWP, as the heat from the heat drum would have deterred him from getting as close to the moving parts as he did. The use of a tool to perform the task would also have reduced the risk of injury, although I do not think it would have eliminated it as there are other potential scenarios which could occur, such as the tool falling into the moving parts and a worker leaning too far in to try to retrieve it. The employer noted, however, that the procedure had been performed over 1000 times without incident or reported concern. Overall, I do not conclude that there was a high likelihood of an incident occurring.

However, I also find that if an injury occurred, it was likely to be serious. The injured worker is fortunate that coworkers heard him yelling and turned the machinery off promptly or his injuries probably would have been much more serious than the soft tissue injuries that he sustained.

In this situation, I do not conclude that there was a high likelihood of an incident occurring. However, the risk still existed and any injury that occurred was likely to be serious. Having regard to the two factors outlined in policy, I conclude that the violation did not meet the threshold of high risk.

Repeat Violations

In the Report for Administrative Penalty, the Board officer also noted that the employer had a previous violation of section 10.3(2) after a June 9, 2015 inspection. The inspection was in relation to a May 28, 2015 incident resulting in worker injury. The scrim roll machinery was in use for production work and the worker was hand-feeding the end of a new fiberglass fabric roll when the injury occurred. The machinery had not been adequately safeguarded or locked out.

While this was a different piece of machinery, this was a violation of the same section of the *Regulation.* As this was a repeat violation, the Board was required to consider imposing a penalty.

Due Diligence

Section 196(3) of the *Act* provides that the Board must not impose an administrative penalty if the employer exercised due diligence to prevent the failure or non-compliance to which the penalty relates. Policy item D12-196-10, *OHS Penalties – Due Diligence*, explains that an employer acts with due diligence where the employer shows that it took all reasonable care to prevent the failure, non-compliance, or conditions to which the penalty relates.

The employer's main submission is that it exercised due diligence in the circumstances. A health and safety manager commented on the employer's overall focus on safety. The employer also provided evidence of extensive training for all workers, supervisors and managers.

The employer had previously provided the Board with an August 15, 2017 letter, outlining its diligence. In the Report for Administrative Penalty, the Board officer stated that the employer had an established health and safety program, including, among other things, general information and training for its workers about lock-out requirements, SWPs for specific tasks, and safety audits. He stated that it demonstrated that the employer was actually performing safety audits at the workplace, was holding and documenting tailgate and crew meetings, and had SWPs documented for many tasks at the workplace.

I have reviewed these documents and note the evidence of numerous lockout audits, in which the workers were generally found to be performing the procedure correctly. Lockout was brought up frequently at safety meetings. For example, the minutes from an April 12, 2017 crew safety meeting noted that there had been some lockout violations recently and workers were reminded to use lockout correctly. There was evidence around April 5, 2017 that a worker on night shift was disciplined because he removed his locks from a group lockout before his cross shift worker arrived. The details of the discipline are unknown to me.

I have also considered the SWP regarding the foil facing machine at the time of the incident. The employer provided evidence that the SWP had been reviewed six times and revised three times since 2006, with the most recent review in August 2016.

The employer submits that it is only with the benefit of hindsight that they realized that lockout was the preferred procedure when feeding the foil in the foil facing machine. They submit that to impose a penalty is to rise to an absolute liability standard.

The question for me to determine is whether the employer took all reasonable steps to prevent the violations. It is not sufficient to have a safety program, even an exemplary one, if all reasonable steps were not taken.

In this case, I find that the employer had made significant efforts towards due diligence. They had a railing in place to limit access to the foil facing machine. They had prepared a SWP for the machine which notified the workers of the hazard of the moving parts. According to the employer's evidence, following the SWP would ordinarily result in workers keeping more distance from the moving parts when feeding the foil, as the heat drum would be very hot. The employer had trained their workers in a procedure that would not have required the worker to lean over the railing to feed the foil. The training records show that the worker had demonstrated competence with this machine on January 28, 2015.

However, there is a lack of explanation in the materials or submissions for the worker's actions. Although one would not expect him to be continually supervised, the fact that he apparently turned on the machine more than two hours earlier than expected, without anyone apparently noticing this, raises a question about supervision. It is unclear whether other workers were performing the tasks in the same way that he was.

I do note that various workers had performed this task for over 19 years without incident. The employer had reviewed and revised the SWP periodically and had considered it sufficient, although it did not effectively control the risk of workers being injured by the moving parts when feeding the foil into the machine.

Taking all the evidence into account, I find that the employer did not meet the threshold for due diligence. The employer was aware of the hazardous points of operation, but did not require lockout while feeding the foil in the foil facing machine. They had a SWP which, according to their evidence, did not describe the use of a tool which workers used to make the task safer. Specifically, the SWP did not describe how a worker was to feed the foil without placing his or her hands within the hazardous points of operation. The machine was not effectively safeguarded or locked out during this process. I acknowledge that the employer made significant efforts towards due diligence in its overall operations, but the incident that occurred illustrated a significant gap in its safety procedures.

I conclude that the employer did not act with due diligence to prevent the violations from occurring.

