

To: CEC Regarding HECA  
Docket No, AFC-08A  
July 12,2012

My name is Trudy Douglass. I was born and raised in Bakersfield. I am neither a political nor environmental activist. I am an outraged citizen of Kern County. I am here to object to the proposed Hydrogen Energy California (HECA) project.

SCS Energy is treating our county like a third-world nation by choosing to burn the dirtiest fuel possible to run their chemical factory. This company has participated in building three natural gas energy plants.(Astoria Energy, Marcus Hook, and Newington Energy) One of which, Astoria Energy, won the 2007 Pacesetter Plant Award. Why then are they proposing to transport coke and coal for hundreds of miles when they can get natural gas from just a few miles away? Why aren't we offered this cleaner alternative?

SCS Energy is trying to permit PurGen One, a coal gasification project in New Jersey. I am sure that they have been diligently offering gifts and promises to smooth its path as they have done here but, at this time New Jersey has had the wisdom to say "NO". The SCS project in New Jersey is in an industrial area, a Dupont chemical factory designated as a toxic waste site, with ocean breezes to dispel pollution and a thick sandstone formation to hold the CO2. Our site is farm land, at the closed end of a valley, with porous shale to hold the CO2 until holes are drilled through our protective barrier for oil recovery.

SCS Energy represents capitalism at its worst, where government and private interests combine to overwhelm the peoples' health and safety. This company has the potential to reap enormous profits from our air, land and water by:

- Burning of oil refinery waste.
- Producing hazardous, chemical fertilizer. (See attached document.)
- Supplying Occidental Petroleum with CO2 to loosen oil for recovery.
- Selling off extra electricity at peak prices.

In return for what SCS is taking from us we receive the permanent #1 spot for the worst air in the United States, the really good chance that the CO2 will come up with the oil (making our air even worse), the real possibility that this chemical factory will leave us with a toxic waste site and a park for Tupman. There are people in Sacramento and Kern County who have put short-term, short-sighted gain above public welfare. They have been lulled into disregarding the long-term dangers of coal gasification in our valley.

If this project goes forth as proposed we will have higher medical costs from pollution based diseases: asthma, emphysema, cancer and heart disease, reduced longevity, lower productivity of the people and the land,

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and higher fees and fines for our failure to meet EPA particulate standards. Although HECA is the polluter they avoid censure by buying those “magical” Air Credits with our own tax money to offset their offense against us. This is legal but is it right?

Building this facility in Kern County goes beyond foolish to criminal. If the Energy Commission feels that California desperately needs a new resource for electricity, they should permit SCS for a natural gas facility. If it is to be a chemical factory, let the County of Kern decide and let them put the facility in an area zoned for the manufacture of hazardous materials. Please act at least as wisely as New Jersey.

In conclusion, please schedule some of the other meetings in Bakersfield and Arvin so that people with disabilities or transportation problems can attend to share how this chemical, coal gasification factory will effect them. As you have experienced, the drive to Elk Hills is lonely and a little dangerous at night.

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## Welcome

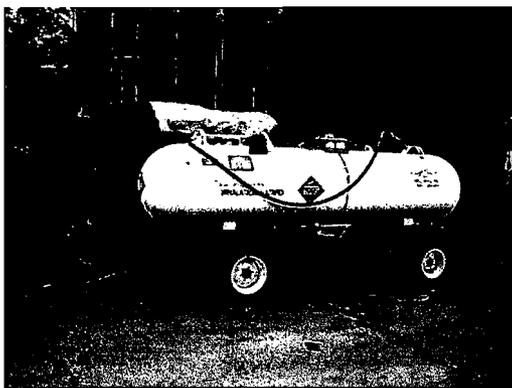


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# Anhydrous Ammonia Safety

Last Updated: April 20, 2012



Anhydrous ammonia (NH<sub>3</sub>) is a nitrogen crop fertilizer that can cause severe chemical burns; frostbite to the eyes, skin, and respiratory tract; and death. It is important for all individuals working with this type of fertilizer to understand the potential risks, necessary safety precautions, and proper response in the event of accidental contact.

Anhydrous ammonia is a hygroscopic compound, meaning that it takes up water from the nearest source, which can include the human body—especially the eyes, lungs, and skin because of their high moisture content. Anhydrous ammonia is caustic, corrosive, and damaging to tissue high in moisture content when it contacts the human body. Anhydrous ammonia inhalation incidents are typically severe because the victim's throat can swell shut, causing suffocation. When vapors or liquid come in contact with a person's eyes, blindness may occur.

Typically, anhydrous ammonia is stored under pressure, but it vaporizes to a colorless gas. It has a unique odor that can be detected at a low concentration of 5 ppm. The concentration in fertilizer is approximately 1,000,000 ppm, but even brief exposure to a concentration of 2,500 to 6,500 ppm can result in death.

Anhydrous ammonia is transported under pressure as a liquid, so all equipment used for transport must be designed for use under high pressure to avoid ruptures or breaks. Incidents can occur when anhydrous ammonia escapes from transfer hoses or valves, equipment malfunctions and sprays anhydrous ammonia in multiple directions, hoses pull apart during transportation or application, and so on.

## PPE and Supplies

It is essential that all workers who use anhydrous ammonia wear the appropriate personal protective equipment (PPE), be equipped with necessary response supplies, and know how to respond in an emergency. PPE should include ventless goggles or a full-face shield, rubber gloves with long cuffs that can be rolled to catch drips, and a long-sleeved shirt. Nonrubber gloves made of ammonia-proof material are acceptable. Because contact lenses can trap the gas and become fused to the eye, it is recommended that individuals not wear contact lenses while working with anhydrous ammonia.

