



January 10, 2020

Pierre Manseau
Environment and Climate Change Canada
351 St-Joseph Boulevard
Gatineau, Québec K1A 0H3

Good Afternoon Pierre,

It was great meeting you last month during our meeting regarding E2 regulations and our discussion on some helpful changes we are pursuing for our plan participants. Below I have provided a brief resume of what we discussed, and I am reaching out to ask for a meeting regarding the next steps toward getting these changes in place.

We understand that the guideline will be clarified to indicate that the involvement of first responders during E2 drills may not be required. Clarification of the "if applicable" wording for their inclusion and what plan participants would do if first response refuse or are unable to attend (a regular occurrence for some regions).

We also understand that the exclusion for site systems encompasses systems that are under 4.5t or 10t at 360m.

Finally, we also understand that under the exclusions Section 2 para 2(c) crop drying equipment is considered a heating appliance.

1. Exemption for the agricultural sector:

Ideally, we would ask for ECCC to provide an exclusion for farming entirely, considering ammonia¹ is excluded from E2 for fertilizer on farms to allow farmers to manage essential services. Propane should also be excluded on all farms for the same reason. Propane for grain drying and heating buildings is also essential on farms and should have equivalent exclusion. Even ammonium hydroxide, which is in the inhalation hazard category² has a threshold set at 9.1t.

¹ Excluded Quantities" (2)(e) c. Ammonium hydroxide's threshold is 9,1 t (hazard category: Inhalation) whereas Ammonium nitrate, solution's threshold is 20 t. and classified As Oxidizer that may explode) <https://www.canada.ca/en/environment-climate-change/services/environmental-emergencies-program/regulations/list-hazardous-substances.html>

² Ammonium hydroxide is a colorless liquid chemical solution. It is in a class of substances called caustics. Ammonium hydroxide causes the necrosis of tissues through disruption of cell membrane lipids (saponification) leading to cellular destruction. As cell proteins break down, water is extracted, resulting in an inflammatory response that causes further damage.

Furthermore, here are the items we are looking to change or clarify:

2. **Section 3 (2) d)³ 360 m:** Changes to regulation re: 360 m requirement and raised limits for onsite storage.

Stakeholder impact with accurate examples reflective of current requirements – Current limits do not reflect industries current usage. 4.5T and 10T limits should be raised to reflect the typical uses in agriculture, camps, parks, and remote areas. Current wording also creates some difficulties that may force users to be included in E2 planning: given the new regulation, the exclusion distance forces farms, private residences, camps, resorts, etc. into the registration process because there is no consideration afforded for the requirement for storage to be accessible by road and located close to their equipment requiring the product. The 360 m at all points along the boundary is not realistic.

Inclusion of a raised level of storage with proposed wording would alleviate many of the site difficulties without compromising safety.

Proposed wording: quantities of the substance set out in item 17 of Part 1 of Schedule 1 that are in a container system that has a maximum capacity of less than 10 t and is located at least 360 m from ~~all points along the boundary of the facility~~ the nearest off-property dwelling or public building.

Public impact: none

Safety impact: no changes

3. **Section 1 (1) container system⁴:** Clarification to *Technical Guidelines*

Currently, the regulation specifies that a container system⁵ can be segregated by either automatic or remote shutoff valves, but not by manual valves.

Stakeholder impact with accurate examples reflective of current requirements - Current systems that are set up with multiple tanks linked together totalling over 4.5 t are required to have an E2 if they are not at 360 m. If propane suppliers have to upgrade all their current locations to remote or automatic shut off valves, this will cost money and time to do this, and will increase costs to end users like farmers or businesses in remote location, etc. This will affect grain growers, farmers with livestock, as well as schools and hospitals and all users for remote locations everywhere.

It is our understanding that the term “other mechanisms” has been intentionally left ambiguous for the purpose of allowing other valves that may serve in the same manner and function as automatic or remote valves, but have not been specifically identified. While we understand that nearly 250 substances are regulated therefore it is difficult to be prescriptive in the application of segregation, propane is not a toxic substance.

