



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF DRINKING WATER
Marie E. Owens, P.E.
Director

August 19, 2020

Central Iron County Water Conservancy District
John Jerome Juergens
88 E Fiddlers Canyon Rd,
Suite A
Cedar City, Utah 84721

Subject: **Plan Approval**, Well Drilling, Home Owner Well #2 (WS002);
Chekshani Cliffs HOA, System #11087, File #12184

Dear Mr. Juergens:

The Division of Drinking Water (the Division) received the plans and specifications for the drilling of Home Owner Well #2 from Justin Christensen, Ensign Engineering on July 27, 2020.

We understand that this project consists of drilling a new well for this water system. The well will be known in the Division's database as Home Owner Well #2 (WS002). It includes drilling a 30-inch diameter well borehole to an approximate depth of 1,000 feet. Also, a production casing of 12-inch diameter steel will be installed. The annular space between the 30-inch borehole and the 12-inch casing will be sealed with neat cement grout from the ground surface to a minimum depth of 115 feet. The remaining annular space to the bottom of the well will be filled with gravel pack. The 12-inch casing will have 3/8" milled perforations at water bearing depths that will be determined during the drilling process. The project also includes well development, constant rate pump testing, and collection of new source chemistry.

We have received the following information for the Home Owner Well #2 drilling project:

1. Plans and specifications for borehole and well drilling.
2. Preliminary Evaluation Report.

We have completed our review of the plans and specifications, stamped and signed by Curtis L. Nielson, P.E., and dated July 27, 2020, and found they basically comply with the applicable portions of *Utah's Administrative Rules for Public Drinking Water Systems*. On this basis, **the plans for drilling Home Owner Well #2 are hereby approved**. This approval pertains to well

John Jerome Juergens
Page 2 of 3
August 19, 2020

drilling, development, aquifer testing, and disinfection of Home Owner Well #2 only. Please be aware that discharge permits may be required by Utah Division of Water Quality for discharges generated during well drilling and aquifer drawdown testing.

The Utah Division of Water Rights (State Engineer's Office) regulates the drilling of water wells. **Before the drilling of a well commences, the well driller must receive a start card from the State Engineer's Office.** Please be aware that, for public drinking water supply wells, in addition to the Division of Drinking Water's *R309-515* rule, the Division of Water Rights' rule *R655-4* also applies and shall be followed.

After drilling is completed, you are required to submit additional information outlined in *R309-515-6(5)(b)* and *(c)* for review, and **obtain an approval from the Director for equipping this well and constructing discharge piping and infrastructure necessary for introducing the well water into the distribution system.** After obtaining the well equipping approval, you'll then be required to obtain an Operating Permit before Home Owner Well #2 may be put in service. A checklist outlining the well approval process, including the items required for well equipping and obtaining an Operating Permit, is enclosed for your information.

Please label the well water sample collected for new source chemical analysis with your water system number **UTAH11087** and **WS002** (for both the facility ID and sample point ID) on all laboratory forms for each individual source. This will ensure proper identification and entry of the new source chemical analysis results in our database.

Approvals or permits from the local authority or county may be necessary before beginning construction of this project. As the project proceeds, notice of any changes in the approved design, as well as any change affecting the quantity or quality of the delivered water, must be submitted to the Division. We may also conduct interim and final inspections of this project. Please notify us when actual construction begins so that these inspections can be scheduled.

This approval must be renewed if construction has not begun or if substantial materials have not been ordered within one year of the date of this letter.

Drinking Water Source Protection Requirement

We have also reviewed your submission of the Preliminary Evaluation Report (PER) for the Proposed Well, provided by your consultant, Ensign Engineering. **The Division concurs with this report. The PER must be refined and a complete Drinking Water Source Protection (DWSP) Plan submitted within one year of the date of this letter.** Refer to *R309-600-13(6)* and *R309-600-7(1)*. In lieu of land use agreements, you utilized the Iron County Drinking Water Source Protection ordinance (Chapter 13.16) to comply with *R309-600-13(2)(d)*. According to 13.16.080, the administration and enforcement of the ordinance is the responsibility and obligation of the owner of the public water system. As such, the administrative contact of the system must provide a statement indicating their understanding of this requirement and

John Jerome Juergens

Page 3 of 3

August 19, 2020

acknowledgment of the final source protection zones before the well can receive an operating permit. If you have any questions about the source protection requirements, please contact source protection staff at (801) 536-4200.

If you have any questions regarding this approval, please contact J. Paul Wright, DEQ Southwest District Engineer, of this office, at (435) 986-2590, or Michael Newberry, Engineering Manager, at (385) 515-1464.

Sincerely,



Michael Newberry, P.E.
Engineering Manager

JPW/mn/mrn/mdb

Enclosure — Well Approval Checklist

cc: Jeremy Roberts, Southwest Utah Public Health Department, joberts@swuhealth.org
J. Paul Wright, P.E., DEQ Southwest District Office, pwright@utah.gov
Justin Christensen, Ensign Engineering, jchristensen@ensigneng.com

DDW-2020-018670.docx

Division of Drinking Water
Checklist for New Public Drinking Water Wells
(per Utah Administrative Code, Rule R309-515-6)

System Name: _____ System Number: _____

Well Name & Description: _____

1. Approval to Drill the Well

- Project Notification Form (PNF)
- Preliminary Evaluation Report (PER) concurrence
- Well drilling specifications and plans
- Valid Start Card or authorization to drill letter from the Division of Water Rights

2. Approval to Equip the Well

- PNF (if the well drilling and well equipping are designed by different consultants)
- Well location data
- Certification of well seal
- Well driller's report (well log)
- Aquifer drawdown test results (step drawdown test & constant-rate test) for well yield determination
- Chemical analyses of the well water
- Plans and specifications for equipping the well
 - Pump information (e.g., pump specifications, pump curve & operating point, motor information, etc.)
 - Well head discharge piping
 - Well house design

3. Operating Permit to Introduce the Well Water

- Documentation of valid water right(s)
- Recorded land use agreements, or documentation that the requirements for coverage under the City/County source protection ordinance have been met
- Design engineer's certification of conformance with plan approval conditions
- Design engineer's certification of rule conformance for any deviation from approved plans
- As-built or record drawings
- Evidence of O&M manual delivery to system owner
- Satisfactory bacteriological results as evidence of proper flushing and disinfection