COLORADO
Oil & Gas Conservation Commission
Department of Natural Resources

COGCC FACT SHEET: *OIL AND GAS WITHIN 2,000 FEET*

This fact sheet is being provided because an operator has submitted, or is planning to submit, drilling permits to the COGCC for an oil & gas location within 2,000 feet of your residence. COGCC wishes to inform individuals that live near planned oil and gas operations that the Colorado Department of Public Health and the Environment (CDPHE) recently published a study that addresses potential health risks from oil and gas development.

On October 17, 2019, a study titled "Final Report: Human Health Risk Assessment for Oil & Gas Operations in Colorado" was released by CDPHE. The health risk modeling study used actual emission data that was collected in previous studies of oil and gas operations to mathematically estimate (model) hypothetical chemical concentrations at distances between 300 and 2,000 feet in different meteorological conditions and other controlling factors to estimate potential for exposures.

The individual chemical concentrations modeled from hypothetical well pads in the study were below health based guidelines for chronic (long-term) health impacts and were within acceptable risk ranges for cancer, as established by the United States Environmental Protection Agency. The study did not determine any elevated risk of chronic health impacts from any single substance at 500 feet or greater although the study showed slightly elevated risk of blood and nervous system effects from multiple chemicals at 500 feet but not at 2,000 feet. Further, the study did find that there may be potential risks of acute (short term) impacts at all modeled distances, particularly during the drilling, hydraulic fracturing and flowback phases of oil and gas development. The acute risks are primarily associated with benzene, which under worst-case conditions may be temporarily at high enough concentrations to cause short-lived symptoms such as headaches, dizziness, and respiratory, skin, and eye irritation. The modeled concentrations that were high enough to cause these symptoms are from the modeling parameters that represent potential worst-case conditions (i.e. certain meteorological conditions, peak emissions, continuous exposures, etc.).

The study is not based on actual reports of symptoms, nor is it based on actual measurements up to 2,000 feet, rather, it only reports that there are potential impacts under worst-case conditions. It should also be noted that the study relied on data collected in 2013 to 2016, and since then, there have been upgrades in operational practices and controls, including improved emission controls which are now in common use; additionally, both the COGCC and the CDPHE Air Pollution Control Division have enacted more stringent regulations that apply to current oil and gas operations.

Please contact the COGCC or visit the COGCC website for additional information regarding permits for planned oil and gas operations. All permits have a 20-day comment period that is available to all members of the public. All permit information can be viewed on the website, including the best management practices (BMPs) and conditions of approval (COAs) that are applied for the protection of public health, safety and welfare or the environment.

The COGCC and CDPHE will be conducting further studies to better understand potential health impacts from oil and gas operations. Please visit the COGCC website and the CDPHE website for additional information regarding these studies and any updates.

20191120

URLs for embedded links:

1. https://drive.google.com/open?id=1pO41DJMXw9sD1NjR_OKyBJP5NCb-AO0I
2. http://cogcc.state.co.us/
3. https://www.colorado.gov/pacific/cdphe/oghealth