



October 26, 2018

CERTIFIED MAIL NO. [REDACTED]

Re: Water Supply Request for Investigation [CID# 335909]
Jackson Township, Lycoming County

Dear [REDACTED]

The Department has completed its investigation of your water supply located at the above referenced address ("Water Supply") in response to a complaint received on July 31, 2018 regarding cloudiness/turbidity in your Water Supply. Based on the sample results and other information obtained to date, the Department has determined that the Water Supply was impacted by oil and gas activities, specifically pipeline construction activities. The information upon which this determination is based is summarized below.

On July 31, 2018, Howard Energy Partners (HEP) reported to the Department that you claimed your Water Supply was turbid. That same day, the Department sampled your Water Supply and was able to substantiate your concerns. The attached sample results and results table show pollution that occurred as a result of pipeline horizontal directional drilling. The sample results showed that turbidity and arsenic exceeded the respective primary maximum contaminant levels (MCLs), and aluminum, iron, manganese, and total dissolved solids exceeded the respective secondary maximum contaminant levels (SMCLs). Turbidity was present at a concentration of 3,140 nephelometric turbidity units (NTU). The MCL is 1 NTU. Please note that the turbidity MCL is applicable only to unfiltered surface sources and is used here for comparison purposes only. Arsenic was present at a concentration of 0.0436 milligrams per liter (mg/L). The MCL is 0.01 mg/L. Aluminum was present at a concentration of 100 mg/L. The SMCL is 0.2 mg/L. Iron was present at a concentration of 49.49 mg/L. The SMCL is 0.3 mg/L. Manganese was present at a concentration of 0.924 mg/L. The SMCL is 0.05 mg/L. Total dissolved solids were present at a concentration of 560 mg/L. The SMCL is 500 mg/L. Primary MCLs are intended to reflect potential dangers to human health, while secondary MCLs reflect the aesthetics of the water (e.g. taste, smell, etc.).

It is the Department's understanding that you are currently being provided a temporary water supply and that HEP continues to monitor and purge the Water Supply on a regular basis. The Department is continuing to work to permanently resolve this issue. A copy of the Department's Notice of Violation to HEP regarding your Water Supply is enclosed. Please contact Sasha Minium at 570.327.0553 if you have any questions about the Department's determination regarding the Water Supply.

October 26, 2018

Sincerely,



Jennifer Means
Environmental Program Manager
Eastern Oil and Gas District

Enclosures:

Fact Sheet – Interpreting Water Supply Results
Results Table
Sample Results
Notice of Violation, dated 9/7/2018

cc: Sasha Minium
Stephanie Wharton
Sharon Steinbacher
Complaint File #: 335909