³ (d) quantities of the substance set out in item 17 of Part 1 of Schedule 1 that are in a container system that has a maximum capacity of less than 10 t and is located at least 360 m from all points along the boundary of the facility;

⁴ container system means any receptacle or network of receptacles that is used to contain a substance — including any connected pipelines or piping — except any part of that network that is automatically or remotely segregated from the rest of the network by shut-off valves, or other mechanisms, in the event of any environmental emergency. (système de réservoirs)

⁵ Container Systems (page 56 of Technical Guidelines for the E2 Reg's) - *container system* means any receptacle or network of receptacles that is used to contain a substance — including any connected pipelines or piping — except any part of that network that is automatically or remotely segregated from the rest of the network by shut-off valves, or other mechanisms, in the event of any environmental emergency.

Proposed wording: All “other mechanisms” means the capacity to shut off the flow of a substance without the need to send an employee to manually turn or push a mechanism to stop the flow near the container system. In adopting this approach, numerous users would be exempted.

The *Technical Guidelines* must specify that a propane container system may be remotely segregated by a manual shutoff valve that is located at a minimum distance of 25' from the tank is required.

Public impact: none

Safety impact: no changes

With regards to our discussion, it was our understanding that some helpful information to provide would be:

- Possible provision of engineering plans for acceptable options for auto/ remote shut off valving.

4. Clarification in the *Technical Guidelines* for buried propane tanks.

Stakeholder impact with accurate examples reflective of current requirements - Buried tanks are not subject to the threat of BLEVE and should not be included in the requirements. This exemption would reflect the fact that buried storage is a lessor threat from risk of explosion.

Proposed wording: The *Technical Guidelines* must specify an exemption for buried propane tanks from the 360m requirement and the 4.5 t threshold.

Public impact: none

Safety impact: buried tanks decrease risks

5. Section 3 (2) a) Excluded quantities⁶: Clarification in the *Technical Guideline* of rail and aggregate storage reporting.

This is one topic we did not have time to discuss at our meeting was Rail requirements, for which we are proposing clarifications.

Stakeholder impact with accurate examples reflective of current requirements - Currently, ECCC is requiring rail cars to be included into the volumes as per Section 3 para (2) (a): “(a) quantities of the substance that are located at the facility for a period of 72 hours or less, evidence of the date and time at which the quantities of the substance arrived at the facility;” however, quantities of propane in railcars located at facilities are extremely variable and can remain on site for much longer period than 72 hours. These factors combined will significantly skew the volumes onsite and create a perception that the propane industry is not in compliance in cases when volumes vary greatly.

Furthermore, rail cars fall under TDG until offloaded into storage in an onshore permanent facility. The reporting requirements is a duplication and is difficult to follow as site railcar numbers can change repeatedly and tracking is already required by the rail companies, TDG documentation, and Transport Canada regulations.

⁶ (a) quantities of the substance that are located at the facility for a period of 72 hours or less, unless the substance is loaded or unloaded at the facility, if, during that period, the person keeps evidence of the date and time at which the quantities of the substance arrived at the facility;

Proposed wording: The *Technical Guidelines* must indicate that rail cars located at facilities are covered under TC TDG regulations until the off-load process begins even after 72 hours. Amounts of products in rail cars are excluded. Furthermore, keeping evidence is not applicable in these cases (for the period of 72 hours or less).

Public impact: none. Storage capacity is accounted for already.

Safety impact: no additional safety impact – already covered (ERAPs)

6. Section 1 (1) container system⁷: Clarification in the *Technical Guideline*

- Aggregate amounts on a site vs a site with many small exempted systems (i.e. Mobile home sites, Parks)

Stakeholder impact with accurate examples reflective of current requirements - The CPA understands the exclusion to mean, for example, that three separate heaters, each connected to a separate container system each below 4.5t on the same site/farm is excluded from all E2 requirements. In adopting this approach, numerous users would be exempted.

Proposed wording: Updating the *Technical Guidelines* to reflect this will clarify the exemption.

These clarifications would ensure propane users, regulatory inspectors, and all concerned understand that multiple, unconnected systems do not form an aggregate amount and even if the total aggregated is above 4,5 t, it remains within the prescribed threshold.

Public impact: none.

Safety impact: none.

I am available to answer any questions you may have. I will follow-up with you in a few days to discuss these proposed changes.

Sincerely,



Robert Loenhardt
Senior Director of Regulatory Affairs
Canadian Propane Association
robertloenhardt@propane.ca
Office 613-683-2274

⁷ container system means any receptacle or network of receptacles that is used to contain a substance — including any connected pipelines or piping — except any part of that network that is automatically or remotely segregated from the rest of the network by shut-off valves, or other mechanisms, in the event of any environmental emergency. (système de réservoirs)