TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 14, 2022

Mr. John M. Hewitt, P.E., CFM
Hewitt Engineering Inc.
716 Barnett Street
Kerrville, Texas 78028

Re: Community Water Group WSC - PWS ID No. 1330145
Request for an Exception to the Well Log/Completion Data Requirement
Request for an Exception to the Well Casing Material Requirement
Request for an Exception to the Pressure Cementing Method Requirement
Well No. 2 (TCEQ Well ID: G1330145B)
Kerr County, Texas
RN 101273191 | CN 601358336

Dear Mr. Hewitt:

On August 4, 2022, the Texas Commission on Environmental Quality (TCEQ) received your letter dated July 29, 2022, requesting exceptions to the well completion data requirement specified in Title 30 of the Texas Administrative Code (30 TAC) §290.41(c)(3)(A), the well casing material requirement specified in 30 TAC §290.41(c)(3)(B), and to the requirement that all public water supply wells be constructed with a proper pressure cementing method as specified in §290.41(c)(3)(C). This request is for the Community Water Group WSC public water system (PWS) Well No. 2 (TCEQ Well ID: G1330145B), which is located at 1585 TX-39 in Hunt, Texas. Your submittal indicated Well No. 2 is an existing well being converted to a PWS well. Our review of your requests is below.

30 TAC §290.41(c)(3)(A) - Well Log/Completion Data Requirement

A PWS in the State of Texas is required to provide well completion data to the TCEQ for its review and approval prior to placing a well into use as a public water source. A PWS is also required to maintain the well completion data for all water wells in use that provide water for public consumption. These records may be necessary for review of the well groundwater conditions at the time the well was drilled, if a well subsequently exhibits contamination, and the cause and potential means of resolving the contamination needs to be determined. The well completion data also documents the well capacity and water quality at the time of its installation, which may be used as a benchmark to evaluate its current performance or water quality and provides documentation of the means and materials used in the construction of the well. A PWS is required to develop and submit certain documentation to the TCEQ in consideration for the granting of exceptions to these requirements.

Well log completion data is defined as the driller's log (geological log and material setting report), cementing certificate, the results of the 36-hour pumping test, the results of the microbiological and chemical testing as required by the Chapter 290 rules, legible copies of the recorded deeds for all PWS-owned real property within 150 feet of the well, legible copies of recorded sanitary control easements or other documents demonstrating compliance with the sanitary control easement requirement of the Chapter 290 rules, an original or legible copy of a United States Geological Survey (USGS) 7.5 minute topographic quadrangle map showing the

accurate location of the well, and a map showing the location of the well in relation to the surrounding property boundaries. Based on review of the submitted information, the TCEQ has determined that **additional information is required** to proceed with the review of the well completion data exception request. This request is now closed.

Attached is a copy of the TCEQ guidance document, *Well Completion Data Exception* (Enclosure 1), which can be used in the comprehensive development of all the required information for the well completion data exception. Please review the document to verify that all the required documentation for the exception is provided.

The status of the required well completion data exception information for Well No. 2, as provided to the TCEQ in the submittal, is as follows:

- **Driller's geological log:** A geological log for Well No. 2 or an acceptable substitute was not provided. In order for us to be able to consider granting an exception in lieu of the lithology for Well No. 1, **the PWS must provide a substitute geological log from a well within one quarter mile of Well No. 1.** Well reports with geological information can be found on the Texas Water Development Board Groundwater Data Viewer at the following web address:

  https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer

- **Material setting report:** A material setting report was not provided. If such a report is not available, please provide clear color photos of the wellhead. The photos need to be clear enough so that any of the manufacturer's markings that are visible can be read. Also document the casing materials and dimensions and provide the analytical results of a raw water lead sample from the well. As discussed below, please resubmit your exception request to the well casing material **requirement in 30 TAC §290.41(c)(3)(B) with the needed documentation.**
- **Cementing certificate:** A cementing certificate or a well report with adequate cementing data for Well No. 2 was not provided. As discussed below, please resubmit your exception request to the **pressure cementing method requirement in 30 TAC §290.41(c)(3)(B) with the needed documentation.**
- **36-hour pump test:** The PWS was not able to provide the results of a 36-hour pump test for Well No. 2. **Please provide the results of a 36-hour pump test or an acceptable alternative pump test for Well No. 2** as discussed in the enclosed *Well Completion Data Exception* guidance document. **If an alternative pump test is used in lieu of a complete 36-hour pump test, the PWS may request an exception to the 36-hour pump test requirement in 30 TAC §290.41(c)(3)(G).**
- **Microbiological test results:** The submittal did not include three consecutive days of negative raw water bacteriological samples for Well No. 2. **The PWS must provide three consecutive days of negative bacteriological results for raw water samples taken from Well No. 2.** The samples must be taken at the wellhead and prior to the disinfection injection point. The bacteriological analysis of the raw water samples must be performed by a TCEQ-accredited laboratory with a current NELAP certification. The samples must be taken no more than 6-months prior to the time that the sample results are submitted to the TCEQ for review.

