Air quality health hazards modeled from SWPA-EHP research plotted at proposed site of Weymouth compressor station

The following charts are based on current natural gas compressor station air quality screening models from the SWPA-EHP (Southwest Pennsylvania Environmental Health Project). This information is not based on what pipeline companies say the emissions will be, but rather on actual measurments taken in communities surrounding operational compressor stations. They diagram the estimated population exposed to Formaldahyde, VOC's, and PM 2.5 fine partiulate matter if a compressor station were to be located at the Weymouth site. More details on this study are available at http://www.environmentalhealthproject.org/health/air/ . This data shows an unprecedented population that would suffer adverse health effects from such a siting. It clearly demonstrates a need not only for a full enviornmental impact study, but for an alternative location to be selected for the compressor station.

All population values are estimated from http://www.freemaptools.com/find-population.htm

Very Unhealthy	Unhealthy	Unhealthy For Sensitive Groups	Moderalty Unhealthy
Everyone should avoid extended or heavy exertion.	People with heart or lung disease, older adults, and children should avoid extended or heavy exertion. Everyone else should reduce extended or heavy exertion	Unusually sensitive people, older adults, and children should avoid extended or heavy exertion.	Unusually sensitive people (those with heart/lung disease orasthma) should consider reducing extended or heavy exertion
500 - 1000 EFFECTED	3000 EFFECTED	31020 EFFECTED	82297 EFFECTED

Very Unhealthy	Unhealthy	Unhealthy For Sensitive Groups	Moderalty Unhealthy

1 Mile

Est. Population	82,297	31,020	3K	
ug/m³	33-15	56	100-1400	

SWPA-EHP Estimated* Exposure to

Particulate Matter 2.5

PM2.5 particles travel deeply into the respiratory tract, reaching the lungs. Exposure to fine particles can affect lung function and worsen medical conditions such as asthma and heart disease. Scientific studies have linked increases in daily PM2.5 exposure with increased respiratory and cardiovascular hospital admissions, emergency department visits and deaths. Studies also suggest long term exposure to PM 2.5 may increase rates of chronic bronchitis, reduced lung function and increased mortality from lung cancer and heart disease.

*Estimates are for night time conditions. Less than 50% cloud cover and winds below 5 MPH. All emmisions are assumed to be ground level and constant over the day and year on level terrain.

Very Unhealthy | Unhealthy | Unhealthy For Sensitive Groups | Moderalty Unhealthy

*Estimates are for night time conditions. Less than 50% cloud cover and winds below 5 MPH. Emmisions are assumed to be ground level and constant over the day and year on level terrain.

SWPA-EHP Estimated*

Formaldehyde Exposure

In the short-term can cause asthma-like symptoms, coughing, wheezing, and shortness of breath. Long term exposure includes increased risk of cancer. Classified by the **WHO** as carcinogenic to humans. It has also been associated with childhood asthma.

400	3000	51,861	Est. Population
72-35		16-10	ug/m³

1 Mile

Google

Very Unhealthy | Unhealthy | Unhealthy For Sensitive Groups | Moderalty Unhealthy

SWPA-EHP Estimated*

VOCs Exposure

Volatile organic compounds present at compressor station construction and operation, are a varied group of compounds which can range from having no known health effects to being highly toxic. Short- term exposure can cause eye and respiratory tract irritation, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reaction, nausea,and memory impairment. Long-term effects include loss of coordination and damage to the liver, kidney, and central nervous system. Some VOCs, such as benzene, formaldehyde, and styrene, are known or suspected carcinogens.

Est. Population	31,020	3000	
ug/m³	150	725-350	4200

1 Mile

*Estimates are for night time conditions. Less than 50% cloud cover and winds below 5 MPH. All emmisions are assumed to be ground level and constant over the day and year on level terrain.