

December 14, 2015

CERTIFIED MAIL NO.

Re:

Water Supply Request for Investigation 314330

Notice Sent to Operator

Morgan Township, Greene County

Dear

This letter is regarding your water supply that serves the residence identified above. The Department's investigation prompted by the information that you provided to the Department on August 11, 2015 indicates that oil and gas activities are presumed to be the cause of the pollution of your water supply. A summary of this information is below.

CASE INFORMATION

Date of Complaint	Nature of Complaint (odor, taste, quantity, use, color)	Pollution	Sample Results Above Statewide Standards or Recommended Levels
August 11, 2015	Foamy, cloudy, and discolored water with off taste.	Water was found to contain the following at levels higher than those found in predrill samples: MBAS (foaming agents) Iron Manganese Total Dissolved Solids	Iron Manganese Total Dissolved Solids *No standard exists for MBAS.

On August 11, 2015 it was reported that your water had started to develop a thick layer of "soapy foam" on the surface as well as discoloration/cloudiness and an off taste. Lab results for samples taken August 13, 2015 indicate that MBAS, iron, manganese, and total dissolved solids in your water are all elevated both in comparison to samples taken prior to current drilling operations on June 11, 2015 and above state drinking water standards. While iron, manganese, and total dissolved solids are above state drinking water standards they are considered secondary

contaminates meaning that their impacts are primarily aesthetic and should not pose increased health risk. MBAS is a measurement of anionic surfactants (detergents/foaming agents) which

pose minimal short term and no long term risks as they should break down and disperse over time which the department will monitor. Until such time as all elevated parameters are restored the operator will be responsible for providing a water supply.

The sample results from the Water Supply are set forth in the table below:

Contaminant or	Unit	Standards or	Sample	Sample
Parameter		Recommended Levels*	Results	Results
	3 = 5		6/11/15	8/13/15
Iron	mg/L	0.30	0.122	1.29
Manganese	mg/L	0.05	0.0192	0.056
TDS	mg/L	500	276	510
MBAS	mg/L	No Standard	<0.0250	0.52

Please find enclosed the Department's Notice of Violation and request for corrective action to the operator. As you can see, the Notice requests that certain actions take place within defined timeframes. The Department will continue to pursue this matter.

If you have any questions about any of the above, please contact Environmental Trainee Kristof Eichenlaub at 724-769-1022.

Sincerely,

Eric A. Gustafson

Southwest District Oil and Gas Manager

District Oil and Gas Operations

Enclosures:

Exhibit A

Notice to Operator (sample results attached)

Fact Sheet – Interpreting Water Supply Results

Fact Sheet - Stray Gas

cc:

Complaint file

D. Counahan

OCC