

# **Review and Approval of Public Water System Engineering Plans**

## **Addendum #7**

(Revision 2)

### **Quality Assurance Project Plan for the Texas Commission on Environmental Quality Public Water System Supervision Program Relating to the Safe Drinking Water Act**

(Revision 14)

Effective

November 10, 2022



## List of Acronyms

Acronym	Definition
API	area of primary influence
CA	corrective action
CCN	Certificate of Convenience and Necessity
CN	customer number
DWQT	Drinking Water Quality Team
EPA	Environmental Protection Agency
OW	Office of Water
PE	professional engineer
PRT	Plan Review Team
PTRS	Plan and Technical Review Section
PUC	Public Utility Commission
PWS	Public Water System
PWSS	Public Water System Supervision
QA	quality assurance
QAPP	Quality Assurance Project Plan
QMP	Quality Management Plan
RN	regulated entity number
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SOP	standard operating procedure
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
THSC	Texas Health and Safety Code
WSD	Water Supply Division
WUD	Water Utilities Database

## **(A) Project Management**

### **A1 Approval**

The following individuals are signatories on this QAPP Addendum because they are responsible for management and assurance of quality of the work described.

#### **Joel Klumpp, Section Manager**

Texas Commission on Environmental Quality (TCEQ) / Office of Water (OW) / Water Supply Division (WSD) / Plan and Technical Review Section (PTRS)

Signature: Joel Klumpp Date: 09/09/2022

#### **Jessica Hoch, PWSS Program Lead Quality Assurance Specialist**

TCEQ/OW/WSD

Signature: Jessica Hoch Date: 09/09/2022

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## **A3 Distribution List**

The PWSS Program Lead Quality Assurance Specialist (QAS) ensures the individuals on the distribution list in Section A3 of the QAPP Programmatic document receive a copy of the Programmatic QAPP and Addenda. Redistribution occurs when amendments or revisions are approved and published.

The Team Leader of the TCEQ Plan Review Team ensures the QAPP is distributed, or otherwise made available to all participants specified in Section A4 of this QAPP Addendum.

The current, approved version of the Programmatic QAPP and Addenda are maintained on the [TCEQ PWSS Program](http://www.tceq.texas.gov/drinkingwater/pwss.html)<sup>1</sup> webpage.

## **A4 Project/Task Organization**

The TCEQ's Plan Review Team (PRT) performs reviews of engineering plan submissions by public water systems. This team is organized within the WSD's Plan and Technical Review Section. Section A4 of the Programmatic QAPP document describes roles and responsibilities of key individuals in TCEQ WSD.

The individuals/groups listed below participate directly in activities related plan reviews.

### **A4.1 Plan Review Team Leader**

Leads the PRT to ensure plan review requirements related to the PWSS Program (e.g., oversight, SOPs, corrective actions, equipment, supplies, training, reporting, data/information management, etc.) are implemented. Coordinates with management as needed and required. Is a registered professional engineer in the State of Texas, see Section A8.1. Reviews all approval and disapproval letters prior to send out.

### **A4.2 Engineering Staff Reviewers**

Approximately 10 engineers and five contractors on the PRT are assigned to review complex engineering plans and specifications for compliance with state and federal regulations. The engineering staff provides technical assistance to and/or consults with consulting engineers, water system operators, and the general public on rule interpretations; performs engineering evaluations to determine plan feasibility and conducts detailed engineering work for major public drinking water projects; prepares technical reports with recommendations for use by the TCEQ and the general public; and analyzes the engineering design of water facilities. The reviewers prepare draft response letters to all engineering submittals. The response letters involve approvals, disapprovals, and/or requests for additional information.

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<sup>1</sup> [www.tceq.texas.gov/drinkingwater/pwss.html](http://www.tceq.texas.gov/drinkingwater/pwss.html)

### **A4.3 Business Plan Reviewers**

Business plan reviewers are responsible for reviewing engineering plan documents for financial and managerial capability and preparing a memo for the engineering reviewers regarding these capabilities.

### **A4.4 Administrative Staff Reviewers**

Administrative staff are responsible for entering and tracking the engineering plan submittals in the Water Utilities Database (WUD) which provides a tracking mechanism for completeness and timeliness objectives. Administrative staff also finalize the approval and “unable to approve” letters that are sent out to the PWSs as part of the review the review process.

## **A5 Problem Definition and Background**

The Texas Health and Safety Code (THSC), Chapter 341, Subchapter C describes the duties of the TCEQ relating to the implementation of the Safe Drinking Water Act (SDWA) and the regulation and control of PWSs. Pursuant to the THSC Chapter 341 Subchapter C, the TCEQ reviews plans and specifications for all planned construction related to PWSs not exempted by THSC Chapter 341.035(d). The statute also requires the TCEQ to be notified of any subsequent material changes, improvements, additions, or alterations in existing systems, and consider compliance history in approving new or modified PWS.