Additional Factors in Deciding Whether to Impose a Penalty

Policy item D12-196-1 also sets out three additional factors that must be considered with regard to the appropriateness of imposing a penalty:

1. The potential for serious injury, illness or death in the circumstances, based on the available information at the time of the violation;

2. The likelihood that the penalty will motivate the employer and other employers to comply in the future, taking into account one or more of the following:

    a. The extent to which the employer was or should have been aware of the hazard;
    b. The extent to which the employer was or should have been aware that the *Act* or *Regulation* were being violated;
    c. The compliance history of the employer;
    d. The effectiveness of the employer's overall approach to managing health and safety; and
    e. Whether other enforcement tools would be more appropriate.

3. Any other relevant circumstances.

I have previously determined that there a potential for serious injury, based on the information available at the time of the violation. The lack of a requirement for lockout while feeding the foil created a risk of injury from the hazard of the moving parts. The employer had taken steps and developed procedures to mitigate that risk, but it still remained present.

It is relevant to note that, for unknown reasons, the worker had not followed the SWP for the machine in question, resulting in the drum being cold when he was trying to feed the foil. He then put his hands too close to the hazardous point of operation and they were drawn into the machine. He may have slipped prior to the incident occurring. In other words, there was an element of independent action on the part of this worker that contributed to the event that occurred, despite records confirming that he had been trained and demonstrated competence on the safe operation of this machine.

The main question for me to determine is whether the penalty will motivate the employer and other employers towards compliance.

In this situation, I consider that the employer's actions fell short of due diligence, but the employer had taken significant steps in this direction. The employer's SWP demonstrated awareness of the hazard and their statements at the inspection show that they thought that they had effectively addressed the hazard.

They did not consider that the machine required lockout for this task, due to the SWP and other processes that they had in place. While I disagree with that conclusion, I do not consider this to be a situation in which the employer was ignoring ongoing hazards. The employer stated that the procedure took about 20 seconds to complete and had been performed over 1000 times without incident. The evidence demonstrates that in hindsight, the risk had not been effectively controlled, but it was not a risk that had been ignored by the employer.

I have reviewed the employer's compliance history which I consider to be an overall positive factor. The employer had orders following four inspections in the past three years, which is not a large number of orders in relation to the size of the employer's workforce. This evidence does not show a significant history of non-compliance. For an employer of this employer's size, the inspection history is relatively positive.

The employer's submissions support that they have a strong commitment to occupational health and safety. The employer, whose head office is overseas, is greatly invested in communicating with all locations regarding safety matters. They allocate approximately $6,000,000 Canadian annually to improve health and safety within the corporation. Safety managers are regularly invited to international safety conferences and have quarterly meetings by Skype with all health and safety managers.

One health and safety manager stated in her letter that she has a budget of $90,000 per year. Following every injury, incident or event, the SWPs are reviewed and revised as needed. The employer has a process wherein every injury, accident or incident is reported within 24 hours to all factory managers and safety managers worldwide in order to alert them to the issue and allow them to review their process if similar. This process was followed after the August 3, 2017 incident. I am satisfied that the employer has a robust and overall effective approach to managing safety.

I highlight that the employer's response to this event was immediate and the injured worker was removed from the machine and taken by ambulance for medical attention. The machinery was immediately locked out. The worker returned to the worksite before the end of the shift, but was sent home. The employer had begun its investigation prior to the Board's officer's attendance at the site the following day.

I note that the employer has made improvements since the incident. The SWP was revised on August 8, 2017 and now requires lockout for this process. The area is fully guarded. The space between the tension roller and the heat drum has been increased to six inches (from two) and the tension roller can be raised higher so the foil easily feeds in between and around the heat drum (no tool will ever be needed). The employer submits that it has spent over $150,000 in guarding following this incident and a review of their operations. In my view, this

evidence supports that the employer is motivated to provide a safe workplace for its workers.

I have also considered whether any other enforcement tools would be more effective. Policy item D12-196-11, *Penalty Warning Letters,* states that as an alternative to imposing an administrative penalty, the Board may send the employer a warning letter when the grounds for considering a penalty are met and the employer has failed to exercise due diligence. The issuance of a warning letter for a violation does not limit the Board's ability to pursue administrative penalties, prosecution or other enforcement or compliance action.

Given the guidance in Policy item D12-196-11, I find that this is an appropriate case for a warning letter. The employer had taken steps towards due diligence, but did not quite meet the standard, given the serious nature of the violation. The employer devotes significant resources to health and safety and provided evidence of an otherwise robust safety program. The employer demonstrates a high level of motivation towards safety and I find that a penalty is not necessary to further motivate this employer or other employers.

Having regard to all the circumstances outlined in policy, I conclude that the penalty should be cancelled. I find that a clear warning letter would suffice to ensure that it remained committed to complying with the *Act* and *Regulation.*

Therefore, I allow the employer's request in part.

Conclusion

As a result of this review, I vary the Board's December 14, 2017 decision by cancelling the penalty order and imposing a warning letter. This Review Division decision will substitute as a warning letter against the employer.

Melina Lorenz
Review Officer
Review Division