

**Ammonium Nitrate (AN) and Calcium Ammonium Nitrate (CAN) Code of Practice  
Summary of Protocol Changes – 2023 Edition**

September 1, 2022

**Overall Comments:**

As part of Fertilizer Canada’s commitment to continuous improvement, we aim to review and update our Safety and Security Codes of Practice on a five-year cycle. The Agricultural Ammonium Nitrate Code of Practice (AN Code) was originally published in 2014 and was last revised in 2016. The Calcium Ammonium Nitrate Security Code of Practice (CAN Code) has not been updated since it came into force in 2019.

In response to member feedback and changing dynamics in the industry, Fertilizer Canada will be amalgamating the AN and CAN Codes of Practice into a single AN and CAN Code of Practice. to be published and brought into force in 2023.

Accordingly, a revised AN and CAN Code of Practice will be published in early 2023 to come into force following a transition period. The main changes proposed from the current version Protocols (2016 version (AN Code) and 2019 version (CAN Code)) are:

1. All Protocols have been amalgamated into a single Code of Practice. Some sections have required re-numbering, which are considered minor / administrative changes and the associated Protocols are noted as “No substantive changes made” in the matrix.
2. Specific Protocols or sections that are only applicable to AN fertilizer as per regulatory requirements are marked accordingly within the 2023 Edition and are identified in Column 3 of the matrix below.
3. Incorporation of Technical Bulletins issued since the current versions of the AN Code (2016) and CAN Code (2019) were published. These changes are identified in Column 3 of the matrix below.
4. Language throughout the Code was updated to provide clarity and consistency, and in some sections explanatory text has been moved from the Protocols into the Implementation Guide or Appendices (supporting materials). Many of these changes are considered minor and the associated Protocols are noted as “No substantive changes made” in the matrix.
5. Other changes include reflecting regulatory changes, evolution of industry best practices etc. Details are provided in the matrix in Column 3.

As indicated above, the following matrix summarizes the changes to individual Protocols in the proposed 2023 Code from the current versions and identifies substantive changes. A complete track change document comparing the 2016 AN Code & 2019 CAN Code Protocols with the proposed 2023 AN and CAN Code is also provided (available [here](#)).

Section	2023 AN and CAN Code	Changes from 2016 AN Code / 2019 CAN Code
A	<b>INBOUND SHIPMENTS</b>	
A.1	A.1 SAFETY AND SECURITY OF INBOUND AMMONIUM NITRATE AND CALCIUM AMMONIUM NITRATE CARGO	

A.1.1	A.1.1 BY MARINE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections, with exception of record-keeping requirements in the TDGR being only applicable for AN fertilizer.</li> <li>- Added descriptions of AN-based fertilizers, and clarification on treatment of CAN under the UN Model Regulations.</li> </ul>
A.1.2	A.1.2 BY RAIL / TRUCKS	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections (section applicable to AN and/or CAN cargo), with exception of record-keeping requirements in the TDGR being only applicable for AN fertilizer.</li> <li>- Added requirement for importer/receiver notifications in event of theft or tampering.</li> </ul>
A.2	A.2 PROVIDING TRANSPORT FROM SOURCE VIA RAIL/TRUCK	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code, with exception of training and record-keeping requirements in the TDGR being only applicable for AN fertilizer</li> <li>- Added clarifications to security/emergency response plan requirements</li> <li>- Added clarification that U.S. requirements for AN fertilizers only apply to product coming from the U.S.</li> </ul>
A.3	A.3 ACCESS TO PRODUCT DURING SHIPMENT	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
A.4	A.4 LOSS OR TAMPERING OF PRODUCT DURING SHIPMENT	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
A.5	A.5 PRODUCT SPILLS DURING TRANSPORT AND LOADING	<ul style="list-style-type: none"> <li>- Section is not in 2019 CAN Code</li> <li>- Expanded to be applicable to AN and/or CAN, including clarifying regulatory obligations for AN vs. CAN</li> </ul>
A.6	A.6 DELIVERY OF AMMONIUM NITRATE AND/OR CALCIUM AMMONIUM NITRATE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
<b>B</b>	<b>STORAGE OF AMMONIUM NITRATE AND CALCIUM AMMONIUM NITRATE</b>	
B.1	B.1 PRODUCT STORAGE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added requirement that the storage facility maintain a list of employees at locations where AN / CAN is stored or sold (regulatory requirement)</li> </ul>
B.1.2	B.1.2 STORAGE SAFETY	<ul style="list-style-type: none"> <li>- Section is not in 2019 CAN Code – noted accordingly in sub-sections</li> </ul>
B.1.2.1	B1.2.1 PHYSICAL STORAGE FACILITY REQUIREMENTS	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in CAN Code)</li> <li>- Noted that compliance with this section is only required for facilities that store AN fertilizer. However, many of the best practices for product management and site management could be followed for sites that store CAN fertilizer to ensure good product stewardship, product safety, and reduce risk.</li> </ul>
B.1.2.2	B.1.2.2 STORAGE AND HOUSEKEEPING REQUIREMENTS	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in CAN Code)</li> <li>- Noted that compliance with this section is only required for facilities that store AN fertilizer. However, many of the best practices for product management and site</li> </ul>

