



Fertilizer Safety & Security Council

Conseil de la sécurité en fertilisation

Responding to an Incident

During the initial first response phase of an incident, first responders must be able to identify the presence of anhydrous ammonia, initiate protective actions, secure the area and call upon specially trained personnel if needed.

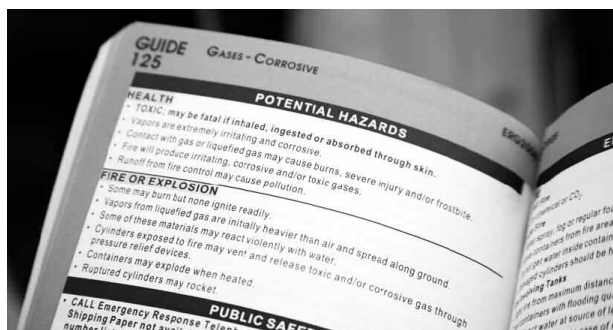
Key actions include:

1 Identify the substance

- ◆ From a safe distance upwind and uphill, look for the placard and identification number UN1005.



- ◆ Look for the markings such as “Anhydrous Ammonia, Inhalation Hazard”, “Danger Ammonia”, or “Caution Ammonia”.
- ◆ Seek additional information such as an emergency response telephone number that may be noted on shipping papers, on a vehicle or displayed at a storage facility.
- ◆ Confirm that the incident involves anhydrous ammonia.



2 Initiate protective actions

- ◆ Call the emergency response telephone number on shipping papers or facility documentation or CANUTEC at (613) 996-6666 or *666 on a cellular phone.

Secure the Area

- ◆ As an immediate precautionary measure, isolate the spill or leak area for at least 100 metres (330 feet) in all directions.
- ◆ Keep unauthorized personnel away.
- ◆ Stay upwind.
- ◆ Keep out of low areas such as basements, sewers, and tanks.
- ◆ Ventilate closed areas before entering.

Protect Yourself

- ◆ Wear positive pressure Self-Contained Breathing Apparatus (SCBA) to reduce the risk of inhalation and skin contact. Be aware that structural firefighting equipment (bunker gear) does not provide adequate protection when anhydrous ammonia is present in high concentrations.
- ◆ Only qualified personnel, wearing fully encapsulated chemical-protective clothing

Get to know and understand the correct technical response guidelines for anhydrous ammonia outlined in the 2012 Emergency Response Guidebook (ERG2012) Guide 125 (orange pages).



with SCBA (Level “A” suits), should approach a leaking container when the concentration level is unknown.

3 Consider these factors

UN1005 — Anhydrous Ammonia

- ◆ Is toxic and dangerous in high concentrations.
- ◆ May be fatal if inhaled, ingested or absorbed through the skin.
- ◆ Has a pungent odour; vapours are extremely irritating and corrosive.
- ◆ In gaseous and/or liquid form may cause burns, severe injury and/or frostbite.
- ◆ May burn but does not ignite readily. However, fire involving anhydrous ammonia will produce irritating, corrosive and/or toxic gases.

Population

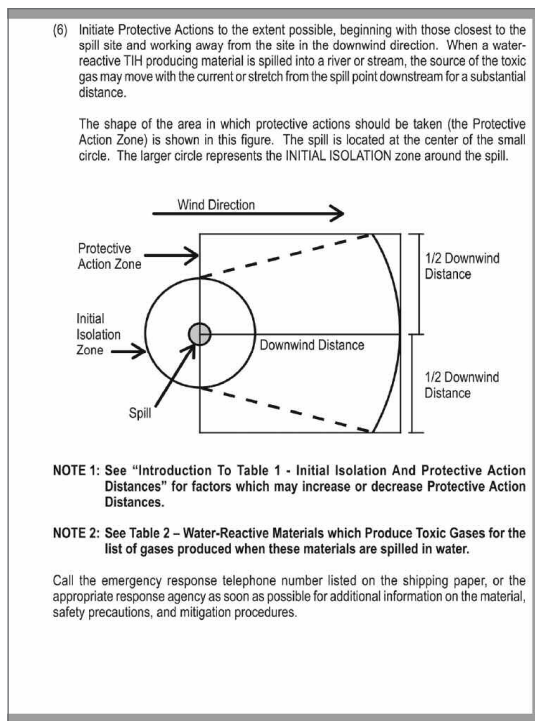
- ◆ Location of people/communities.
- ◆ Number of people in area.
- ◆ Time available to evacuate or shelter-in-place.
- ◆ Ability to control evacuation or shelter-in-place.
- ◆ Building types and availability.
- ◆ Special institutions such as nursing homes, hospitals, schools or correctional facilities.

Weather

- ◆ Effect on vapour and cloud movement, i.e. wind direction or rain.
- ◆ Potential for changing conditions such as a storm.
- ◆ Effect on evacuation or shelter-in-place.

4 Evaluate the effectiveness of evacuation or shelter-in-place protection

- ◆ Determine the scope of the incident. Is the spill large or small?
- ◆ Is the release continuous?
- ◆ Isolate the area in all directions as outlined for UN1005 in ERG2012, page 300.
- ◆ Protect persons downwind as outlined for UN1005 in ERG2012, page 300.



For more information on potential hazards, public safety, and emergency response, see Guide 125, (orange pages) and also The Table of Initial Isolation and Protective Action Distances (green pages) in the 2012 Emergency Response Guidebook.

5 Call the experts

Only personnel trained to the NFPA 472 Standard Technician Level or equivalent and using appropriate Personal Protective Equipment (Level “A”) should enter the area. When expert help is needed, call:

- ◆ **CANUTEC** at (613) 996-6666 or *666 on a cellular phone.
- ◆ **Departmental HAZMAT team.** If not available, there may be mutual aid agreements with neighbouring fire departments or regional or provincial HAZMAT teams that can assist.
- ◆ **The manufacturer.** Look for emergency contact information on site, or in the case of a transportation incident, check the shipping papers for an emergency telephone number.