- **Chemical analysis:** The submittal included partial results of a raw water chemical analysis for Well No. 2. **Please provide the complete current raw water chemistry analytical results from Well No. 2 analyzed by a TCEQ-accredited laboratory with a current NELAP certification.** The sample must be analyzed as a drinking water sample (i.e., drinking water matrix). The chemical constituents required for analysis are listed in Item 7 of the attached TCEQ document *Public Well Completion Checklist for Interim Approval (Step 2)* (Enclosure 3). The pH value for the raw water must be determined in the field at the time that the water sample is collected. A laboratory pH result will not be accepted. Raw water chemistry samples must be taken no more than 12-months prior to the time that the sample results are submitted to the TCEQ.
- **Recorded sanitary control easements:** An unrecorded copy of a sanitary control easement was provided for the property owned by Camp La Junta. It was noted that the Guadalupe River is within 150 feet of the well and the PWS will not be able to exercise sanitary control of this portion. If a PWS cannot obtain all the sanitary control easements for the surrounding properties within 150-feet of each well, an exception to the sanitary control easement requirement in 30 TAC §290.41(c)(1)(F) may be required. Please see Enclosure 4: Sanitary Control Easement Exception Checklist for guidance on this exception type.
- Recorded Deed: The PWS must submit a copy of the recorded deed for all real property owned by the PWS within 150-feet of Well No. 2.
- USGS 7.5-minute topographic map: A USGS topographic map showing the location of Well No. 2 was provided. **The provided information is acceptable for this requirement**.
- **Well site map:** the PWS must submit a map showing the location of Well No. 2, including latitude and longitude coordinates, in relation to the surrounding property boundaries.

30 TAC §290.41(c)(3)(B) – Well Casing Material Requirement
30 TAC §290.41(c)(3)(C) – Pressure Cementation Method Requirement

The submittal contained a Well Schedule for Well No. 2 from the Texas Water Development Board; however, the well log and cementing certificate for Well No. 2 was not available. As such, we have no information regarding the cementation method, annular space dimensions, depth of the pressure cementation, grouting mixture or volume of cement used in construction of Well No. 2. Without the required information cited below, a determination cannot be made regarding compliance with American Water Works Association (AWWA) Standards for Water Wells (A100) requirements. A material setting report for Well No. 2 is also not available and as such the well casing material below ground surface is unknown and undocumented. In the absence of documentation of the materials used in well construction, the TCEQ requires a raw water sample be analyzed for lead to verify that the construction materials are not leaching lead into the well's groundwater source.

The TCEQ Technical Review and Oversight Team reviews requests for exceptions to these rules based on well construction, geology, and the presence of sanitary hazards in the surrounding area. Based on our review, additional information is required to **complete our evaluation** of your requests for an exception to the well casing material and pressure cementing method requirements at this time. Please provide the information listed below to complete our review of your exception requests:

1. Photographs of the well site, wellhead, and well casing above ground surface.
2. A description of the well casing material, diameter of the casing, depth of water level, and any well construction details.

3. Results of a raw water sample from the proposed well analyzed for lead to verify that the construction materials are not leaching lead into the groundwater source. The raw sample must be analyzed for lead at a TCEQ-accredited laboratory with a current National Environmental Laboratory Accreditation Program (NELAP) certification. Please ensure that the raw water sample is collected within 6 months of your future submittal to the TCEQ.
4. Legible, official copies of recorded SCE agreements for the adjacent properties within 150-feet of Well No. 2.

In support of your exception request, you provided the following information:

- FEMA flood rate map and a USGS 7.5-minute quadrangle map for Well No. 2;
- A statement regarding the well material and depth of pressure cementing of Well No. 2;
- Texas Water Development Board Well Schedule for Well No. 56-62-412;
- An incomplete copy of the chemical analysis;
- An unrecorded copy of the sanitary control easement granted by Camp La Junta; and
- A statement that prohibited sanitary hazards are not located within a 150-foot radius of Well No. 2.

Please note that the documents received in your original request are not retained; therefore, those original documents will also need to be provided when you submit the requested items. The TCEQ's review of your original exception request has been closed. If you have questions concerning this letter, or if we can be of additional assistance, please contact Mr. Trenton Chalk at Trenton.halk@tceq.texas.gov or (512) 239-5207, or any member of the Technical Review and Oversight Team at PTRS@tceq.texas.gov.

