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December 22, 2004

"The Employer"

The Chief Compliance Officer is writing in response to the employer's letter dated May 19, 2004 requesting deviations under Sections 153(1) and 153(2) of the General Regulation 91-191.

153(1) Where explosives are unloaded from a transport vehicle and are to be used the same day, an employer shall ensure that blasting explosives and detonator products are placed at least 50 m apart where possible and are (a) under visual observation at all times, or (b) locked in separate dayboxes that meet the standards set out in "Magazine Standards for Blasting Explosives and Detonators", revised in 1982 and published by the federal Department of Energy, Mines and Resources.

153(2) Where blasting explosives or detonator products are to be stored overnight, an employer shall ensure that they are stored in accordance with the requirements of the Explosives Act (Canada).

The employer's request is for a deviation pertaining to the use of a daybox for storage of explosives within the blast furnace building at the employer's premises and to recognize that, due to the employer's continuous operation, there is no differentiation between day and overnight storage.

In the employer's letter, the employer indicates that the Smelting Unit at the employer's premises operates a large blast furnace. This furnace is charged with sinter and coke and oxygen-enriched air is blown in through the bottom of the vessel to reduce the solid sinter material into a molten liquid form.

During the blast furnace operations the inner walls of the furnace shaft gradually build up with accretion. This build up will eventually restrict the furnace volume and impede production as well as create unacceptable environmental conditions due to poor ventilation inside the furnace. The rate of build up depends on several factors, which include changes in material produced in the Sinter Plant, quality of the blast furnace coke, oxygen volume and others.

This accretion material must periodically be removed or the furnace would eventually have to be shutdown and cleaned out. This can be both costly and time-consuming. Regular, on-line removal of the accretion is accomplished by hammering long steel pipes into the layers of the accretion, cooking the inside of the pipes with water, then detonating charges of explosives inside the pipes to loosen the accretion from the walls of the furnace shaft.

The blast furnace runs on a continuous production schedule, split into two twelve-hour shifts in a twenty-four hour period. Typically a routine blasting session is carried out at the start of each new shift to maintain the furnace shaft in an open condition. As well, depending on the process, further blasting may have to be carried out at anytime during the operation.

The employer has an established Code of Practice for blast furnace application of explosives. The employer's commitment is to work with the employees to continually improve on this process, key factors always being safety of the operation, protection of the people and environment and efficiency of the operation.

Recently, the employer conducted a rigorous review of the blasting procedure, which included the procurement of explosives from the main magazines to the completion of the blasting session. A review of this process demonstrated that the area of greatest concern amongst all employees was the continual movement of explosives from the main magazines located at the Northeast corner of the property to the furnace building and back again when blasting was completed. This operation added extra time to the blasting sessions and if it occurred other than at the start of a new shift, interrupted manpower scheduling in a negative way. This often led to frustration and employees not totally focused on this very crucial task.

The employer indicates that a suggestion was made that the employer install a small magazine in the explosives preparation building on furnace top that would allow the employer to keep enough explosives on hand to typically carry out all blasting requirements for twenty-four hours. This would facilitate scheduling of explosives pick-ups once a day, during daylight hours and on a timely basis that would avoid manpower scheduling interruptions.

A type 6 magazine was acquired and installed that permits double securing of explosives while in the furnace building. The magazine is locked and inside the preparation shack, which is also locked when not occupied. There is a licensed blaster on site at all times when explosives are in the building. There is room for one case of explosives product in the magazine, which is typically consumed within twenty-four hours of operation.

On December 6 (and at the Chief Compliance Officer's request) the employer submitted additional information for the Chief Compliance Officer's consideration. The information the employer provided included:

1. Additional information on the employer's blasting practices including the frequency in which blasting takes place;
2. A 2004 log of blasting dates and daily frequency for the employer's furnace blasting operations;
3. A diagram depicting the blasting process and;
4. A memo dated October 18, 2002 outlining a blasting process review done by the employer's Technology Center.

Based on the information the employer has provided, it appears that blasting, to keep the furnace shaft open and moving, occurs at least once in a 24-hour period (or once per day). The one exception where this does not occur is following complete shaft clean outs, an activity which entails opening up the west end of the furnace and mechanically removing all accretions. The employer states that when the shaft is completely clean, the furnace can run anywhere from 48-96 hours before there is sufficient build up requiring blasting for removal. After taking into consideration the employer's current practice and reviewing the requirements of Section 153 (1) of the General Regulation 91-191, the Chief Compliance Officer is of the opinion that the employer does not require a deviation from Section 153 (1) provided that explosives stored in your dayboxes (which must meet the requirements of the "*Magazine Standards for Blasting Explosives and Detonators")* are used within a 24-hour period. Should the inventory in the dayboxes not be used within this time frame, it will have to be returned to the Magazine to ensure compliance with Section 153 (2).

By copy of this letter, the Chief Compliance Officer has advised WHSCC and the employer’s JHSC of the decision.

Regards,

Chief Compliance Officer