

**WorkSafe Services**

PO Box 160  
Saint John NB E2L 3X9  
Phone 506 632-2200  
Toll free (Claims) 1 800 222-9775  
N.E. Regional Office 1 800 561-2524  
Web www.whscc.nb.ca

**Services de travail sécuritaire**

Case postale 160  
Saint John NB E2L 3X9  
Téléphone 506 632-2200  
Sans frais (Réclamations) 1 800 222-9775  
Bureau de la Région du N.-E. 1 800 561-2524  
Web www.whscc.nb.ca



June 20, 2008

"The Employer"

The Chief Compliance Officer is writing in response to the employer's email dated May 20, 2008 requesting a deviation from Section 207(1)(b) Regulation 91-191, which states:

*207(1) An employer shall ensure that a hoisting apparatus is*

...

*(b) equipped with suitable ropes, chains, slings, hooks and other fittings,*

*so as to ensure the safety of a person who uses the apparatus or works in its vicinity.*

In the employer's deviation the employer is requesting to allow for the use of a steel sorting hook, not equipped with a hook safety latch.

The employer has provided the following facts for the Chief Compliance Officer's consideration:

**Background:**

The employer's Low Level Waste (LLW) transfer work process requires that radioactive material be stored within specially constructed low level waste transfer boxes transported to the dry storage site at the employer's premises. These transfer boxes have to be lifted from ground and maneuvered into specialized storage vaults. Each transfer box is approximately 2' deep and 4' wide and 22' long, with a maximum capacity of 10,000 lbs. There will be 220 transfer boxes that will be permanently stored in the dry storage vaults.

Each lift will occur using a mobile crane with certified rigging and hooks. Rigging will be done by qualified riggers.

**Issue:**

Under normal rigging practices, hooks used in lifting and rigging practices would be equipped with a safety latch so that the hook cannot accidentally un-latch itself from the load which would subsequently fall to the ground. This would also require that workers physically manipulate the hook to release it from the load.

The employer proposes to deviate from the practice of using a safety latch on the hooks and requiring workers to enter the vault to unhook the load. The employer is proposing the use of a steel-sorting hook that will allow the hook to disengage by itself, by gravity, once the load is in place and securely positioned.

- The employer believes the vaults are actually of a design that would classify them as a confined space. They are not designed for human occupancy, they have restrictive access and egress with a hazardous exposure - radiation fields.
- The boxes will be emitting radiation considered a hazardous exposure, which will expose the worker to unnecessary radiation dose. One of the guiding principles and challenges for the employer is to incorporate ALARA into everything the employer does. Maintaining radiation exposure to fields As Low As Reasonably Achievable.
- The employer would eliminate entrance into a possible confined space, via a long extension ladder, and reduce possible injury by eliminating the hazards associated with a confined space.
- Even if it were not a confined space, the employer would eliminate having persons inside the vault and the associated hazards of moving about, climbing etc.
- Following safe working procedures and using sorting hooks for this lifting and rigging, the employer believes the process can and will be done safely, satisfying the intent of Regulation 207(1).

The employer has included the following documentation in the employer's request:

1. Proposed rigging equipment to be used;
2. Photos of the hooks to be used;
3. Photo of the container to be lifted.

On June 6, 2008 a WHSCC Engineer, a Health & Safety Officer and the Chief Compliance Officer met with the contractors to review the proposed operation. During the site visit we were provided with a demonstration of the process and noted the following information:

- The crane involved in the process is a 20 ton gantry crane manufactured Munck;
- The overall set up which includes hooks manufactured by Crosby and rigging allows for a maximum load of 6 tonnes to be applied on the crane;
- The maximum load that will be transferred is not expected to exceed 5 tonnes;
- The crane operators have received extensive training provided by Atlantic Crane;
- The operation will require seven persons, one will operate the crane remotely from the ground, two will be located above on the storage containers and four on the ground who will be required to attach the rigging to the load prior to the lift;
- The crane has been modified to restrict the movement of the load one direction at a time to minimize a "pendulum" effect.

It was raised during the meeting whether the existing Regulation required that the hooks involved in the process be equipped with a safety latch. A review of the legislation has found that Section 207(1)(b) of the Regulation does not specify when a safety latch on a hook is required, therefore it up to those involved in the operation to determine when such devices are suitable to ensure the health and safety of workers. As a result a deviation is not required.

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

Yours truly,

Chief Compliance Officer