Compressor Station Basics

Compressor stations pump gas through a pipeline by compressing the gas at intervals along the system. The engines run 24 hours a day, seven days a week, 365 days a year. Compressor stations are required to bring the gas pressure in smaller gathering pipelines up to the pressure in larger transmission pipelines. The DEC Supplemental Generic Environmental Impact Statement (SGEIS) says that each compressor station will service gas wells within a 4-to-6-mile radius, and also will have dehydration units, to remove water vapor from the gas. Compressor stations are extremely noisy—the equivalent of a propeller plane flying overhead or a concrete mixer—24 hours a day, 7 days a week. The siting of compressor stations does not require a SEQRA (State Environmental Quality Review Act) review, and is governed by the Public Service Commission. Eminent domain is used for siting both compressor stations and pipelines.

Remember Erin Brockovich?

A famous American legal battle which became the centerpiece of the Hollywood film Erin Brockovich involved a PG&E compressor station in Hinkley, California, USA which contaminated soil and an aquifer with corrosion inhibiting Chromium VI and other toxic compounds without regard for the health of residents.

Useful resources for understanding compressor stations:
http://www.marcellusshale.us/Marcellus-gas-facilities.htm
http://gomarcellusshale.com/forum/topics/compressor-stations-how

Remember Erin Brockovich?

Citizen-produced videos on compressors
Get the links live at:
http://un-naturalgas.org/pipelines-compressor_stations.htm
http://www.neogap.org/compressor-stations.php
http://www.youtube.com/watch?v=W3rXRGbLM68&feature=related
...and one shot by Pennsylvania regulators

You can help. Get involved. To find a group near you visit:
www.DamascusCitizens.org

Generating Noise
Vibrations
Air Pollution
Disease
In your community
**Vibro-Acoustic Disease**

*Vibrations too low to hear*

The Lisbon, Portugal Human Development Center named the disease after studying it and performing autopsies for 25 years. The cause is Severe or long term exposure to Low Frequency Noise (LFN), noise that has a frequency less than 500 cycle per second (CPS). Natural Gas Compressors emit LFN continuously. LFN causes the body to secrete adrenaline, which in turn causes blood vessels to constrict. The smallest blood vessels are in the brain and eyes. In some cases, visual acuity is severely affected. Some exposed folks have died of brain aneurisms in our county [Dew, Texas]. Age doesn't matter. Some people are affected more than others. A key sign of VAD is a thickening of the pericardium (sack) around the heart. Only an *echo-cardiogram* test will reveal it. [Details](https://docs.google.com/Doc?docid=0AQsxa7SpCLLDZGszNGh3bI82MGRwOj4YmN0&hl=en&pli=1)

**Communities at Risk**

*Compressor noise travels for miles*

Steuben County’s (NY) Woodhill compressor station is not only the greatest source of pollutants in the county, it’s approximately 3 times greater a polluter than the Corning glass manufacturing plant. The compressor station also emits nearly 3 times the number of different pollutants as Corning does. [Details](http://www.google.com/url?sa=D&q=http://www.planethazard.com/phmapenv.aspx%3Fmode%3Dtopen%26area%3Dcounty%26state%3DNY%26countyfip%3D36101)

**Your Environment at Risk**

*Toxic gases are vented directly to the air*

In Dish, Texas, where numerous pipelines and Compressor Stations have been built in recent years, there has been a corresponding die-off of trees, livestock dying of mysterious causes, and humans developing a range of unusual medical problems. Extremely high levels of carcinogenic and neurotoxic air pollutants have been recorded near one of the town's 11 compressor stations.

Health care professionals report that a large number of children who attend schools near compressor stations suffer periodic nosebleeds. Suspected in these nosebleeds is formaldehyde, a byproduct of the combustion engines used in the compressor stations that pump gas through transmission lines. [Details](http://www.startelegram.com/2010/10/03/2516374/formaldehyde-from-gas-compressor.html)

**Diagnosis:** Vibro-Acoustic Disease

“I have been to the hospital emergency room five times. The first time, they found brain damage after I had been exposed to severe LFN for two hours on three separate consecutive days. Next was severely high blood pressure. Next was severe hearing loss and ruptured ear drum. I now have a permanent hole in my ear drum, severe headaches and constricting blood vessels.”

Charles E. Morgan, P.E., Inactive Major, USAF, Retired

In February of 2010, residents of Lamar County, Texas, U.S.A won a lawsuit against National Pipeline Co. for excessive noise causing damage to health and property. [Details](http://startelegram.typepad.com/files/the-paris-news.htm)