



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

208 West Third Street, Suite 101
Williamsport, PA 17701-6448

September 16, 2010

Northcentral Regional Office

Fax 570-327-3565

CERTIFIED MAIL NO. [REDACTED]

[REDACTED]

Re: Act 223, Section 208 Determination
Complaint ID# 272059
West Burlington Township, Bradford County

Dear [REDACTED]

The Department has investigated your June 15, 2010 complaint that recent oil and gas well drilling activities at Chesapeake Appalachia's Yoder well pad, the drilling of the Yoder 2H well (Permit# 37-015-20450) to be specific, impacted your private water supply (well). The data collected from several analyses of your private water supply, by both the Department and Chesapeake Appalachia, indicates that your private water supply has been degraded from drilling activities conducted by Chesapeake Appalachia at the Yoder well pad.

A summary table of the analytical results from the samples collected from your private water supply, by both the Department (06/17/2010 during drilling and 08/04/10 after drilling) and Chesapeake Appalachia (05/14/10 for a re-drill survey and 08/27/10 for an updated analysis), is included with this letter. The data in the table indicates that your private water supply now has elevated levels of Iron and Manganese, and those elevated levels exceed Pennsylvania DEP Drinking Water Secondary Maximum Contaminant Levels (MCLs). Note that the data also shows that your private water supply exceeds Pennsylvania DEP Drinking Water MCLs for Barium and Total Dissolved Solids, as it did in the pre-drill water survey conducted by Chesapeake Appalachia.

Chesapeake Appalachia must now develop a plan, in conjunction with both you and the Department, to mediate or replace your existing private water supply. A remediated or replaced water supply must be of equal quality to your water supply prior to drilling activities. In the meantime, Chesapeake Appalachia is still responsible for providing you an adequate (in both quality and quantity) alternative water supply source.

If you have any questions, or require additional clarification, please contact me at 570-327-3680.

Sincerely,

Robert W. Everett III
Water Quality Specialist
NCRO Bureau of Oil and Gas Management



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

2/3/2011

CERTIFIED MAIL NO. [REDACTED]

Re: Act 223, Section 208 Determination
Complaint No. 272059
West Burlington Township, Bradford County

Dear [REDACTED]

The Department has investigated the possible degradation of your water supply well located at [REDACTED] in response to a 6/15/2010 complaint that recent gas well drilling activities may have affected your water well. On 6/17/2010 and 8/04/2010, the Department collected samples from your water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports indicated that gas well drilling had impacted your water supply, and on August 16, 2010, the Department issued a letter of positive determination describing this impact.

Subsequent to the issuance of the August 16, 2010 determination letter, the Department collected additional samples from your water supply on 1/6/2011. 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 two compounds elevated above Department standards. Barium was present at 3.2 mg/L which exceeds the primary maximum contaminate level (MCL) of 2 mg/L, and turbidity exceeded the secondary MCL of 1 NTU. 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.). The Department's investigation indicates that the previous impact to your water supply appears to have been temporary, and that water quality has returned to background conditions.

Based on water quality sample results to date, the Department does not anticipate requiring any further action in relation to this matter. Should you have any questions, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,

William J. Kosmer, P.G.
Licensed Professional Geologist
Oil and Gas Management

Enclosures:
Laboratory Analytical Results