Sincerely,

Stephanie Escobar

Stephanie Escobar, Team Leader
Technical Review and Oversight Team
Plan and Technical Review Section
Water Supply Division
Texas Commission on Environmental Quality

SJE/tmc

Enclosure 1: *Well Completion Data Checklist*
Enclosure 2: *Pressure Cementing Exception Checklist*
Enclosure 3: *Public Well Completion Checklist for Interim Approval (Step 2)*
Enclosure 4: *Sanitary Control Easement Exception Checklist*

cc: Mr. Ross Rommel, President, Community Water Group WSC, P.O. Box 136, Hunt, TX 78024-0136
Mr. Lawrence Graham, Manager, Community Water Group WSC, P.O. Box 136, Hunt, TX 78024-0136

bcc: TCEQ San Antonio Regional Office – R13

WELL COMPLETION DATA EXCEPTION

Rules Affected: Title 30 Texas Administrative Code (30 TAC) §290.41(c)(3)(A) and §290.46(n)(3)

Background

A Public Water System (PWS) is required by 30 Texas Administrative Code (30 TAC) §290.41(c)(3)(A) to submit well completion data for review and approval by the Texas Commission for Environmental Quality (TCEQ) prior to using a well for public consumption. Additionally, 30 TAC §290.46(n)(3) requires the PWS to maintain copies of the well completion data for the life of the well. A well completion data exception may be required if a PWS does not have a record of receiving approval by the TCEQ (or predecessor agency) of the well completion data for a new well, for an existing well being converted for use as a PWS well, or if the PWS cannot provide the well completion data when requested.

Well completion data is defined as follows:

1. Driller's log (geological log and material setting report);
2. Cementing certificate;
3. 36-hour pump test;
4. Microbiological testing results;
5. Chemical testing results;
6. Legible copies of the recorded deeds for all real property owned by the PWS within 150-feet of the well;
7. Legible copies of recorded sanitary control easements or other documents demonstrating compliance with the sanitary control easement for all property located within 150-feet of the well not owned by the PWS;
8. An original or legible copy of a United States Geological Survey 7.5 minute topographic quadrangle map showing the accurate location of the well; and
9. A map showing the location of the well in relation to the surrounding property boundaries.

When a PWS cannot provide documentation of receiving approval of a PWS well from the TCEQ, as a first step, the PWS should verify that it has all records pertaining to the well. The PWS should request copies of all correspondence pertaining to the water system from TCEQ's Central Records. Please note that Central Records will not search the files for specific items; they will simply copy the files that are available. Also, TCEQ staff cannot research the files for the PWS. For more information on obtaining copies from TCEQ Central Records, please visit the TCEQ Record Services website[i].

Other sources that may have documentation or records pertaining to the well include the local health department, local water well drillers, groundwater conservation districts, and the Public Utility Commission of Texas.

Guidance

If the needed well completion data is not found, a Well Completion Data Submittal Exception may be required. Note that if the information which comprises well completion data is not available, other types of exception requests may also be necessary. Discussed below are the items that comprise well completion data, and the materials which must be submitted by a PWS in order for the TCEQ to consider granting an exception to the well completion data submittal requirement or to the recordkeeping requirement. Please note that all documents are required to be submitted to the TCEQ when requesting an exception request pertaining to well completion data.

1. *Driller's Log* – This documentation consists of the geological log and material setting report that is typically provided by the driller. The geological log, in its simplest form, describes at what depth various types of soil materials are encountered. A material setting report typically describes the quantities, dimensions, and types of materials used in the construction of the well. It may also include pump information, such as pump manufacturer and pump capacity (gallons per minute) at a specified total dynamic head. The geological log and material setting report may both be provided on a *State of Texas Well Report* (well report) form completed by the well driller.

   If the geological information for the well is not available, the PWS must provide acceptable replacement geological information. The replacement geological information that will be considered by the TCEQ includes the following:

   - Substitute driller's logs or well reports from existing nearby wells – The submitted substitute driller's logs or well reports must document a sufficient clay layer considered to be protective of the source, and must be for wells that are at least as deep as the PWS well. In the event that the depth of the PWS well is not known, or if the available substitute driller's logs are for wells that are not as deep as the PWS well, the TCEQ, at its discretion, may accept the substitute driller's logs provided the driller's logs verify the presence of a sufficient protective layer exists above the first water bearing unit. The submitted substitute driller's logs or well reports must be from wells no farther than ¼-mile from the PWS well. The driller's log or well reports must be accurately plotted on a United States Geological Survey (USGS) Map 7.5 Minute map as discussed later in this document.

   If there are no water wells documented within ¼-mile of the PWS well, but there are water wells with documented locations within 1-mile of the PWS well, please contact the Technical Review and Oversight Team at 512-239-4691 to discuss if the driller's logs or well reports from these wells may acceptable substitutes for the PWS driller's log.

