Cabot Oil & Gas Corporation

U.S. EPA's January 2012 Position on Water Delivery

Cabot is steadfastly committed to constant improvement of our operations, environmental stewardship, collaboration with state regulators, and compliance with all applicable federal, state and local laws. Our track record in Dimock and in all areas in Pennsylvania in which we operate demonstrates that we are always responsive to recommendations and requests to protect both the health of the communities in which we operate and the environment.

In October 2011, Cabot provided water sampling data to the Pennsylvania Department of Environmental Protection (PADEP) following sampling events conducted in Dimock Township. The data was also placed on the Cabot website at www.cabotog.com. Based on testing of a range of constituents, PADEP concluded that Cabot met its obligations under the consent order and settlement agreement. After reviewing the data, on December 2, the EPA concluded "the data does not indicate that the well water presents an immediate health threat to user". In January, with no additional credible data, the EPA reversed their decision and came to a different conclusion from PADEP by using data points that do not accurately represent the water quality and are inconsistent with the overall body of data collected at each residence by Cabot, PADEP, and other independent parties. PADEP has been critical of EPA's subsequent intervention.

Most recently, in a statement dated January 20, 2012, EPA announced its belief that four Dimock residences should have replacement water delivered due to Agency concerns. Cabot has reexamined the data relevant to EPA's January 2012 statement. Based on this reexamination, it appears that EPA selectively chose data on substances it was concerned about in order to reach a result it had predetermined. EPA chose to include specific data points without adequate knowledge or consideration of where or why the samples were collected, when they were taken, or the naturally occurring background levels for those substances throughout the Susquehanna County area. The end result is an unwarranted investigation and unnecessary delivery of water.

Examples of EPA's Selective and Inconsistent Use of Data

- The only data point EPA selected as evidence of high levels of arsenic in the water well at the Ex. 6 - Personal Privacy residence was actually collected from the local public water supply. That sample was collected at the request of the plaintiffs and their attorneys. The well water samples taken at this residence and the other three residences show arsenic levels that are all below EPA primary contaminant levels. This makes sense that arsenic is present as it is a naturally occurring substance. It is not associated with natural gas drilling.

- Manganese levels in the four water wells for the residents where water will be delivered are higher than EPA secondary contaminant level standards, but they are in line with the levels which naturally occur throughout the Susquehanna County area. The secondary contaminant levels for substances are established in relation to the color and taste of water and do not indicate any possible human health concerns. As with arsenic, this makes sense, as manganese is not associated with natural gas drilling and is a naturally occurring substance.

- EPA said it is concerned about the levels of sodium in the well water even though the Agency has never established a water quality standard for sodium. Moreover, the sodium concentration EPA selected to represent the well water for the Craig and Julie Sautner residence was sampled after the water had undergone treatment, which included a water softener. Water softeners reduce water hardness by replacing calcium and magnesium with sodium, therefore raising the overall sodium concentration high above the pre-treatment level. A review of the complete Sautner sodium data set shows that when the water samples were collected pre-treatment (and thus before going through a water softener) the concentrations were 3-4 times less than when samples were collected post-treatment.

  Concentrations for all residents were within naturally occurring background concentrations for the area. It should also be noted that the local public water supply serving the entire Borough of Montrose (which EPA is having delivered to the four residents identified) has a reported sodium concentration of 51,000 ug/L, which is

substantially above the level that EPA established as a condition for water delivery. This data is available for review on the Pennsylvania American Water website listed below.[1]

- EPA's claims of "concerning" levels of glycols are also misleading. Those levels are well below the ATSDR advisory level referenced by the U.S. EPA, and in fact, the concentrations were reported at such a low level there is a question as to whether the glycols were present at all. Furthermore, during the investigation, similar concentrations were identified for these compounds in commercially available nationally branded bottled water and from groundwater in areas well outside any drilling operations. Moreover, the concentrations of di(2-ethylhexyl) phthalate (DEHP) identified by EPA, associated with the four residents receiving water, are all below its primary maximum contaminant level .

Cabot stands by its assessment that the data shows there are no health concerns with the water wells. Cabot desires to set the record straight. Science, and its conclusions, must be our priority and cornerstone.

[1] "Typical Water Quality Information - PAWC – Montrose System." Pennsylvania American Water. Web. <http://www.amwater.com/paaw/>.

