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November 13, 2015

**CERTIFIED MAIL NO.:** 



Re: 58 Pa.C.S. § 3218 Determination Complaint No. 315738 Fox Township, Sullivan County

Dear

The Department has investigated the possible degradation of your water supply well located at the above referenced subject address in Fox Township, Sullivan County, in response to a September 30, 2015 notification received from Chief Oil & Gas reporting that "post-activity" water sampling of your water supply showed apparent elevations in metal concentrations, chlorides, TDS, and pH compared to pre-drill levels. On October 13, 2015, the Department collected samples from your home water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. Analytical reports for the samples are now available and are included with this letter, as well as documents that will assist you with interpreting the sample results.

The sample results showed several compounds elevated above Department standards. Manganese exceeded its secondary maximum contaminant level (SMCL) of 0.05 mg/L at a concentration of 4.624 mg/L, TDS exceeded its SMCL of 500 mg/L at a concentration of 990 mg/L, chloride exceeded its SMCL of 250 mg/L at a concentration of 560 mg/L, and aluminum exceeded its SMCL of 0.2 mg/L at a concentration of 5.316 mg/L. PH was outside of the acceptable range of 6.5-8.5 pH units, with a measurement of 4.6 pH units. Primary MCLs are intended to reflect potential dangers to human health, while secondary MCLs reflect the aesthetics of the water (i.e. taste, smell, etc.). Additionally, turbidity was detected at 1.5 NTU above its MCL of 1 NTU. However, this standard is only applicable to unfiltered surface water sources. All of these compounds were also elevated above pre-drill levels in your water supply.

Two Volatile Organic Compounds (VOCs) were detected, but at concentrations below Department standards and in relatively equal concentrations in the sample from the water supply and the blank. Acetone was present in the sample from your water supply at a concentration of 2.01 ug/L and at a concentration of 3.26 ug/L in the blank. T-Butyl alcohol was present at a concentration of 5.47 ug/L in the sample from your water supply and at 7.09 ug/L in the blank. Additionally, a tentatively identified compound (TIC) of Dimethyl Benzaldehyde was detected. The presence of TICs are not considered absolute or confirmed by the laboratory, but rather, indicates a spike of a compound for which the instrument was not calibrated.

Because drilling activities occurred at an unconventional gas well within two thousand five hundred feet of your water supply, and the pollution occurred and was reported within one year after completion of those activities, under Section 3218(c) of the Oil and Gas Act (58 Pa C.S. §3218), the gas well operator is presumed to be responsible for the degradation of your water supply.

The Department is continuing to work to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact Matt Nuss at 570.662.0845.

Sincerely

Jennifer W. Means

Environmental Program Manager

Eastern Oil and Gas District

Enclosures:

Laboratory Analytical Results

"How to Interpret a Water Analysis Report"

cc:

Dave Engle Matt Nuss

William J. Kosmer, P.G.

Chris Yeakel

Sharon Steinbacher

Complaint File #315738