



# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NORTHWEST REGIONAL OFFICE

RJ

February 9, 2011

U.S. Energy Development Corporation  
2350 North Forest Road  
Getzville, NY 14068

Re: Natural Gas in a Water Supply  
Complaint ID No. 276220  
Act 223 Section 208 Determination and Request for Investigation  
Foster Township, McKean County

Dear Gentlemen:

As you are aware, the Department is conducting an investigation into the contamination of natural gas into the [REDACTED] water supply ([REDACTED] Water Supply"). Based on its investigation, the Department has determined that there is natural gas contamination in the [REDACTED] Water Supply. The Department has further determined that the oil and gas drilling activities of U.S. Energy Development Corporation is the cause of the contamination.

Pursuant to 25 Pa Code § 78.51, US Energy Development Corporation is required to restore or replace the affected supply with an alternate source of water adequate in quantity and quality for the purposes served by the supply.

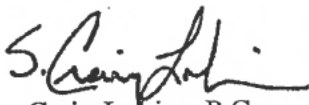
In addition, the Department is requesting that U.S. Energy Development Corporation conduct an investigation of this gas migration. The purpose of the investigation is to determine the nature of the incident, assess the potential for hazards to public health and safety, and mitigate any hazard posed by the concentrations of stray natural gas. The investigation shall include, but not limited to, the following:

1. A field survey to assess the presence and concentrations of natural gas, and the aerial extent of the stray natural gas, including the aerial extent of the combustible gas in the soils, surface water bodies, water wells, and other potential migration pathways.
2. An immediate evaluation of the operator's adjacent oil or gas wells to determine well cement and casing integrity and to evaluate the potential mechanism of migration. This evaluation may include assessing pressures for all casing intervals, reviewing records for indications of defective casing or cement, application of cement bond logs, ultrasonic imaging tools, geophysical logs, and other mechanical integrity tests as required. The initial area of assessment must include wells within a radius of 2,500 feet and may be expanded if required by the Department.
3. Identification of actions necessary to correct any defect in the oil and gas wells to mitigate the stray gas incident.

A final written report documenting the results of the investigation shall be submitted to the Department for approval within 30 days of the close of the incident, or in a time frame otherwise approved by the Department. The final report must include the following:

1. Documentation of all results of the investigation, including analytical data and monitoring results.
2. Operational changes established at the operator's oil and gas wells in this Commonwealth.
3. Measures taken by the operator to repair any defects at any of the investigated oil and gas wells.
4. Reports submitted in accordance with this section that contain an analysis of geological or engineering data shall be prepared and sealed by a geologist or engineer licensed in this Commonwealth.
5. A schedule for restoration or replacement of water supplies that contain combustible free gas in the headspace of the water well or dissolved methane in water greater than 7 mg/l.
6. A plan for ongoing monitoring and maintenance of restored or replaced water supplies.

Sincerely,



Craig Lobins, P.G.  
Regional Manager  
Oil and Gas Management

Enclosures

cc:

████████████████████  
Water Quality Specialist, Brian Ayers  
Oil and Gas Inspector, Timothy Curry  
Compliance Specialist, Jennifer Kosco  
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