

July 9, 2020

Jeffrey L. Ventura, CEO
Range Resources
100 Throckmorton Street, Suite 1200
Fort Worth, TX 76102

RE: Ambient Air Monitoring at Augustine Well Site in Cecil Township

Dear Mr. Ventura:

Having learned recently that Range Resources had launched an ambient air monitoring program at its Augustine well site in Cecil Township, the Southwest Pennsylvania Environmental Health Project (EHP) is deeply concerned about whether this monitoring program will obtain and report the necessary information to make an accurate judgment about the health risks posed to residents living nearby.

As a public health organization that specializes in monitoring around shale gas development sites, we know the importance of objective, comprehensive, and meaningful data collection and analysis. Collection of information based on models like EPA regional regulatory compliance does not achieve the public health objective of protecting populations placed at risk because overall averages do not take into account the episodic nature of exposure. Federal air sampling guidelines are designed to reduce regional air pollution, not to evaluate the safety of nearby pollution sources, and even if those sites achieve regional air standards on average, they still may negatively impact the health of individuals living, working, or attending school nearby.

Plausible health effects have been observed near shale gas extraction and processing sites throughout Pennsylvania and the United States. Symptoms observed include stress, respiratory issues, nose bleeds, adverse birth outcomes, and cancer. Because there is evidence of acute and, in some cases, life-threatening health impacts on residents in neighborhoods near shale gas wells and associated activities, it is imperative that monitoring for emissions focuses on obtaining the information necessary to identify and reduce public health impacts.

For example, the Range Resources report from the Fort Cherry School District, in which hired consultant Gradient asserts safety, is based on EPA regional air standards and did not address health risks from high episodic exposures to chemical irritants. In fact, there is clear evidence that the levels and types of exposures that would place children's health at risk do

occur at this site, but these mixtures of toxic chemicals are not mentioned in the Gradient Report.

We appreciate that Range Resources is displaying real-time data on its website regarding monitoring at the Augustine well site in Cecil Township. However, the monitoring and the data provided are not enough to make informed judgments about exposures. Many factors, such as weather, wind speed and direction, vertical mixing of emissions, and emission peaks, affect nearby communities' exposure and their related health effects.

The data currently provided on the Range Resources website do not integrate any of the aforementioned factors to illustrate actual exposure risk. For instance, visitors can see average levels of PM2.5 for a given day and totals of individual chemicals based on a 24-hour collection period every six days, but there is no information about frequency or duration of periods of high concentration, which would better represent the gases that residents are actually inhaling over the course of the day. We also note that placing the sampling sites behind an impermeable fence, as photographs on your website indicate to be the case with at least one monitor, is not likely to result in the successful collection of desired information.

In order to better determine whether the monitoring data at the Augustine well is objective, comprehensive, and meaningful, we ask you to respond to these questions:

1. What assurance can you provide that the monitoring and analysis are being performed by an objective, third-party research organization with a reputation for integrity and without direct ties to industry?
2. What consideration will you give to the lower tolerances for toxic emissions that can disproportionately impact vulnerable populations, such as children, pregnant women, elderly persons, and persons with chronic health conditions?
3. What assurances can you provide that Range Resources had no undue input into the design of the monitoring and that the company has made and will make no attempts to influence the results by scaling back activity at the monitoring site or otherwise skewing the data?
4. Are you willing to supply all raw data files from the Augustine well site to third-party researchers, such as EHP, for further analysis?

Thank you for addressing our concerns. We look forward to your response.

Sincerely,



Alison L. Steele, Executive Director
Southwest Pennsylvania Environmental Health Project

cc: Patrick McDonnell, Secretary, PA DEP
Dr. Rachel Levine, Secretary, PA DOH
Cecil Township Board of Supervisors
 Cindy Fisher, Chairperson
 Frank A. Egizio, Vice Chairman
 Eric J. Sivavec
 Thomas A. Casciola
 Ronald Fleeher