

Considering the exceedance of standards at sensitive receptors if unloading is carried out when winds are blowing at less than 2 m/s and in the direction of sensitive receptors, the proponent must also examine the possibility of planning a last resort alternative if unloading must be carried out under these conditions

- QC3- 5.** In reviewing the fuel MSDS, two contaminants do not appear to have been retained in the air dispersion study, diesel fuel C9-18 -Alkane - branched and linear 1159170-26-9 and kerosene (petroleum) - hydrodesulfurized 64742-81-0. The proponent must justify why these contaminants were excluded.

To determine the emission rates attributable to tank filling, the composition of the products was determined from their Material Safety Data Sheets. The maximum concentration of each substance in the product was used. However, when the total of the maximum concentrations of the substances exceeds 100%, the mass fraction of each substance is adjusted in the model so that the total reaches exactly 100%.

The assumption of using the maximum concentration from the MSDS to establish emission rates is considered to be valid. However, for gasoline, the type of adjustments made to reduce the sum of the mass fractions to 100% underestimates the maximum emission rates by about 25% and no longer replicates the worst-case foreseen contaminant concentrations based on the period of application of the limit value as laid out in Appendix H of the CAR.

The adjustment was made because the mass fractions are then converted to mole fractions, needed in the use of Raoult's Law to determine the emission rate.

- QC3- 6.** In order for the modeling scenario to reproduce the expected worst-case contaminant concentrations based on the period of application of the limit value in accordance with Appendix H of the CAR, the proponent must make adjustments to the gasoline mass fractions to ensure that the contaminant mole fractions are maximal. The proponent must submit an update to the air dispersion modeling that includes this adjustment.

Section 45 of the CAR specifies the requirements for certain tanks. These requirements are applicable to the storage of volatile organic compounds having a certain vapour pressure at storage conditions. This section applies to all new and existing tanks.

In this case, based on the vapour pressure data provided, Tank 2, which is to contain gasoline, must be equipped with a floating roof. The proponent also mentioned that it made another request to the Ministry to exempt gasoline tanks from section 45 of the CAR for the 14 petroleum depots operated by the FCNQ. The Ministry is still waiting for additional information from the proponent before issuing a recommendation regarding the possibility of proposing an amendment to Section 45 of the CAR for FCNQ-operated oil depots.

- QC3-7.** The proponent must respect the regulations in force and must, for the time being, plan to equip Tank 2 with a floating roof. It must also complete and submit an additional modeling scenario, which includes the gasoline tank equipped with a floating roof.

QC3- 11. As requested in QC2-10 of the June 25, 2021, document, the proponent must indicate whether erosion is already visible and compare the flow that will be discharged during the emptying of the basin to the flow that currently flows into this waterway. The proponent shall also describe the protective works it undertakes to install where deemed necessary.

COURTESY TRANSLATION