   The following webpage is a resource for locating PWS wells which might be candidates for substitute drillers logs or well reports:

   TCEQ Source Water Assessment Viewer[ii]

Searchable resources for well logs are as follows:

Texas Water Development Board Groundwater Data Viewer[iii]

TCEQ Water Well Report Viewer[iv]

- A soil boring to collect the data – If acceptable substitute geological logs or well reports are not available, the PWS must install a soil boring to obtain the geological information and generate a replacement geological log. The depth of the soil boring must be at least equal to the depth of the PWS well, and be located at a distance of no further than 50-feet from the PWS well. If the depth of the PWS well is unknown, then the soil boring must be installed at least to the depth of the groundwater strata typically used for a water source in the area, as documented by driller's logs or well reports from other wells in the area. A licensed water well driller must install the soil boring, and it must also be plugged with cement in compliance with the regulations of the Texas Department of Licensing and Regulation. A copy of the geological log or well report for the soil boring and plugging report, signed and dated by water well driller, must be provided to the TCEQ as a part of the documentation for the well completion data exception.

When the original material setting report is not available, the PWS may supply certain documentation as a replacement material setting report. In order for the TCEQ to consider a replacement material setting report as a part of a well completion data exception, the following needs to be submitted by the PWS:

- Well Material Characterization – If there is no documentation of the materials used in the well, the PWS should request an exception to the well casing material requirement in 30 TAC §290.41(c)(3)(B) prior to the TCEQ granting a well completion data exception. The PWS must provide documentation of the well casing material as can be determined by the portion of the casing above the sealing slab. The documentation must include casing diameter and material. Clear photos of the casing must also be provided. The PWS must also provide copies of invoices for any repairs or equipment replacement, or any reports such as previously performed downhole videos that can provide information regarding the construction of the well or pumping equipment. A raw water sample analyzed for lead at a TCEQ-accredited laboratory with a current National Environmental Laboratory Accreditation Program (NELAP) certification, utilizing Environmental Protection Agency (EPA) approved methods, must be provided.

2. Cementing Certificate – A cementing certificate is typically provided to the PWS by the well driller at the time that the well is drilled. It documents the cementing method and materials used to seal the annular radius of the well. In order for the cementing certificate to be considered acceptable by the TCEQ, the document must include the cement mix (gallons of water per sack), amount and type of any additives added to the cement mix, the total amount of cement used (sacks), the depth of the well cemented, and the pressure cementation method. This information may also be found on the well report. If this information is

unavailable, or if the available information indicates that the annular radius seal does not comply with the Chapter 290 rules, the PWS may request an exception to the pressure cementation method requirement in 30 TAC §290.41(c)(3)(C) concurrent with the well completion data exception request. The PWS may request an exception by providing the information found on the pressure cementing exception checklist[v].

Granting of a pressure cementing method exception by the TCEQ will satisfy the cementing certificate requirement required for the well completion data.

3. *36-Hour Pump Test* – The 36-hour pump test is performed when the well is installed to develop the well and to determine its capacity. If this information is unavailable, the PWS may request an exception to the 36-hour pump test requirement in 30 TAC §290.41(c)(3)(G) concurrent with the well completion data exception request. Since an existing well should be developed, the point of the exception is to address well capacity. Two options, dependent on the status of the well, are available to do this:

   - The TCEQ has tested and rated the well– If the well has been issued a TCEQ Source ID number and has a tested or rated capacity listed in the TCEQ database, the PWS needs to document if the portion of the PWS served by the well has had water outages or boil water notices due to the well in the past 10 years. Documentation required to be provided by the PWS of these instances include the dates when the outages or boil water notices occurred, and their causes. If the TCEQ determines that the outage or boil water notices occurrences are caused by problems with the well that have not been corrected, it may require the PWS to collect daily water production data for 18 months as a requirement for granting an exception. A search of the Texas Drinking Water Watch database may be helpful in determining if a well rating exists for a particular well. The Texas Drinking Water Watch webpage can be accessed at the following address:

     Texas Drinking Water Watch[vi]

   - The well is currently not rated by the TCEQ – If the water system is not registered with the TCEQ, the well has not been issued a TCEQ Source ID number, or if the well does not have a tested or rated capacity in the TCEQ database, the PWS must determine the capacity of the existing well. The method required to be used to determine the actual capacity of a well depends on type of PWS.

     A PWS that has been classified as a community system must perform a 36-hour pump test to rate the well. A PWS classified by the TCEQ as a transient, or non-transient non-community water system is encouraged to perform a 36-hour pump test, but is not required to use this method to determine tested well capacity. The 36-hour pump test will be considered to be a substitute for the pump test that was required to be performed at the time the well was drilled and used to rate the well. In order to reduce water usage, shorter pumping periods may be accepted under the following conditions:

1. The pumping rate remains constant for at least four hours, and the pumping period has been a minimum of 24 hours; or,

2. The pumping rate remains constant for at least four hours, and a straight-line trend is observed on a plot of water level versus a logarithm of time during pumping and recovery.

Regardless of the method, the pump test procedure must comply with Section 5.1 of the most current edition of the American Water Works Association (AWWA) Standard A100, and a minimum of a four-hour resting period is required between prior pumping and the test itself.

