



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DISTRICT OIL AND GAS OPERATIONS

October 22, 2013

CERTIFIED MAIL # [REDACTED]

Re: 58 Pa.C.S. § 3218 Determination
Complaint No. 294619
Dimock Township, Susquehanna County

Dear [REDACTED]

The Department has investigated the possible degradation of your water supply well located at [REDACTED] in response to a 2/2/2013 complaint that recent gas well drilling activities may have affected your water supply well. On 2/4/2013, 2/6/2013 and 7/24/2013 the Department collected samples from your home water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results.

The sample results showed several compounds elevated above Department standards. Iron was present at 3.03 milligrams per liter (mg/L) on 2/4/2013 and at 2.44 mg/L on 2/6/2013 which exceeded the secondary maximum contaminant level (SMCL) of 0.3 mg/L. Manganese was present at 0.08 mg/L on 2/6/2013 which exceeded the SMCL of 0.05 mg/L. Primary MCLs are intended to reflect potential dangers to human health, while SMCLs reflect the aesthetics of the water (i.e. taste, smell, etc.). Additionally, the sample results showed methane was present at 16.8 mg/L on 2/4/2013, 27.0 mg/L on 2/6/2013 and 36.3 mg/L on 7/24/2013 in your water supply. Ethane was also present at 0.0975 mg/L on 2/4/2013, 0.167 mg/L on 2/6/2013 and 0.272 mg/L on 7/24/2013.

In the case of an unconventional well, because the water supply is within two thousand five hundred (2,500) feet of the unconventional vertical well bore, and the pollution occurred within twelve (12) months of the later of completion, drilling, stimulation or alteration of the unconventional well, under Section 3218 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.

When the Department is made aware of methane levels greater than 7 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

10/22/2013

The Department is continuing to work to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact Eric Rooney, P.G., at 570-346-5543.

Sincerely,



Jennifer Means
Environmental Program Manager
Oil and Gas Management

Enclosures:

Laboratory Analytical Results
"How to Interpret A Water Analysis Report"

cc:

Jennifer Means
Marc B. Cooley
Mike O'Donnell
Eric Rooney, P.G.
Complaint File # 294619
Cabot Oil and Gas Corporation