



Just the Facts...

What Military Personnel Should Do if Faced with an Industrial Chemical Cloud

If your duties involve being in an industrial area during response efforts related to Hurricane Katrina, this information is important for your protection.

Summary:

- Many gaseous industrial chemicals are normally stored under high pressure as a liquid (for instance, a propane cylinder). If the container, equipment or pipes used for the chemical bursts, the liquid is forced out under pressure and evaporates very rapidly to produce a gas cloud. The cloud could be dangerous – especially near the source of the leak or rupture. This could happen with commonly used chemicals in the gulf region including chlorine, sulfur dioxide and ammonia.
- As the Gulf Coast dries out, foundations that have been waterlogged may shift, chemicals lines and equipment may fail, or corrosion could cause weak pipes and tanks to burst.
- A sudden rupture or leak of these high pressure chemicals could form a ground hugging cloud that would rapidly overwhelm personnel.
- Most gasses will be colorless; a person may have difficulty in knowing which way to run if unprepared.
- The gas may cause irritation to the mouth, throat, nose, and lungs and produce tears, which will reduce the ability to see clearly.

What you should do:

- Always know which way the wind is blowing and what is upwind from your position.
- If you note you are breathing in an irritating gas, try to hold your breath to get out of the immediate area and try not to cough (both of these will be hard to do).
- No one mask is 100% percent effective against all gasses. However, put on an M40 mask if you have one because it may offer some protection. You still must leave the area quickly. (Be aware that the N95 particulate mask is not effective against a gas leak.)
- You may need to make a rapid decision on whether to run or seek shelter. Things to keep in mind include:
 - If there is a safe indoor shelter nearby and the leak appears to be substantial, consider going there. Shut any open windows. A vehicle that is not running may also be a safe shelter. A running vehicle may be using the vent and fan, which would draw the gas into the vehicle.
 - If running away, don't delay to find a mask or cloth, but if available, try to wet a cloth or clothing to breathe through while running. (Do NOT wet a breathing mask or cartridges.)
 - If you know where the leak is coming from, try to get upwind quickly and safely. Run at a 90-degree angle (sideways) to the wind if you do not know the location of the leak.
- Do not attempt to stop, reduce or repair the leak. The gasses are under pressure and most of these gasses will cause extreme cold at the point of release.

When you are away from the leak:

- If your eyes or throat continue to be irritated, flush your eyes and/or gargle or drink clean water as soon as possible.
- As soon as possible, change clothes and wash your skin and hair with clean water, and soap, if possible.
- If you experienced more than momentary or short-term irritation (eyes, nose, throat, lungs, skin, etc.), you should seek medical attention.