

2022 Anhydrous Ammonia Code of Practice, Version 1.2

Summary of Changes from Version 1.0

Section / Protocol	Change
A.1.3	1. Clarified that “All communication shall be in writing.”
A.2	1. Added “to operate” in protocol text: “The anhydrous ammonia storage and handling operation has the appropriate licence or permit <u>to operate</u> as prescribed by Provincial or Federal regulations.”
A.6	1. Clarified that this protocol “applies to all sites, including sites that store mobile equipment,”. 2. Added language from User Guide to protocol text and defined “in use”: “Exits must be locked when site is not in use and unlocked when site is in use. A site is “in-use” when any transfer or handling of ammonia or any maintenance or repairs are taking place on site, including: <ul style="list-style-type: none"> • While connecting and disconnecting hoses for transfer. • While bleeding equipment for transfer and after transfer operations are completed. • While personnel are performing maintenance, until all anhydrous ammonia has been evacuated from the equipment that is being maintained. In addition, emergency exits shall be located to provide options for escape regardless of wind direction.”
B.2.11	1. Added “and activation” to the protocol text and clarified that all appurtenances (related equipment and accessories including pumps) must be colour coded, in addition to piping: “All piping and appurtenances (including pumps) must be colour-coded yellow for vapour lines, orange for liquid lines and blue for emergency shut-off <u>and activation</u> devices.”
B.2.15	1. Added “legible” to the protocol text: “The storage vessel must be equipped with a <u>legible</u> level gauge to prevent over filling of the vessel.”
B.2.16	1. Added “The pressure gauge must be legible.”
B.5.4	1. Added “Safe handling procedures must be specific to the functions performed at the fixed storage tank.”
B.7	1. Added that compliance will be indicated through “written documentation that suits are rated for ammonia (such as a certification or testing report from the manufacturer or a third-party company),”.
B.8	1. Removed the word “emergency” and added the word “protection” to the protocol text:

	<p>“The anhydrous ammonia storage and handling operation is equipped with the required <u>protection</u> equipment that is accessible and identifiable by all personnel.</p> <p>In addition to all personal protective equipment, specified in Section B7, the following designated <u>protection</u> equipment is required,”.</p>
B.8.6	<p>1. Added that water supplies must be “labelled with a white cross on a green background or a green cross on a white background,”.</p> <p>2. Added “Safety showers should follow the ANSI Z358.1 Standard and be accessible within 10 seconds,”.</p>
C.2.10	<p>1. Corrected protocol instructions to clarify that “Compliance will be indicated through a visual inspection of the vessel markings for CSA B620 compliance and through documentation.”</p> <p>2. Removed “Inspection of hose testing records indicates compliance.,”</p>
C.2.12	<p>1. Added “legible” to the protocol text: “The transport vessel must be equipped with a <u>legible</u> level gauge to prevent over filling of the vessel.”</p>
C.2.13	<p>1. Added “The pressure gauge must be legible,”.</p>
C.5.4	<p>1. Added “Safe handling procedures must be specific to the functions performed with the delivery unit.”</p>
C.6	<p>1. Added that compliance will be indicated through written documentation that ammonia suits are rated for use with anhydrous ammonia: “Anhydrous ammonia resistant suits must have written documentation that suits are rated for anhydrous ammonia (such as a certification or testing report from the manufacturer or a third-party company).”</p>
C.8	<p>1. Removed “signed”: “Compliance will be indicated by an examination of a signed and dated standard operating procedures,”. “There is proof of signed and dated standard operating procedures,”.</p>
C.10.5	<p>1. Clarified that either an explanation or a demonstration is acceptable, “Appropriate PPE must be worn if activation is demonstrated. An explanation of how the emergency discharge control functions is acceptable in lieu of a demonstration. Documentation must be referenced for compliance. Acceptable documentation includes annual visual inspection reports if emergency discharge controls are identified in the report, or a certificate of compliance.”</p>
C.10.9	<p>1. Replaced “and/or” with “and”: “Compliance will be indicated by inspection of hoses on nurse tanks <u>and</u> hose test records,”. “An inspection of hoses on nurse tanks <u>and</u> hose test records displays requirements are met,”.</p>
C.10.11	<p>1. Added “the gauges must be legible,”.</p>
C.10.12	<p>1. Added “the gauge must be legible,”.</p>

C.12.4	1. Added "Safe handling procedures must be specific to the functions performed with the nurse wagon."
C.14	1. Replaced "other" vehicles with "non-commercial": "Other Non-commercial vehicles must pass an annual safety inspection,". "Compliance will be indicated through a visual examination of the current CVSA safety sticker on commercially licenced vehicles transporting ammonia and through documentary evidence of inspection and maintenance records to indicate that other non-commercial vehicles transporting anhydrous ammonia at the operation and not requiring CVSA certification have passed a current annual safety inspection." "A visual inspection that CVSA safety stickers appear on commercially licenced vehicles transporting anhydrous ammonia and documentary evidence that all other non-commercial vehicles transporting anhydrous ammonia at the operation not requiring CVSA certification have passed a current annual safety inspection."
C.16.3	1. Corrected spelling of "unless".
C.17.1	1. Added language to match User Guide: "Inspections shall be done: <ul style="list-style-type: none"> • Before the unit leaves the Ag Retail Storage location • Prior or during each time the unit is filled • Prior to being returned to the Ag Retail Storage location"
D.7.3	1. Removed "hands on / discharge" and replaced "appropriate number of employees/staff" with wording from the User Guide: "Hands on / discharge Fire extinguisher training has been provided." "Compliance will be indicated through an examination of training records to indicate that all staff involved in the anhydrous ammonia operation have been trained on the proper use of fire extinguishers as required by regulatory authorities,". "Examination of training records to indicate that all staff involved in the anhydrous ammonia operation have been trained in fire extinguisher use as required by regulatory authorities and that certification is current,".
E.5	1. Added new Site Registration Requirements protocol.
F.3	1. Corrected "Section 0" reference to "Section F".
G.1	1. Clarified requirements by adding "An index, dated, have page numbers, and contain a list of plan holders and plan locations," to protocol text. 2. Corrected "Protocol 0" reference to "Protocol A.3".
G.7	1. Clarified that this protocol can be completed through a tabletop exercise.
G.10.1	1. Clarified that compliance is indicated through completion of Schedule 2 of E2 Plan:

	<p>“Site Managers can demonstrate that E2 Plan schedules Schedule 2 have has been completed.”</p> <p>2. Removed “Site Managers are aware of Aug 24, 2020 deadline for E2 plan registration,”.</p>
--	--