A PWS that has been classified as a transient system or non-transient non-community water system may opt to provide well capacity information based on actual water usage. Actual water usage must be determined by rated well pump capacity and pump run times, as documented by an accurate elapsed time meter (ETM). The ETM must record run time to a minimum of one tenth of an hour. The well capacity will be determined on the daily recorded ETM measurements for 30 consecutive days. Note that the 30 day recording period cannot include periods of scheduled shut-down or system inactivity. For a PWS that typically experiences a time of peak water usage due to, but not limited to, production demand or seasonal demand, the 30 day period must capture this peak water usage.

4. *Microbiological Test Results* – Documentation of three consecutive days of raw water bacteriological sampling with negative results performed at the time the well was installed is required as a condition for use of a PWS well. The laboratory that performed the bacteriological analysis must have been accredited by the TCEQ or a predecessor agency at the time of the sampling. If this information is unavailable, the PWS must provide substitute analytical results consisting of three consecutive days of raw water sampling. The sampling must be performed within 6 months of the submittal of a request for an exception to the well completion data requirement. The samples must be analyzed at a TCEQ-accredited laboratory with a current NELAP certification. For a list of TCEQ-accredited laboratories see the Texas NELAP lab list[vii]. Note the chlorine residual level of the sample at the time the sample was collected (e.g. field measurement) must be included with the sample results and must be a numerical measurement of 0 (zero)(e.g. not "N/A").

5. *Chemical Analysis* - Documentation of a chemical analysis of the raw water performed at the time that the well was installed is required as a condition for use of a PWS well. The PWS must provide the results of a recent sampling event performed within 12 months of the submittal of a request for an exception for well completion data. The chemical sample results must be provided for the constituents currently required by regulation, and be analyzed at a TCEQ-accredited laboratory with a current NELAP certification, utilizing EPA approved methods. The required constituents are listed in Item 7 on the Well Completion Data checklist[viii]. Note the pH of the sample must be taken at the time the sample was collected (e.g. field measurement). Results of laboratory pH measurement are not acceptable.

6. *Recorded Deed(s)* – The PWS is required to supply documentation in the form of a legible, official copy of the recorded deed(s) and recorded easements, as appropriate, indicating its ownership of all real property within 150-feet of the well, or right to access the PWS well to insure that operation and maintenance activities can be performed. There is no substitute for this requirement. Unrecorded or unofficial copies of deeds or easement agreements are not acceptable.

7. *Recorded Sanitary Control Easements* – The PWS is required to supply documentation in the form of a legible, official copy of the recorded sanitary control easement (SCE) for all property within 150-feet of the well that it does not own. If a PWS does not have recorded SCEs for all property that it does not own within 150-feet of a PWS well, the PWS should acquire the needed SCE(s) prior to submitting the request for a well completion data exception. If the PWS cannot acquire a needed SCE, it may request an exception to SCE requirement by providing the information found on the sanitary control easement exception checklist[ix]. Unrecorded or unofficial copies of an SCE are not acceptable.

   The SCE exception must be submitted concurrently with the well completion data exception request. Note that a PWS with ordinance powers may substitute an enacted ordinance for otherwise needed SCEs.

8. *United States Geological Survey (USGS) 7.5 Minute Topographic Quadrangle Map* The well location shown on a current version of the appropriate USGS map or exact scale replica is an acceptable substitution if a USGS map contemporary with the installation of the well is not available. Photocopies of the USGS map are not acceptable due to distortion inherit in the photocopy process.

9. *Well Location Map* – A map indicating the boundaries of the well property and surrounding properties as they exist currently is an acceptable substitution if a map contemporary with the installation of the well is not available.

If you have questions regarding this guidance document or need to discuss some specific issue in complying with its requirements as they apply to your PWS, you may call 512-239-4691 and ask to speak to a member of the Technical Review and Oversight Team.

Finalized and Approved by:

Joel Klumpp, Plan and Technical Review Section Manager, 10/15/2019

If no formal expiration date has been established for this external guidance, it will remain in effect until superseded or canceled.

Revision History:

Date	Action	Action by
2/24/2016	Approved	Joel Klumpp
8/4/2016	Approved	Joel Klumpp
5/24/2017	Approved	Joel Klumpp
10/20/2017	Revised	Michael McDevitt
05/08/2018	Approved	Joel Klumpp
10/15/2019	Approved	Joel Klumpp

[i] http://www.tceq.texas.gov/agency/data/records-services/fileroom.html
[ii] https://www.tceq.texas.gov/gis/swaview
[iii] http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer
[iv] http://www.tceq.texas.gov/gis/waterwellview.html
[v] http://www.tceq.texas.gov/assets/public/permitting/watersupply/pdw/Pressure_Cementing_Method_Exception_Checklist.docx
[vi] http://dww2.tceq.texas.gov/DWW/
[vii] http://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf
[viii] https://www.tceq.texas.gov/assets/public/permitting/watersupply/ud/forms/Public_Well_Completion_Data_Checklist_(2-2019).pdf
[ix] http://www.tceq.texas.gov/assets/public/permitting/watersupply/pdw/Sanitary_Control_Easement_Exception_Checklist.docx