The specific data at each residence

Resident 4 (Craig and Julie Sautner)

- EPA's arsenic level is lower than the primary maximum contaminant level. In fact, none of the samples have exceeded the level; most are non-detect values.
- For the manganese value, the EPA selected a data point that is nearly three years old (collected 3/26/2009). Further, this data was one of only three samples that showed concentration levels above the secondary contaminant level for manganese, which was developed based on aesthetics such as taste and appearance, not for human health concerns. The other 43 water samples collected over the past several years – including samples collected in the past year and a half – consistently show the concentration to be below this secondary contaminant level. Moreover, all the manganese results fall within the naturally occurring concentrations in the area.
- The water sample for EPA's sodium data point was taken from post-treatment water (which includes a water softener). An elevated sodium level is natural due to the water softening process. Additionally, this data point is also more than three years old (collected 11/19/2008). More recent well water data shows a range for sodium concentrations that is less than the Montrose public water supply.

Resident 6 Ex. 6 - Personal Privacy

- EPA's initial analysis identified a concentration of DEHP for the Ex. 6 - Personal Privacy residence approximately four times higher than the primary maximum contaminant level as a reason to require water delivery. EPA retracted its stated concern after realizing the sample was NOT taken from the Ex. 6 - Personal Privacy well but from a well several miles away in Brooklyn which is not associated with gas drilling activities. To our knowledge, EPA has not offered to supply water to the Brooklyn residence.
- The arsenic value cited is below the primary maximum contaminant level and is within naturally occurring background levels for the Susquehanna County area.[2]

[2] Low, D. J., and Galeone, D.G., 2007, Reconnaissance of arsenic concentrations in ground water from bedrock and unconsolidated aquifers in eight northern-tier counties of Pennsylvania: U.S. Geological Survey Open-File Report 2006-1376.
Taylor, L. E., 1984, Groundwater resources of the upper Susquehanna River Basin, Pennsylvania: Pennsylvania Geological Survey, 4th series, Water Resources Report 58, 136 p.

- EPA's manganese value is the maximum detected value. It discounts the majority of the results, including the most recent ones. All the manganese results fall within the naturally occurring concentrations in the area. [3]
- EPA's sodium data point is the maximum value, was collected 18 months ago and is inconsistent with data collected since September 2010 (being consistently in the range of 70,000-80,000 ug/L). All of the concentrations detected fall within naturally occurring levels.

Resident 7 Ex. 6 - Personal Privacy

- EPA's arsenic value is below the primary maximum contaminant level and within naturally occurring background levels for the Susquehanna County area.
- EPA's manganese levels are within the naturally occurring background range.

Resident 8 Ex. 6 - Personal Privacy

- EPA's arsenic value cited is from a sample of the local public water supply that is provided to the town of Montrose by Pennsylvania American Water. It is not representative of the groundwater well. All the other arsenic values associated with the water well are below the primary maximum contaminant level.
- EPA's sodium concentration is from a data point that is more than two years old (collected 12/26/2009) and represents only a single point in time. The 18 other sample results available for sodium prior to and following this time were not considered by EPA. Nonetheless, all 19 sodium samples fall within that normally expected for the area and are below that reported for the public water supply for the Borough of Montrose.

---

[3] Hollowell, J. R. and Koester, H. E., 1975, Ground-water resources of Lackawanna County, Pennsylvania: Pennsylvania Geologic Survey, Fourth Series, Water Resource Report 41, 106 p.
Lohman, S. W., 1937, Ground water in northeastern Pennsylvania: Progress Report W4, Pennsylvania Geological Survey Fourth Series, 312 p.
Lohman, S.W., 1939, Groundwater in North-Central Pennsylvania: Commonwealth of Pennsylvania, Topographic and Geologic Survey Bulletin W4, 312 p.
Pennsylvania State University, 2006, Methane Gas and its removal from wells in Pennsylvania: Water Facts #24, The Pennsylvania State University, College of Agricultural Sciences, 2 p.
Wetterhall, W.S., 1959, The ground-water resources of Chemung County, New York: State of New York Department of Conservation Water Power and Control Commission, U.S. Geological Survey Bulletin GW-40, 58 p.

- As with sodium, EPA has selected the maximum value detected for manganese, discounting the majority of the results, including the most recent. All results fall within the naturally occurring concentrations in the area.
- The DEHP concentration cited by EPA is 2.61 ug/L and is below the primary drinking water level.