



October 30, 2023

## BULLETIN # 02-2023

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### Clarifications on Environmental Emergency (E2) Regulatory Requirements for Ammonium Nitrate (AN) and AN-Based Fertilizers

#### Protocol D2 – Environmental Emergencies Reporting

The distribution and/or retail facility must provide submission of notices to ECCC in accordance to the *E2 Regulations* requirements.

#### Specific Requirements:

The reporting requirements under the *E2 Regulations* include notifications for facilities when regulated substance quantity meets or exceeds the product quantity, or maximum container system capacity thresholds. Required notifications:

- a) E2 Plan development
- b) E2 Plan implementation
- c) Submit notification that a full-scale exercise has taken place (required every 5 years beginning on the date that the E2 Plan was brought into effect)

The E2 Regulations came into force in August 2019. In the event of an incident involving accidental release of AN or CAN, the E2 Plan and spill reporting requirements must be followed. Fertilizer Canada issued Bulletin #04-2019<sup>1</sup> to provide guidance on the major changes that were made to the E2 Regulations to assist facilities with the changes and provide a list of corresponding changes to the Code of Practice.

This Bulletin provides information for certified sites and auditors to clarify the regulatory requirements for minimum product thresholds under the Environmental Emergency (E2) Regulations, 2019. Specifically, the Bulletin includes information on the concentration and quantity thresholds for AN, and information on the small quantities exemption.

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<sup>1</sup> [https://fertilizercanada.ca/wp-content/uploads/2019/08/Tech-Bulletin-04-2019\\_All-Codes\\_E2-Regulation-Changes\\_Aug-2019\\_final-1.pdf](https://fertilizercanada.ca/wp-content/uploads/2019/08/Tech-Bulletin-04-2019_All-Codes_E2-Regulation-Changes_Aug-2019_final-1.pdf)



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### **Concentration and quantity thresholds:**

Compliance with the E2 Regulations is required for facilities that meet both the minimum thresholds for concentration and quantity for the on-site storage of regulated products listed on Schedule 1.

Ammonium nitrate, solid (CAS #6484-52-2) is included on Schedule 1 of the E2 Regulations with:

- a minimum concentration of 60 percent (% mass/mass); and
- a minimum quantity of 20 tonnes.

Mixtures containing AN that are in a concentration greater than or equal to the concentration in Schedule 1 are also subject to the E2 Regulations. This means that even though CAN is not listed on Schedule 1 of the E2 Regulations, it is still possible that the quantity of AN within the CAN could meet or exceed the concentration and quantity thresholds for AN, and therefore be subject to the E2 Regulations.

Please find below information from the Implementation Guide (2023) in B1 PRODUCT STORAGE with guidance on how facilities can determine if they meet the minimum thresholds for AN under the E2 Regulations.

*“Facilities storing more than 20 tonnes of ammonium nitrate above 60 percent (by weight) must prepare an Environmental Emergency (E2) Plan as required by the Environmental Emergency Regulations, 2019 under CEPA.*

*CAN fertilizer and other AN-based fertilizers that are over 60 percent AN (by weight) are captured under the E2 Regulations if the total quantity / capacity volume threshold of AN are met. If the AN concentration falls to below 60 percent by weight of the mixture, then it is no longer considered captured under the E2 Regulations. AN mixtures must have 60 percent (by weight) or greater, to meet the concentration criteria. If the concentration criteria is met or exceeded, but the total quantity on site is not met or exceeded, and the maximum capacity of the largest container system is not met or exceeded, then the facility is only subject to Schedule 8 of the E2 Regulations for reporting of spills.*

*For example, to reach threshold of 20 tonnes of AN in a mixture:*

- *In a mixture with 60 percent AN by weight, then the entire mixture with AN must be at least 33.33 tonnes to meet the threshold.*
- *In a mixture with 80 percent AN by weight, then the entire mixture with AN must be at least 25 tonnes to meet the threshold.*

*It is up to the facility to determine if the concentration, total quantity on site and maximum capacity of the largest container system, is met or exceeded.”*



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**Exception for small quantities (30 kg or less) in container system:**

In section 3(2)(b) of E2 Regulations, there is an exclusion for quantities of the regulated substance that are in a “container system” that has a maximum capacity of 30 kg or less. When a substance is stored in a container/bag subject to the 30 kg exclusion, the quantity in these containers will not contribute to the calculation of the total quantity or capacity at a facility to determine if the threshold quantity is met.

The definition of “container system” in Section 1(1) of the E2 Regulations “*means any receptacle or network of receptacles that is used to contain a substance...*”. The interpretation that Fertilizer Canada has received from the Environmental Emergencies Program at ECCC has confirmed that a “container system” would include a sealed bag. Based on this, the volume of AN or CAN contained in sealed bags of 30 kg or less should be excluded from the calculations of the total quantity or capacity at a facility to determine if the minimum threshold quantity is met.

**Additional Guidance / Information:**

Please note that this Bulletin is intended to clarify the application of the E2 Regulations but is for information purposes only. If certified sites require more specific regulatory interpretation, they should review the E2 Technical Guidelines Document<sup>2</sup>, or reach out directly to Environment and Climate Change Canada (ECCC)<sup>3</sup>.

To file visit: <https://ec.ss.ec.gc.ca>

Should you have any questions with respect to your audit, please do not hesitate to contact the Code Project Manager, Anthony Laycock via email at [manager@awsa.ca](mailto:manager@awsa.ca). You may alternately contact Fertilizer Canada using the coordinates below.

Regards,

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<sup>2</sup> <https://www.canada.ca/en/environment-climate-change/services/environmental-emergencies-program/regulations/technical-guidelines.html>

<sup>3</sup> Environmental Emergencies Division email contact: [ec.ue-e2.ec@canada.ca](mailto:ec.ue-e2.ec@canada.ca)  
Environmental emergencies Regional contacts are listed here: <https://www.canada.ca/en/environment-climate-change/services/environmental-emergencies-program/regional-contacts.html>



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## **AN AND CAN CODE OF PRACTICE** **BULLETIN #02-2023**

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