Sanitary Control Easement Exception Checklist

If a public water system (PWS) does not own all of the property within a 150-foot radius for a given public water well in its system, 30 TAC §290.41(c)(1)(F) requires that the PWS attempt to acquire a 150-foot sanitary control easement (SCE) from the adjacent land-owners in order to isolate the well from potential pollution hazards. The SCE protects the well by prohibiting some types of future site uses or the future installation or construction of some types of site improvements on the portions of the adjoining property within 150 feet of its well. Note that if potential pollution hazards are known or suspected to exist within 150 feet of the PWS well, a request for a Well Setback Distance Exception may need to be made in addition to the SCE request.

If the landowners refuse to grant the easement, an exception to TCEQ's SCE requirements may be requested. Note that if a portion of the right-of-way for a road, highway, and/or railroad is within the 150-foot radius of the PWS well, this portion of the right-of-way will need to be included as a part of the SCE exception. Exceptions to the SCE requirement may be made by providing the following information **for each well** to the following address:

Technical Review and Oversight Team (MC-159)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Please provide as much of the documentation below as possible:

□ State of Texas Well Report (Driller's Log) [1, 3]
□ Driller's Geological Log [1, 2, 3]
□ Cementing Certificate (cement type and any additives used, number of sacks, and volume pumped) [1, 2, 3]
□ Casing depth and material [1, 2, 3]

1. **Lack of this information may require the submittal of a Well Completion Data and/or Record Keeping Exception request.**
2. **This information may be included on Well Driller's Log or as a separate document.**
3. **Lack of this information may require the submittal of a Pressure Cementing Exception request.**

If you do not have a copy of the State of Texas Well Report (well driller's log), it may be available in the State database. In order to perform a search of the state well database please view the information at the following webpage:

http://www.tceq.texas.gov/drinkingwater/SWAP/wells.html

Other searchable resources for well logs include:

http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer

https://gisweb.tceq.texas.gov/waterwellpublic/

Additionally, the following information must accompany the exception request:

□ A general location map and a detailed site map (include a scale and north arrow) or plat of the well site and surrounding affected properties identifying:

a. Location of the well.
b. The area within a 150-foot radius around the well.
c. Property boundaries for all properties within 150 feet of the well. Identify the property by the name of the property owner and legal description.

Information about property owners, legal descriptions of properties, and boundaries may be found at the appropriate county appraisal district website:

http://www.texascad.com/

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□ A legible, official copy of recorded deed or deeds of all real property owned by the PWS within 150 feet of the well.

□ Provide a statement confirming the actual or suspected presence, or absence of the following hazards. **Note that if a hazard is present or suspected to be present, include its location on the map that will be submitted with the Exception request.**

Any of the following within **50 feet** of the well:	Any of the following within **150 feet** of the well:
• Sanitary or storm sewer [1] • Septic tank or other tanks used to hold or treat sewage • Cemetery • Livestock and feedlots **1. Sanitary or storm sewers constructed of ductile iron or PVC pipe with a working pressure of at least 150 pounds per square inch and meeting American Water Works Association standards, and with pressure type joints may be located at a distance of less than 50-feet, but no closer than 10-feet to the well. Note that building drain lines must comply with this setback requirement.**	• Aboveground or below ground sanitary wastewater disposal areas including but not limited to septic tank drainfields, drip irrigation drainfields, or spray irrigation areas • Improperly constructed [2], abandoned, or inoperable Water well • Underground petroleum or chemical storage tank • Liquid petroleum or chemical transmission pipeline • Landfill and dump sites • Military and industrial facilities • Sewage treatment plant or sewage wet well • Drainage ditch containing industrial or municipal waste discharges • Solid waste disposal sites • Area where sewage plant or septic tank sludge or effluent is applied • Any other potential hazards or contamination sources **2. Improperly constructed wells include all wells not constructed to public water well standards (e.g. residential wells, industrial wells, agricultural wells).**

□ A copy of your correspondence* with each adjacent land-owner for properties where sanitary control easements could not be obtained. Correspondence to adjacent land-owners must:

a. Include a 30-day review period for the easement request;
b. Be within one (1) year of the date of the exception request;
c. Be documented by a certified mail receipt; and
d. Include a copy of the sanitary control easement with a completed legal description of the property for each of the adjacent landowners within 150 feet of the well.

***Correspondence with the landowner is not required if the property is public land (i.e., flood control district, military base, etc.), a road, or railroad right-of-way.**

If a PWS is a political subdivision, it may adopt an enforceable ordinance in lieu of obtaining sanitary control easements. For a copy of a sample ordinance, call the TCEQ's Plan and Technical Review Section at (512) 239-4691 to contact a member of the Technical Review and Oversight Team.

