

U.S. Environmental Protection Agency Hearing on the Proposed Stay of
Emissions Standards for New, Reconstructed, and Modified Sources in the Oil and Natural Gas Sector

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Good morning. My name is Janice Nolen, and I am assistant vice president for national policy for the American Lung Association. The American Lung Association celebrates our 113th anniversary this year. We have fought for public health against some of the nation's most dangerous challenges, beginning with tuberculosis and influenza, then tobacco and, for more than fifty years, harmful air pollution. We speak up for millions of Americans with lung diseases who need healthy air to breathe. I appreciate the opportunity today to explain the opposition of the American Lung Association to the delays EPA has proposed to the June 2016 new source performance standards for the oil and gas industry.

The American Lung Association strongly opposes the proposed two-year delay of the requirements for reducing harmful emissions from new, expanded and modified sources within the oil and natural gas industry. This misguided step will build in health threats that could be prevented and expand exposure to toxic pollutants to people who will already be burdened. While we are gravely concerned about the longer term impacts of methane on climate change, my focus this morning will be on the immediate health burdens added by the proposed two-year delay.

If EPA takes this step backward, oil and gas facilities will release more pollution in the air--a serious, ongoing threat to human health. The growing inventory of production wells, processing plants, transmission pipelines, and storage units means that harmful emissions of methane, volatile organic compounds (VOCs) and other pollutants would spew in places that currently have no such exposure. Areas near the expanded or altered oil and gas facilities will receive even larger doses of these pollutants. Those new emissions would remain unchecked.

The immediate risk to human health from these expanding sources is real. These pollutants can cause or increase risk of cardiovascular, respiratory, and other acute and chronic systemic damage, and may increase risk of cancer.

Volatile organic compounds include specific toxic gases that react easily with other gases and particles. VOCs from oil and gas include benzene and formaldehyde, both carcinogens, as well as ethylbenzene, toluene, xylene and many others. Implementing the final standards now would limit exposure to these hazardous air pollutants in the oil and gas production process and for transmission and storage. Delaying these standards means exposing more people to these risks.

These compounds can cause difficulty in breathing, impaired lung function and respiratory symptoms, damage to the liver and kidneys, and stomach discomfort. They may also cause developmental disorders, adverse effects to the nervous system, impairment of memory and neurological function, and slow response to visual stimuli. These pollutants can also affect hearing, speech, vision, and motor coordination (ATSDR, 1999, 2000, 2007a, 2007b, 2010).

How much of these toxic gases really come out of the oil and gas production? One recent study of locations near oil and gas development sites around the U.S. found evidence of high levels of benzene and formaldehyde present at levels that exceed the Agency Toxic Substances and Disease Registry (ATSDR) or EPA's Integrated Risk Information System (IRIS) standards for exposure (Macey et al., 2014).

Methane itself poses a serious health risk as an odorless VOC that can burn or explode in an occupational setting. Methane is a particular concern for workers at natural gas wells from the potential for explosions or uncontrolled fires during the hydraulic fracturing process (NIOSH, 2015).

Volatile organic compounds do not stop with causing cancer or irritating the lungs and making breathing difficult. VOCs also form ground-level ozone and fine particulate matter (PM_{2.5}). Keeping the standards in place would help reduce ozone and fine particulate matter levels in areas where oil and gas production occurs and downwind.

We at the Lung Association have been tracking air pollution levels across the nation for the past 18 years in our annual "State of the Air" report. That report looks at the number of unhealthy ozone and particle pollution days recorded in official air pollution monitors over successive three-year periods. One recent shift we've noted has been the rise in smaller cities in the Southwest where oil and gas extraction and processing has moved those cities onto our annual "Most Polluted Cities" list such as Fort Collins, Colorado, ranked 15th most ozone-polluted. We also noted that two rural counties in Utah with high oil and gas extraction have more unhealthy ozone days than many cities.

Breathing ozone increases the risk of asthma attacks and susceptibility to respiratory infections, and increases the need for medical treatment and for hospitalization for people with asthma or chronic obstructive pulmonary disease (COPD). Strong evidence finds that ozone may lead to premature death. (EPA, 2013).

VOCs from fine particulate matter, PM_{2.5}, which not only worsens asthma, but triggers heart attacks and strokes. Breathing PM_{2.5} shortens life, and causes lung cancer. (EPA, 2009).

Delaying these measures to reduce VOC emissions will have a direct impact on the health of children, people with asthma and COPD, people with cardiovascular disease, diabetics and people with low incomes, all of whom face the highest risks from these pollutants. Even healthy adults who work or exercise outside face higher risk, including employees of the oil and gas industry. They deserve protection from these dangerous pollutants, not delay.

Recent research warns that living nearer to oil and gas development exposes residents to greater risk. For example, a 2012 study found that people who lived within one-half mile of those developments in Garfield County, Colorado, faced increased risk from cancer, largely due to elevated benzene exposure (McKenzie et al., 2012). Recent reviews of the research examining the health effects associated with proximity to oil and gas extraction and development have warned about the potential for harm from the emissions, the growth in the development and the increased proximity to more people (Werner et al., 2014; Shonkoff et al., 2014; and Adgate et al., 2014).

Postponing the standards for two years will subject people to risks that can threaten their lives and deprive them of the healthy lives they deserve. The American Lung Association calls on EPA to continue to enforce the new source performance standards adopted in 2016. Thank you.

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