

WorkSafe Services

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Services de travail sécuritaire

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January 31, 2007

"The Employer"

The Chief Compliance Officer is writing in response to the employer's letter of January 3, 2007, in which the employer requests a deviation from *Occupational Health and Safety Act* General Regulation 91-191 section 97 (2) that states:

- A guardrail shall be made of wood, metal pipe, angle iron or wire rope and*
- (a) if made of wood, the top rail, vertical supporting posts and intermediate rail shall be constructed of at least 50 mm × 100 mm No. 1 grade or better spruce or fir;*
 - (b) if made of metal pipe,*
 - (i) the top rail and vertical supporting posts shall be at least 40 mm in diameter, and*
 - (ii) the intermediate rail shall be at least 25 mm in diameter;*
 - (c) if made of angle iron,*
 - (i) the top rail and vertical supporting posts shall be at least 40 mm × 40 mm × 5 mm, and*
 - (ii) the intermediate rail shall be at least 32 mm × 32 mm × 3 mm; or*
 - (d) if made of wire rope,*
 - (i) the vertical supporting posts shall be made of steel at least 40 mm in diameter or of a material of equivalent strength, and*
 - (ii) the top rail and intermediate rail shall be at least 10 mm in diameter, be attached to a welded fastening on the vertical supporting posts with metal clips to prevent unnecessary sagging and be easily distinguishable from the background.*

The employer indicates the following in the employer's request:

That the employer is a member of the region's leading manufacturer of construction materials and community planner, that the employer is a part of a quality and service tradition that reaches back almost a century and a half, is a manufacturer and one of the largest employers in the area. The employer has a dynamic workplace in an indoor plant environment.

Every employee is a part of the employer's team and shares in the responsibility and pride of a safe and healthy workplace.

That non-compliance with any section of the OHS Legislation continues to be addressed by means of in-house inspections, toolbox meetings, the JHSC, WHSCC Risk Management Services, findings reports and formal inspections by WHSCC Health & Safety Officers.

At a recent inspection on October 10, 2006 by the WHSCC, the issue of guardrails around the work and storage mezzanines were brought to the forefront. The use of a chain to be used as horizontal access points of the employer's guardrails around the work and storage mezzanines at the employer's facility, and was a concern by the inspecting officer as chain is not a stated material for guardrail use with the OHS Act with regard to fall protection and zero tolerance.

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The employer has provided the following information with respect to benefits and drawbacks to health and safety that might be reasonably anticipated for the Chief Compliance Officer's consideration:

Regulation 92(2) states "A guardrail shall be made of wood, metal pipe, angle iron or wire rope". In the past, compliant guardrail materials used in the employer's premises brought forth safety issues for the employees. Employees found, by using a cable, that a tripping hazard was created when the area was accessed to go to their workstations. Wood, angle iron or pipe were potential hazards to workers below when access is required.

The employer indicates that through numerous brainstorming sessions, hazard identification and toolbox meetings with the JHSC Members, employees working in the area of concern, engineers, company safety advisors, WHSCC compliance officers, outside consultants and management, the employer believes that the employer has a system equal to and as safe as materials authorized in the regulation and have therefore applied for a deviation for the use of chain as a horizontal guard rail and have provided the following details:

- The proof Coil Chain is Grade 30 and electric welded ¼" safe working load 1,100 lbs;
- With the exception of the usage of chain, the other components of the employer's guard rail system meets the required standards as required in the OHS Act and Regulation 91-191, Section 97-100 inclusive;
- As an additional safety feature the employer has high visibility signage in place;
- To top rail is attached to a ½" steel rod fastened on the vertical supporting posts with welded connections to prevent unnecessary sagging and painted safety yellow to easily distinguish it from the background;
- The opening for passage through a guardrail is equipped with a barrier or gate that may be removed temporarily to permit passage;
- The guardrail shall be inspected by a competent person a regular basis and if the guardrail does not meet the above requirements and standards it is immediately repaired so as to meet the above requirements or is replaced.

During the Chief Compliance Officer's January 17th site visit, where the Chief Compliance Officer reviewed the set-up of the employer's proposal, the following observations were made:

1. The affected areas of the employer's premises where the deviation would apply include the Mezzanine walkway (where access is to the work area is required to allow persons and supplies for carrying out the work) and on the (roof) ends of the units under construction to safely complete the insulation, sheeting and shingling work.
2. The prototype guardrail system on display appeared to have sufficient sag on the top rails (chain) to render the system ineffective in arresting horizontal forces that could be placed against it.

Based on the information the employer has provided, and after the Chief Compliance Officer's site visit on January 17th, 2007, a deviation is granted provided that the employer follow the conditions provided with the employer's request and that the employer make the necessary adjustments to the chains to minimize sag to optimize the arresting properties of the guardrail system.

By copy of this letter, the Chief Compliance Officer has advised WHSCC staff of the decision.

Yours truly,

Chief Compliance Officer