

# WHAT ARE THE POSSIBLE IMPACTS OF AN AMMONIA PLANT ?

*Chemical plants that produce ammonia threaten health, safety, and the environment. Ammonia is a highly toxic chemical produced from fossil fuels, and is used in nitrogen-based fertilizers, plastics, and explosives.*

## 1 LIGHTS & NOISE

Ammonia plants run 24/7 and are lit up like a Christmas tree, with constant industrial noise from high-temperature furnaces and loading operations.

## 3 LOCAL AIR POLLUTION

Plants routinely emit ammonia into the air. Breathing in low levels of ammonia everyday triggers asthma and lung irritation. Higher levels of ammonia inhalation can irritate your eyes and cause breathing difficulties

## 5 REGIONAL AIR POLLUTION

Ammonia emissions travel long distances and can combine with other air pollutant form fine particulate matter (PM2.5), which is linked to heart attacks, strokes, and cancer.

## 7 WATER POLLUTION

Wastewater discharged from ammonia plants contains nitrogen compounds that feed algae blooms, which deplete oxygen and create dead zones in rivers and bays.

## 2 HAZARDOUS TRAFFIC

Ammonia ships out by rail, truck, barge, and pipelines – infringing on local movement and all increasing accident risk. A tanker truck leak in Oklahoma in Nov. 2025 injured 75 people, 11 critically.

## 4 FLARING & UPSETS

Methane and hydrogen are needed to make ammonia and are flared off to relieve pressure during plant upsets, emitting more air pollution. Unauthorized chemical releases occur regularly during plant upset conditions.

## 6 CHEMICAL DISASTERS

A worst-case ammonia release can form a toxic ground-hugging gas cloud with the potential to travel 10–20 miles and can blind, suffocate, or kill those exposed.

## 8 CLIMATE CHANGE

Ammonia production alone accounts for roughly one-third of the entire chemical industry's greenhouse gas emissions.

## AMMONIA IS ALWAYS DANGEROUS TO BREATHE

Ammonia is highly hazardous by its nature. Even at only a few parts per million (ppm), your health can be harmed.

AMMONIA LEVEL (PPM)	EXPOSURE DURATION	HEALTH EFFECTS
< 1	Every day for 8 years	Asthma, breathing difficulty, lung irritation
< 5	1 hour	Mild eye and respiratory irritation
~5	Briefly	Detectable odor threshold — harm begins below this
25	Daily at work	Serious eye and respiratory tract irritation
35	15 min at work	Serious eye and respiratory tract irritation
150	1 hour (everyone)	Severe or irreversible eye and lung injury
300	30 min at work	Immediately dangerous to life and health

## WE DON'T NEED MORE FOSSIL FUEL FIRED AMMONIA PLANTS

- **Fertilizer waste:** Most ammonia becomes fertilizer, but half is wasted after application. Improve farm efficiency before building new plants.
- **False clean fuel:** Industry claims ammonia is a low-carbon shipping fuel, but upstream methane leaks and nitrous oxide emissions from combustion undermine these claims.
- **Coal cover:** Plans to burn ammonia with coal in Asia extend coal's lifespan. End coal use instead of laundering it through ammonia co-firing.

### SOURCES & RESOURCES

- [AIHA Guideline Foundation, Emergency Planning Response Guidelines \(EPRG-2\)](#)
- American Conference of Governmental Industrial Hygienists (ACGIH): [Threshold Limit Values for Ammonia](#)
- Center for International Environmental Law, [Fossils, Fertilizers and False Solutions \(Oct. 2022\)](#):
- OEHA/CalEPA, [Air Toxics Hot Spot Program Guidance Manual \(2015\)](#)
- NBC News / AP, "[Explosion at Mississippi chemical plant](#)" (Nov. 6, 2025)
- WQAD/ABC, "[Ammonia leak at Oklahoma hotel](#)" (Nov. 14, 2025)
- [U.S. EPA Toxics Release Inventory \(TRI\) Explorer](#), 2024 dataset