		<p>management could be followed for sites that store CAN fertilizer to ensure good product stewardship, product safety, and reduce risk.</p> <ul style="list-style-type: none"> <li>- Added requirement that storage facilities are not constructed from incompatible materials</li> </ul>
B.2	B.2 EMERGENCY RESPONSE AND SECURITY PLAN	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections (referred to as SECURITY PLAN in 2019 CAN Code)</li> <li>- Clarified requirements for storage facility staff training; communications to law enforcement / first responder agencies</li> <li>- Clarified requirements for emergency response preparedness and security plan inclusions</li> </ul>
B.3	B.3 ACCESS BY ONSITE PERSONNEL	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
B.4	B.4 LOSS OF PRODUCT DURING STORAGE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
<b>C</b>	<b>OUTBOUND SHIPMENTS / PRODUCT SALES</b>	
C.1	C.1 SECURITY AROUND INDIVIDUALS OR COMPANY RESPONSIBLE FOR PROVIDING TRANSPORTATION	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
C.1.1	C.1.1 TRANSPORTATION COMPANY SECURITY	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Clarified training requirements for carriers of AN include valid TDG training documentation, and record-keeping according to TDGR</li> <li>- Added clarifications to security/emergency response plan requirements</li> </ul>
C1.2	C1.2 DELIVERY RECEIPT ACKNOWLEDGEMENT	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
C.2	C.2 ACCESS TO PRODUCT DURING SHIPMENT	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added requirement for driver notifications to seller in the event of product spill / other incidents</li> </ul>
C.3	C.3 PRODUCT SPILLS DURING TRANSPORT AND UNLOADING	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in 2019 CAN Code)</li> <li>- Noted that parts of the Protocol are only applicable to AN fertilizer</li> </ul>
C.4	C.4 VALIDATION OF CUSTOMERS	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Reorganized section and added clarifying language according to 2019 CAN Code section (C3) and updated customer identification means.</li> <li>- Clarifying regulatory requirements for distributors / retailers selling to another facility for verifying buyer's license / certificate number and proof of registration on component sellers list.</li> <li>- Updated contact information for reporting incidents to NRCan Chief Inspector of Explosives, and for suspicious incident reporting to RCMP network.</li> </ul>

C.5	C.5 TRACEABILITY OF SALES RECORDS	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
C.6	C.6 CRITERIA SPECIFIC TO END USERS	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added clarification that Fertilizer Canada information brochure can be used by distribution / retail facilities for compliance requirements</li> </ul>
C.6.1	C.6.1 POST SEASON STORAGE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- No substantive changes made</li> </ul>
C.6.2	C.6.2 COMMUNICATION OF END USER STORAGE SAFETY AND SECURITY	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added clarifying requirements on product protection from contamination / incompatible materials</li> <li>- Added clarifying requirements for fire suppression systems</li> </ul>
C.6.3	C.6.3 USAGE DOCUMENTATION AND RECORD KEEPING	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added clarification on prohibition of CAN product re-sale (unless have enrolment from NRCan)</li> </ul>
C.6.4	C.6.4 SMALL QUANTITY PURCHASERS INFORMATION	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Added clarification on prohibition of CAN product re-sale (unless have enrolment from NRCan)</li> <li>- Added information on Fertilizer Canada information brochure</li> </ul>
D	REGULATORY REPORTING	
D.1	D.1 ANNUAL INVENTORY REPORTING	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in 2019 CAN Code)</li> <li>- Updated to reflect regulatory amendments in the <i>Explosives Regulations</i> including CAN on Tier 1 of the Restricted Components list.</li> </ul>
E	TRAINING	
E.1	E.1 FERTILIZER CANADA E-LEARNING	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Moved explanatory text to Implementation Guide (supporting documentation)</li> </ul>
E.2	E.2 TRANSPORTATION OF DANGEROUS GOODS TRAINING	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in 2019 CAN Code)</li> <li>- Added note that this Protocol is only applicable to sites that handle AN fertilizer.</li> </ul>
E.3	E.3 WHMIS TRAINING	<ul style="list-style-type: none"> <li>- Protocol was previously only in AN Code (not in 2019 CAN Code)</li> <li>- Added note that this Protocol is only applicable to sites that handle AN fertilizer.</li> </ul>
F	INSURANCE	
F	F INSURANCE	<ul style="list-style-type: none"> <li>- Combined AN Code and CAN Code sections</li> <li>- Updated insurance deductible minimums according to changes implemented through Technical Bulletin (May 2022)</li> </ul>