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November 30, 2020  
File: SR 2946314

VIA EMAIL

Herb Farmer  
Sudbury Integrated Nickel Operations Glencore Company  
2 Longyear Dr  
Falconbridge ON  
P0M 1S0

Email: [herb.farmer@glencore.ca](mailto:herb.farmer@glencore.ca)

Dear Mr. Farmer,

**Re: Application for a Variance from Clauses 1.3.1 & 6.1.1.13 of the Liquid Fuels Handling Code, Technical Standards & Safety Act R.S.O. 2000 for 2 Longyear Dr, Falconbridge**

You have requested permission for the Glencore smelter to fuel a Cat 329 excavator inside its offloading facility, using an unapproved FloMAX dry-break style fuelling nozzle.

Clauses 1.3.1 and 6.1.1.13 of the Liquid Fuels Handling Code 2017 require that equipment be approved to a recognized standard and that dispensing of product inside a building shall only be done with the approval of the authority having jurisdiction.

The reasons for your request are:

1. The excavator is stationed on the mezzanine of the offloading building where it is used to offload ore concentrate from open-top railcars. Due to the height of the offload building and the steep incline (15 degrees) of the excavator access ramp to access the upper mezzanine, excavator travel in/out of the building must be minimized to ensure operator and equipment safety. As a result, fuel must be dispensed into the excavator inside the building.
2. The FloMAX nozzle has a flow rate of up to 150 GPM, which is compatible with the 1.5 inch dry-break style connections on mining equipment, compared to a flow rate of approximately 60 GPM for conventional one-inch nozzles. Productivity is increased by reducing time spent refueling equipment.

In support of your request, you have offered the following equivalent safety:

1. Indoor Fueling

Fueling is expected to occur two times per week with approximately 300 to 400 litres of diesel fuel transferred into the excavator each time. Fueling will be performed by the equipment operator. This operator will receive training on safety related concerns including but not limited to system operations, spill containment and response, and fire response.

The offload building has natural ventilation: The overhead door on the excavator access ramp is interlocked to ensure that it is in the open position before fueling can commence. The total flow rate with the door open is 104,600 m<sup>3</sup>/hr\* (far more than the minimum 250 m<sup>3</sup>/hr required by clause 4.1.7.2(4) of the OFC). \*Based on results from Area 5100 Airflow Survey - October 6, 2020 report.

During fueling, the operator is within two metres of an emergency stop to ensure a rapid response in the event of a spill. The fueling area is a concrete pad surrounded on 3 sides with by a concrete wall. The operator will place a spill containment boom at the open side during fueling. The facility also has a readily accessible spill containment kit.

The building is sprinklered and the fueling area will have two 40:BC fire extinguishers.

## 2. FloMAX FNBL Nozzle:

The Cat 329 excavator is equipped with 1.5 inch dry-break style connections suitable for use with FloMAX nozzles. The fill system is designed by Caterpillar so that the nozzle will stop automatically when the tank reaches its intended fill level. This is a standard fill system used by major construction/mining equipment manufacturers around the world. Fill connections for these tanks are located below the top of the tank at a safe and convenient height for the operator. There are no alternative fill locations or fill methods for these fuel tanks.

In support of Glencore's request, the company has submitted a report signed by Andrew Gendre, P.Eng., comparing the FloMAX nozzle to the CAN/ULC-S620, the standard for hose nozzle valves for flammable and combustible liquids. The report concludes that the FloMAX FNBL diesel fuel nozzle meets and exceeds the requirements and safety objectives listed in the CAN/ULC-S620:2016 standard.

Please be advised that your variance application dated October 19, 2020 has been approved.

**Please be advised that this variance will not take effect until 15 days from the date of posting the decision on the environmental registry. This decision of the Director is subject to a right of appeal, under the Environmental Bill of Rights, if such an appeal is filed within 15 days from date of posting. In the event an appeal is filed, this decision of the director may be subsequently stayed, disallowed or significantly altered. Notice of an appeal will be placed on the Environmental Bill of Rights registry.**

This variance is allowed under the authority of subsection 36.(3)(c) of the *Technical Standards and Safety Act, 2000*, (the "Act") and subject to such conditions as may be specified herein, being that:

- Non-conformity with the conditions specified shall thereby cause the allowed variance to become null and void;
- The applicant accepts full responsibility for any and all damages resulting from the use of the thing to which the variance applies. The applicant further accepts full responsibility for any impacts to the health and safety of any person in consequence of the allowance of the variance or of non-conformity with the conditions specified. The Technical Standards and Safety Authority accepts no responsibility for any such damages or impacts;
- In the event of any claims against the Technical Standards and Safety Authority arising from allowance of the variance or non-conformity with the conditions specified, the applicant agrees to indemnify the Technical Standards and Safety Authority and agrees to hold it harmless from such claims and attendant costs;
- The variance process is subject to public access under the TSSA Access and Privacy Code (available upon request). The fact that a variance has been granted and information about any public conditions, such as a requirement to post a sign, may be released on request. Subject to law and the TSSA Access and Privacy Code, proprietary information will not be subject to release;

- The applicant shall pay the fee associated with the review of the variance; and
- A copy of the variance letter shall always be kept readily available and permanently legible in the vicinity of the appliance/equipment.

This variance only relates to the Act and regulations made thereunder and does not exempt you from compliance with other applicable regulatory requirements. The installation will be subject to an inspection to ensure compliance with the terms of the variance. Please contact Mark Bernard at 705-992-5262 to arrange for the inspection.

Should you have any questions or require further assistance, please contact Ann-Marie Barker at 416-734-3354 or by e-mail at [abarker@tssa.org](mailto:abarker@tssa.org). When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,



Sam Sadeghi  
Director, Fuels Safety Program

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