



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

October 29, 2015

Sean Wilkinson
Weber County Planning Director
2380 Washington Blvd. Suite 240
Ogden, UT 84401

Dear Mr. Wilkinson:

Subject: **Lakeview Water Company Source Capacity & Arsenic Compliance Status**, The Chalets at Ski Lake Phase 6 and Petersen Well (WS001), System #29024, File #9741

The Lakeview Water Company supplies drinking water to The Chalets at Ski Lake development south of Pineview Reservoir. Lakeview Water Company presently has two drinking water sources:

- Mitchell Well (East Well, also identified as WS001 in the Division's inventory database). The Division has established the safe yield of this well at 163 gpm in its database.
- Peterson Well (West Well, WS002). The Division has established the safe yield of this well at 60 gpm in its database. The arsenic level of this well was reported as 12.3 µg/L in the violation notice.

The Division of Drinking Water (Division) notified Lakeview Water Company on February 13, 2013, of its violation of the arsenic maximum contaminant level (MCL) found in Utah Administrative Code *R-309-200-5(1)* because the Peterson Well water exceeded the arsenic MCL of 10.0 µg/L. In order to come into compliance, the Lakeview Water Company has several options, including install an arsenic treatment facility for the Petersen Well, install a blending facility to blend the Peterson Well water with a low arsenic water source, or abandon the Peterson Well.

Ray Bowden is the present owner of the Lakeview Water Company and also the developer of The Chalets at Ski Lake. It is the understanding of the Division that during the approval process of Phase 6, Weber County required the developer to establish an escrow of \$90,000 for arsenic treatment of the Peterson Well. This was to ensure that the violation of the arsenic standard would be addressed. Lakeview Water Company elected to take the Peterson Well out of service while it pursued a permanent solution to the arsenic standard violation.

In June of 2014, Mark E. Babbitt, P.E., of Great Basin Engineering, approached the Division as the consultant for Lakeview Water Company with their desire to drill a new well near the existing Mitchell Well (WS001). It was anticipated that the water from the new well would meet arsenic standard and provide source capacity to replace the Peterson Well (WS002). The Division granted Plan Approval to drilling a new well, known as the Bowden Well (WS005) on December 30, 2014.

The Bowden Well has been drilled with a 12-inch casing. A 24-hour constant-rate aquifer drawdown test was conducted at 310 gallons per minute (gpm) starting on October 13, 2015. The drawdown in the well stabilized after two hours at 71.3 feet (water level 112.2 feet). The Mitchell Well water level was monitored during the pump test with the water level dropping from 34.9 feet to 44.5 feet during the test. The water level in this well recovered to 34.9 feet after one hour from turning the test pump off. However, the aquifer drawdown test was conducted by only turning on the new well. Therefore, there is not sufficient data to determine possible interference between these two nearby wells and what drawdown would be if both wells are in operation at the same time.

An arsenic sample of water from the new Bowden Well (WS005) was taken at the end of the 24-hour pump test and submitted to ChemTech-Ford Laboratories. The sample result was 6.8 µg/L arsenic, which is lower than the arsenic standard of 10.0 µg/L. This arsenic level is consistent with the historical arsenic levels in the existing Mitchell Well (WS001) during its required quarterly sampling.

Lakeview Water Company is moving forward with installing the power and permanent pump in the Bowden Well, and construction plans for a new well house which will serve both the Bowden Well and the Mitchell Well.

In a letter dated February 13, 2013, the Division approved plans for the Lakeview Water Company to construct 6,700 feet of 10-inch PVC water line from their 500,000-gallon concrete water storage tank (ST002) to The Chalets at Ski Lake development. This provided a second route to supply water from the upper tanks (ST001 And ST002) to The Chalets at Ski Lake development and improved the hydraulic performance of the system in providing fire flow. The Division granted an Operating Permit for this line on May 15, 2015. As part of the construction of the 10-inch water line, a new 4-inch PVC line was installed in the same trench. The 4-inch line could provide a connection from the Peterson Well (WS002) to the 500,000-gallon tank (ST002) and the ability to blend water with water from the new Bowden Well and the Mitchell Well. If Lakeview Water Company plans to use Peterson Well in the future by blending the water, the Division will require submittal of a blending plan with specific flow monitoring and control details for review before issuing an approval for blending.

Our understanding is that, at this time, Lakeview Water Company does not anticipate needing to use the Peterson Well (WS002) to meet the source capacity requirement and does not plan to put the 4-inch line into service. **Based on the information the Division received, it appears that the**

Sean Wilkinson
Page 3
October 29, 2015

new Bowden Well (WS005) will have adequate capacity to replace the Peterson Well (WS002).

If you have any questions regarding this letter, you can contact me either by phone at (801) 536-0054 or e-mail bhart@utah.gov.

Sincerely,



Bob Hart, P.E.
Environmental Engineer III

cc: Louis Cooper, Env. Director, Weber-Morgan Health Department, lcooper@co.weber.ut.us
Sean Wilkinsen, Weber County Planning Director, swilkinson@co.weber.ut.us
Chad Meyerhoffer, Weber County Engineering, cmeyerho@co.weber.ut.us
Mark E. Babbitt, P.E., Great Basin Engineering, Inc., markb@greatbasinengineering.com
Ray Bowden, Lakeview Water Company, alpumping@readytek.net
Bob Hart, Division of Drinking Water, bhart@utah.gov
Emily Fray, Division of Drinking Water, emilyfray@utah.gov
Jim Martin, Division of Drinking Water, jhmartin@utah.gov

DDW-2015-015507.docx