In the event of an exposure emergency, the most important resource is an ample supply of clean water to begin flushing the eyes and skin. If you use a vehicle to transport anhydrous ammonia, you must carry a 5 gal. container of clean water. Each person working with anhydrous ammonia should carry a 6 to 8 fl. oz. squeeze bottle of water at all times for rapid response to an emergency.

### **Basic First Aid for Anhydrous Ammonia Exposure**

The first-response treatment for anhydrous ammonia exposure is to flush the exposed area (skin, nose, throat, eyes, and so on) with clean water for a minimum of 15 minutes.

- Flush the exposed area immediately to decrease injury caused by the anhydrous ammonia coming in contact with skin or clothes. Although clean water is the ideal resource for flushing exposed areas of the body, if you do not have water available, other nontoxic liquids, such as cold coffee or orange juice, can be used.
- Remove contaminated clothing unless the clothing is frozen to the victim's skin.
- Seek medical attention immediately and inform medical staff of the exposure to anhydrous ammonia so that they will not treat the wounds with oils or ointments that can intensify the damage.

If you find a person who is in a continuous stream of anhydrous ammonia, contact your local emergency service responders or 911. Inform the emergency medical responders about the type of incident so they can bring the proper equipment to the scene. A self-contained breathing apparatus (SCBA) and protective clothing are necessary to remove a person from a continuous stream. Rescue workers will contact a hazardous materials (HAZMAT) disposal team if HAZMAT services are needed at the scene.

Note that these guidelines are not comprehensive, and all individuals working with anhydrous ammonia should receive training in the proper response to exposure emergencies.

### **Storage and Transportation**

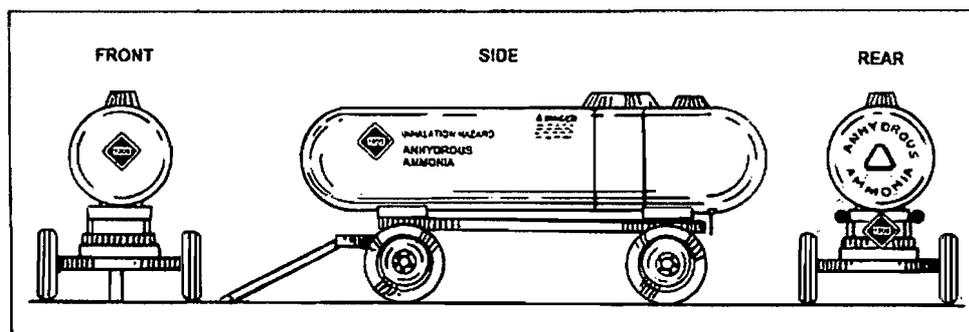
Anhydrous ammonia is a strong alkali that, when dissolved in water, readily reacts with copper, zinc, brass, and other alloys. Therefore, the only types of containers, fittings, and piping that should come in contact with anhydrous ammonia should be nongalvanized steel or iron. Do not store other materials, such as propane or liquefied petroleum gas, in a tank that has been used to store anhydrous ammonia.

When filling your anhydrous ammonia tank, do not fill it more than 85% full, and always disconnect the fill hose before moving the tank. Remember to bleed pressurized anhydrous ammonia from the hose before connecting or disconnecting the hose.

When transporting anhydrous ammonia, be sure to adhere to the following precautions and safety rules:

- **Running Gear:** Regularly inspect the wagon's frame tongue, reach poles, anchor devices, wheel bearings, knuckles, ball joints, and pins for structural damage and wear and make necessary repairs and adjustments.

- **Tires:** Check tires for proper inflation, bald spots, and signs of wear and ensure that lug nuts are tight.
- **Hoses and Valves:** Inspect and replace hoses and valves as needed.
  - The hydrostatic relief valve should be replaced every five years.
  - The transfer hose should be replaced five years from the date of manufacture.
- **Lubrication:** Annually lubricate the wagon's knuckle, wheels, tongues, and so on.
- **Towing Vehicle:** To increase the driver's ability to control the towing vehicle, ensure that the towing vehicle weighs at least as much as the tank.
  - A tractor can tow two tanks, but a truck can tow only one tank at a time.
- **Speed Limit:** When towing an anhydrous ammonia tank, observe a speed limit of 25 mph.
- **Hitch Pin:** Use a hitch pin with a safety chain when towing a tank wagon.
- **Warning Lights:** Ensure that the tank is equipped with a seven-terminal breakaway connector plug to properly operate turn signals, flashing warning lights, and a red brake light.
- **Safety Signage:** If operating on a highway, outfit the tank with all required safety markings, including a slow-moving vehicle (SMV) sign. (Click [here \(/pages/64583/increasing-the-visibility-of-agricultural-equipment-on-public-roadways\)](/pages/64583/increasing-the-visibility-of-agricultural-equipment-on-public-roadways) for more information about SMV signs and increasing the visibility of your agricultural equipment.)
  - The words *Anhydrous Ammonia* must appear on both sides of the tank and on the rear of the tank in letters 4 in. high. The words should be in contrast to the tank so that they can be read easily.
  - *Inhalation Hazard* must appear on both sides of the tank in letters 3 in. high.
  - A Department of Transportation (DOT) placard number 1005 for nonflammable gas should be placed on the front, back, and sides of the tank.



## Additional Safety Recommendations

- Paint the tank with reflective white paint to decrease excessive pressure buildup that can occur when the tank is heated from direct sunlight.
- Do not use dented or damaged tanks until they have been checked by an authorized inspector and necessary repairs are completed.
- Allow only certified welders to perform welding on the tank.
- Regulations and codes regarding towing of anhydrous ammonia and signage may vary, so be familiar with and obey the regulations in your state.

Summarized by:

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