Attachment 6: Drinking Water Exposure Investigation
Dimock, PA Sample Results Letter

(ATSDR Letterhead)

Date

Dear NAME:

In July 2017 you allowed the Agency for Toxic Substances and Disease Registry (ATSDR) to take samples of your private well water and bulk water (if appropriate) and test them for chemicals. We also sampled indoor air at your home for radon gas. We are providing you with the test results in this letter. We thank you for allowing us to test your well. If you have any questions, please call or e-mail Robert Helverson at 215-814-3139, or by email at gfu6@cdc.gov

Sincerely,

Robert Helverson, MS
Region 3 Representative
Division of Community Health Investigations (DCHI), Eastern Branch
Agency for Toxic Substances and Disease Registry (ATSDR)

Enclosure (Will be chemical-specific writeups for each contaminant – see example below – up to date toxicological information and appropriate references will be included.)

Methane can increase risk for explosion

The methane level in your water (10 mg/L) was equal to the bottom end of the warning range set by the U.S. Department of the Interior (DOI). The possible buildup of methane gas indoors can increase the risk for an explosion. Drinking methane dissolved in well water is not considered a health concern.

Sodium is a health concern for people trying to limit salt intake

Sodium was found in your well at 24.2 mg/L, which exceeds the EPA DWEL advisory level of 20 mg/L. The level of 20 mg/L is intended to protect people who have high blood pressure or are on a sodium-restricted diet. Drinking water with a high level of sodium is a health concern for people who must limit how much salt they eat or drink. The taste of water is generally offensive to all users at levels of 200 mg/L and above because of the salty taste. Children are also sensitive to salt in their diet. People who drink this water and must limit their salt intake should discuss the levels of sodium in their water with their family doctor.

TDS may make water hard or salty

Total dissolved solids (TDS) were found in your well at 522 mg/L, which is above the EPA SMCL of 500 mg/L. TDS is a measure of dissolved substances in the water. If the TDS is high, then the water may be hard, stain, or taste salty. Based on taste, TDS levels greater than 1,100 mg/L are considered to be unacceptable for drinking water. Because the level in your well is above 500 mg/L, your water may taste salty.

Arsenic can increase the risk of cancer

Arsenic was found in your well water at 0.17 µg/L and does not exceed the EPA MCL of 10 µg/L or a non-cancer ATSDR screening level of 3 µg/L. Arsenic can increase the risk of cancer of the skin and lungs. The amount found in your well water exceeds the cancer screening value of 0.023 µg/L. If you consume the water for many years (70 years) and drink at least 2 liters a day, at the level detected in your water, there is a slight increased risk of developing cancer.

Iron may affect taste and cause staining

Iron was found in your well water at 758 µg/L, which is above the EPA SMCL of 300 µg/L Drinking the water with this amount of iron will not harm the health of a normal person but some people have a condition called hemochromatosis (body absorbs too much iron), and drinking water with too much iron may cause organ damage. Your water may have a bad taste (metallic), and a rusty color which can stain clothes and dishes after washing. Because the levels are above the SMCL, your water may not be suitable for drinking or cooking.

Lithium is a health concern if people are taking it for medical reasons

Lithium was found in your well at 31.7 µg/L which is above the screening level of 31 µg/L for children. Lithium is prescribed by doctors to treat mood disorders. Its use as a medicine should be closely monitored by a doctor because a person can experience side effects such as an upset stomach and effects on the kidneys and nervous system, if they take too much. A person taking lithium for medical reasons should consult their physician if they using this water for drinking or cooking.

TPH and Oil and Grease may affect taste and quality of water

TPH were found in your well water at 940 µg/L which is above the screening level defined by IDEM. Oil and Grease were found in your well water at a level of 2.6 mg/L (no screening level available). TPH and Oil and Grease are not normally found in drinking water supplies. Their presence may affect the taste and quality of your drinking water. Finding TPH in a water sample means that a range of hydrocarbons is present in your well water; this measurement is not specific to any one chemical. Unless we know what the chemicals were in this TPH mixture, we cannot tell you what this detection means for your health.