If a PWS owns all land within 150-foot radius of the well, no exception is necessary. The water system must keep on file a copy of the recorded deed and map demonstrating such ownership and make it available to TCEQ staff upon request.

Blank sanitary control easements can be downloaded at the following website:

https://www.tceq.texas.gov/assets/public/permitting/watersupply/ud/forms/20698.pdf

For assistance in completing an exception request, you may call 512-239-4691 and ask to speak to a member of the Technical Review and Oversight Team.

Pressure Cementing Method Exception Checklist

Title 30 of the Texas Administrative Code (30 TAC) §290.41(c)(3)(C) requires that for each public water system well, the annular space between the casing and the drill hole be sealed by a pressure cementing method, in accordance with the American Water Works Association (AWWA) Standards for Water Wells (A100-06), Appendix C:

a) Section C.2 (Positive Displacement Exterior Method);
b) Section C.3 (Interior Method Without Plug);
c) Section C.4 (Positive Placement, Interior Method, Drillable Plug); or
d) Section C.5 (Placement Through Float Shoe Attached to Bottom of Casing)

A cementing certificate and/or bonding log, as well as other documentation, may be required to ensure complete sealing of the annular space. Additional information detailing the cement specifications, including the type of cement and percentage of bentonite, is also helpful. If this well information is not available, or the existing information does not show this level of detail, an exception to TCEQ's pressure cementing method may be requested by correspondence to the following address:

Technical Review and Oversight Team (MC-159)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Please provide as much of the documentation below as possible:

□ State of Texas Well Report (Driller's Log) [1]
□ Driller's Geological Log [1, 2]
□ Casing depth and material [1, 2]
□ Legible, official copy of recorded sanitary control easement(s) for all property not owned by the PWS, within 150 feet of the well. [3]

1. Lack of this information may require the submittal of a Well Completion Data and/or Record Keeping Exception request.
2. This information may be included on Well Driller's Log or as a separate document.
3. Lack of this information may require submittal of a Sanitary Control Easement Exception request.

If you do not have a copy of the State of Texas Well Report (well driller's log), it may be available in the State database. In order to perform a search of the state well database please view the information at the following webpage:

http://www.tceq.texas.gov/drinkingwater/SWAP/wells.html

Other searchable resources for well logs include:

http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer

https://gisweb.tceq.texas.gov/waterwellpublic/

Additionally, the following information <u>must</u> accompany the exception request:

□ A general location map and a detailed site map (include a scale and north arrow) or plat of the well site and surrounding affected properties identifying:

a. Location of the well.
b. The area within a 150-foot radius around the well.
c. Property boundaries for all properties within 150 feet of the well. Identify the property by the name of the property owner and legal description.

Revised 09/01/2017

Information about property owners, legal descriptions of properties, and boundaries may be found at the appropriate county appraisal district website:

http://www.texascad.com/

□ Detailed map (include the scale and north direction arrow) or plat identifying:

a) Location of the well; and
b) Nearby hazards (see table below).

□ A statement confirming the actual or suspected presence, or absence of the following hazards. **Note that if a hazard is present or suspected to be present, include its location on a map that is to be submitted with the Well Setback Exception request.**

<table>
<tr>
<td>Any of the following within 50 feet of the well:
• Sanitary sewer[1]
• Septic tank other tanks used to hold or treat sewage or sewerage appurtenance
• Storm sewer[1]
• Cemetery
• Livestock in pastures

1. Sanitary or storm sewers constructed of ductile iron or PVC pipe with a working pressure of at least 150 pounds per square inch and meeting American Water Works Association standards, and with pressure type joints may be located at a distance of less than 50 feet, but no closer than 10 feet to the well. Note that structure drain lines must comply with this setback requirement.</td>
<td>Any of the following within 150 feet of the well:
• Septic tank perforated drainfield
• Areas irrigated by low dosage, low-angle-spray on-site sewage facilities
• Absorption and/or evapotranspiration bed
• Improperly constructed water well[2]
• Underground petroleum and chemical storage tank
• Liquid petroleum or chemical transmission pipeline

2. An improperly constructed well includes all wells not constructed to public water well standards (e.g. residential wells, industrial wells, agricultural wells).</td>
</tr>
<tr>
<td>Any of the following within 300 feet of the well:
• Sewage wet well
• Sewage pumping station
• Drainage ditch which contains industrial waste discharges or wastes from sewage treatment systems</td>
<td>Any of the following within 500 feet of the well:
• Sewage treatment plant
• Animal feed lots
• Solid waste disposal sites
• Lands on which sewage plant or septic tank sludge is applied
• Lands irrigated by sewage plant effluent</td>
</tr>
<tr>
<td colspan="2">Any pollution hazards within 0.25-miles of the well including but not limited to:
• Known abandoned or inoperative wells
• Landfills
• Dumpsites
• Animal feed lots
• Military facilities
• Industrial facilities
• Wood-treatment facilities
• Liquid petroleum and petrochemical production, storage and transmission facilities
• Class 1, 2, 3, 4, or 5 injection wells
• Pesticide storage and mixing facilities</td>
</tr>
</table>

For assistance in completing an exception request, you may call 512-239-4691 and ask to speak to a member of the Technical Review and Oversight Team.

