

## **COMPRESSOR STATION HAZARDS**

The possibilities for health, safety or environmental harm resulting from natural gas compressor stations are many and serious.

Some of these include: Explosions fires leaks and spills.....

plus fugitive emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx), as well as other potential exposure threats, such as radon 222 and lead.

### **EMISSIONS**

While all of these hazards have been well documented nationwide the most prevalent, by far, is the intentional (routine) “blow-downs”. Accidental releases of VOCs and NOx also occur. But all possible threats need to be considered when allowing compressor stations to operate...especially in close proximity to:

homes, work places, playgrounds,  
schools, water resources & farms

The types of VOCs and NOx commonly emitted include:

Formaldehyde, benzene, toluene, ethyl benzene,  
xylene, hydrogen disulfide, carbon monoxide(CO),  
carbon dioxide (CO2), sulfur dioxide (SO2), methane (CH4)....

and other compounds or elements that are toxic, carcinogenic or neurotoxic, and which are prone to causing major adverse health effects in humans and animals.

### **NOISE**

Compressor stations are loud. “Blow-downs” can last from 20 minutes to 2-3 hours, from 12 - 40 x yr. The noise is comparable to a commercial jet taking off. They often occur in the middle of the night.

The sound of regular compressor station operation has been compared to four diesel locomotive engines running 24/7. Residents as far as a mile away can hear the racket. This humming can cause hearing impairment and cardiovascular problems.

From Mina Hamilton's research in Madison County, NY- Research Associate at Radioactive Waste Management Associates.

## HEALTH IMPACTS

Reported by People Living 50 feet to 2 miles from Compressor Stations and Metering Stations.

Wilma Subra- ex-Vice-chair of EPA National Advisory Council for Environmental Policy and Technology

[http://www.earthworksaction.org/files/publications/SUBRA\\_3\\_Shale\\_Gas\\_Plays-Health\\_Impacts\\_sm.pdf](http://www.earthworksaction.org/files/publications/SUBRA_3_Shale_Gas_Plays-Health_Impacts_sm.pdf)

Frequent Nausea*	Throat Irritation*	Eyes Burning*	Nasal Irritation*
Sinus Problems*	Bronchitis*	Persistent Cough	Weakness*
Tiredness*	Chronic Eye Irritation*	Shortness of Breath	Muscle Aches*
Dizziness*	Ringin g in Ears	Sores & Ulcers in Mouth	Urinary Infections
Depression*	Decreased Motor Skills*	Falling, Staggering*	Frequent Irritation*
Brain disorders*	Severe Headaches*	Frequent Nose Bleeds	Sleep Disturbances
Difficulty Concentrating	Joint Pain	Nervous System Impacts	Forgetfulness
Irregular/Rapid Heart Beat	Strokes	Allergies	Easy Bruising
Severe Anxiety*	Excessive Sweating	Abnormal EEG*	Spleen
Lump in Breast	Pre-Cancerous Lesions*	Amnesia	Thyroid Problems

\*61% of Health Impacts Associated with Chemicals present in Excess of Short and Long Term Effects Screening Levels in the air

### Additional Resources with extensive reports:

<http://www.environmentalhealthproject.org/wp-content/uploads/2012/03/Compressor-station-emissions-and-health-impacts-0>

[http://www.otsego2000.org/wpcontent/uploads/2012/08/Madison\\_County\\_DOH\\_Comm ents - Docket No. CP14-497-000.pdf](http://www.otsego2000.org/wpcontent/uploads/2012/08/Madison_County_DOH_Comm ents_-_Docket_No._CP14-497-000.pdf)

## SAFETY

From Mina Hamilton's research for NY State

Since 2011, there have been at 11 accidents - explosions and fires - at compressor stations in the following towns:

Lathrop, PA,	Brooklyn Township, PA,	Montrose, PA,
Branchville, NJ,	Langton, OK	Clinton, AK
Windsor, NY,	Pinedale, WY,	Nine Mile Canyon, UT
Marengo County, AL,	Oaktown, IN and others....”	

## KINDER MORGAN PIPELINE SAFETY VIOLATIONS

“In 2009, the Pipeline and Hazardous Materials Safety Administration (PHMSA) cited Kinder Morgan for violating safety standards regarding the distance between a natural gas pipeline and a “high consequence area” such as a school or hospital; the pipeline was too close for safe operation in case of a leak.

In 2011, PHMSA cited Kinder Morgan for these safety violations:

Failing to test pipeline safety devices,  
Failing to maintain proper firefighting equipment,  
Failing to inspect its pipelines as required,  
and Failing to adequately monitor pipes' corrosion levels.

In 2013, the headline “Wall Street Worries About Kinder Morgan's Safety Record”: pipeline operator slashes and defers maintenance spending-- was a concern to anyone who lived or worked near a Kinder Morgan pipeline.

The Wall Street Journal asked, “Is Kinder Morgan Scrimping on its Pipelines?” Deferred maintenance may account for the high number of Kinder Morgan pipeline accidents in the last decade.

PHMSA's incident reports for Kinder Morgan's onshore gas transmission pipelines shows that faulty infrastructure causes 45% of onshore gas transmission pipeline significant leaks. Failure of the pipe, a cracked weld, and faulty pipeline equipment together account for 28.3% of pipeline leaks, and corrosion of the pipe causes 16.8%.

## Accidents

In U.S. since 2003, Kinder Morgan and its subsidiaries' pipelines have been responsible for at least 180 spills, evacuations, explosions, fires, and fatalities in 24 states.” - PHMSA

### **Pipeline Integrity and Releases from Kinder Morgan's SEC 10-K filing:**

“From time to time, despite our best efforts, **our pipelines experience leaks and ruptures. These leaks and ruptures may cause explosions, fire, and damage to the environment, damage to property and/or personal injury or death.**” From references & footnotes #25 - #35 [http://en.wikipedia.org/wiki/Kinder\\_Morgan](http://en.wikipedia.org/wiki/Kinder_Morgan)