Public Well Completion Data Checklist for Approval to Use (Step 2)

Texas Commission on Environmental Quality
Water Supply Division
Plan Review Team MC-159
P.O. Box 13087, Austin, Texas 78711-3087

Public Water System I.D. No._____
TCEQ Log No. P-_____

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561 or downloaded from the website: http://www.tceq.texas.gov/rules/indxpdf.html

Any well proposed as a source of water for a public water supply must have plans approved for construction by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below for TCEQ evaluation. Based on review of this submitted data, approval may be given for use of the well.

1. ☐ Site map(s) at appropriate scales showing the following: [§290.41(c)(3)(A)]
   - ☐ (i) Final location of the well with coordinates;
   - ☐ (ii) Named roadways;
   - ☐ (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
   - ☐ (iv) Concentric circles with the final well location as the center point with radii of 10 feet, 50 feet, 150 feet, and ¼ mile;
   - ☐ (v) Any site improvements and existing buildings;
   - ☐ (vi) Any existing or potential pollution hazards; and
   - ☐ (vii) Map must be scalable with a north arrow.
2. ☐ A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following: [§290.41(c)(1)(F)(iv)]
   - ☐ (i) Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
   - ☐ (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
   - ☐ (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
3. ☐ Construction data on the completed well: [§290.41(c)(3)(A)]
   - ☐ (i) Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
   - ☐ (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
   - ☐ (iii) Casing size, length, and material (e.g. 200 lf of 12" PVC ASTM F480 SDR-17);
   - ☐ (iv) Length and material of any screens, blanks, and/or gravel packs utilized;
   - ☐ (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
   - ☐ (vi) Driller's geologic log of strata penetrated during the drilling of the well;
   - ☐ (vii) Cementing certificate; and

Public Well Completion Data Checklist for Approval to Use (Step 2)

- ☐ (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).

4. ☐ A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
5. ☐ Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
   - ☐ (i) Test pump capacity in gpm, tdh in feet, and horsepower of the pump motor;
   - ☐ (ii) Test pump setting depth;
   - ☐ (iii) Static water level (in feet); and
   - ☐ (iv) Draw down (in feet).
6. ☐ Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
7. ☐ Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these tests. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in milligrams per liter (except arsenic which is in micrograms per liter). [§290.41(c)(3)(G) and§290.104 and §290.105]

Table 1: Primary Constituents with Maximum Contaminant Level (MCL)

PRIMARY	MCL
Nitrate	10 (as N)
Nitrite	1 (as N)
Arsenic	10
Fluoride	4.0

Table 2: Secondary Constituents with Secondary Contaminant Level (SCL)

SECONDARY	SCL
Aluminum	0.2
Copper	1.0
Iron	0.3
Manganese	0.05
Zinc	5.0
Total Dissolved Solids	1,000
Fluoride	2.0
Sulfate	300
Chloride	300
pH	> 7.0

Public Well Completion Data Checklist for Approval to Use (Step 2)

Table 3: Water Quality Parameters

PARAMETER	UNITS
Alkalinity as CaCO3	mg/L
Calcium as CaCO3	mg/L
Sodium	mg/L
Lead*	mg/L

Lead is regulated by the lead and copper rule. This analyte is to document the amount of lead in the source water. The level shall be less than 0.010 mg/L for approval to use.

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for approval to use of the well.

Table 4: Radionuclides with Maximum Contaminant Level (MCL)

CONTAMINANT	MCL
Gross alpha	15 pCi/L
Radium-226/228	5 pCi/L
Beta particle	50 pCi/L
Uranium	30 µg/L

WHERE: pCi/L = pico curies per liter, µg/L = micrograms per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

List of Counties Where Radionuclide Testing Is required

Please be aware that we have added the requirement for analysis for radionuclides for high risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

Table 5: List of Counties where Radionuclide Testing is required

COUNTY				
Atascosa	Bandera	Bexar	Bosque	Brazoria
Brewster	Burnet	Concho	Culberson	Dallam
Dawson	Erath	Fort Bend	Frio	Garza
Gillespie	Gray	Grayson	Harris	Hudspeth
Irion	Jeff Davis	Jim Wells	Kendall	Kent
Kerr	Kleberg	Liberty	Llano	Lubbock
McCulloch	Mason	Matagorda	Medina	Midland
Montgomery	Moore	Parker	Pecos	Polk
Presidio	Refugio	San Jacinto	San Saba	Tarrant
Travis	Tyler	Upton	Val Verde	Victoria
Walker	Washington	Wichita	Williamson	Zavala