The TCEQ review of plans and specifications conform to requirements in the 30 Texas Administrative Code (TAC) §290. According to 30 TAC §290.39, construction on a new PWS may not begin before receiving written approval of plans and specifications from the TCEQ. In addition, if a significant change to an existing system is planned, construction may not begin without written notification and the approval of plans and specifications. Significant changes to a PWS that warrant plans and specifications to be reviewed by the TCEQ include:

- Increase or decrease in capacity related to
  - Distribution
  - Treatment
  - Production
  - Pressure
  - Storage
- Any other material changes

The TCEQ reviews plans and specifications using checklists described in Section A9. The checklists are based on technical criteria and standards to ensure the engineering plan reviews are consistent and comply with state and federal rules and regulations. The “users” of these reviews include both the TCEQ and the PWSs.

Activities conducted during the review and approval of PWS engineering plans can be considered environmental data operations as defined in the TCEQ Quality Management Plan (QMP) and Environmental Protection Agency (*EPA Requirements for QAPPs, EPA QA/R-5*). As such, the QA processes regarding organization, planning, implementation, and assessment must be addressed in a QAPP which is

reviewed and approved by the EPA. This document is written as an addendum to the PWSS Programmatic QAPP to facilitate its management, review, and future revision.

## **A6 Project/Task Description**

The TCEQ has separate processes as described below for the two types of engineering plan review and approvals-new PWS construction and significant changes to existing PWSs.

### **A6.1 New PWS Construction**

PWSs submit engineering plans for new construction to the TCEQ PRT. The first level of review determines the plans' completeness as described in the Standard Operating Procedure Administrative Review of New PWS Submittals. If the administrative reviewer determines that the plans include all major components in the submittal, then the project is acceptable for further review. Per the work instructions, all new PWS engineering plans must be prepared properly and be signed, sealed, and dated by a professional engineer. Electronic submittals are accepted. If submitted in hard copy only, two copies of each of the following components must be included with the submittal:

- Complete Core Data Form and Plan Review Submittal Form
- Business Plan information, if required.
- Proof of submission of Certificate of Convenience and Necessity (CCN) application to the Public Utility Commission (PUC) if applicable; and request for service documentation, if applicable
- Copies of applications sent to neighboring retail PWSs and the responses
- Engineering report
- Plans and specifications

If the engineering firm has not submitted all of the required documents, such as the submittal form, drawings, or specifications, the PRT prepares an administrative review letter within seven days requesting this information. The PWS is given 30 days from the date of the letter to respond.

If deemed administratively complete, the PRT Leader assigns one copy of the plans to the Technical PRT who reviews plans against rules and regulations. The other copy is given to the Business Plan (BP) reviewer for its review of the Business Plans. This process typically takes 30 days. At this point, if both the Technical PRT and the BP approve the plans, the PRT requests a PWS identification number from the DWSF by transferring the submittal file and establishes the monitoring schedule. Once DWSF has completed entering the system information, DWSRF sends the core data form to Central Registry. Central Registry then assigns the Customer Number (CN) and the Regulated Entity Number (RN) within seven days. The draft approval letter is prepared by the PRT staff and reviewed by the PRT Team Leader. The administrative staff then finalizes an approval letter to be sent to the PWS. The DWSF enters the proposed system information into SDWIS. The whole process takes no more than 60 days.

## **A6.2 Significant Changes or Modifications to Existing PWSs**

PWSs submit one copy of their engineering plans to the TCEQ PRT for review for completeness and technical adequacy as described in the *PRT Standard Operating Procedure for Processing Mail, Logging Plan Submittals into the WUD and Plan Assignment*. If the administrative reviewer determines that the plan includes all major components in the submittal, then the project is acceptable for further review.

If the engineering firm has not submitted all of the required documents, such as the submittal form, drawings and specifications, and/or other pertinent information, then the administrative reviewer contacts the submitting engineer by email or telephone requesting the additional information.

Once a plan is deemed complete by the administrative reviewer, the submittal is logged into the WUD by administrative staff and assigned a log number. Plans for changes or modifications are reviewed similarly to new system requests with the exception of a business plan review, assignment of the PWS identification number by DWSF staff, and the assignment of CNS and RNs by Central Registry. The PRT Leader assigns the plans to a technical reviewer to evaluate them against applicable rules and regulations. If approved, the administrative staff finalizes the "approval letter." This whole process also takes no more than 60 days.

## **A7 Quality Objectives and Criteria**

The TCEQ's objective for reviewing and approving PWS engineering plans is consistent with the overall objective of the SDWA to protect drinking water and public health. Consequently, as the state's environmental agency, the TCEQ can provide better protection of the health of all Texas citizens currently served by PWSs and all those who consume water from the systems. The specific objectives related to the review and approval of PWS Engineering Plans as described below reflect the objectives specified in the Programmatic QAPP.

### **Objectives and Project Decisions**

The PWSS Program's goal for this project is to accurately and consistently assess engineering plans submitted by PWSs, and document, within established timeframes, whether the system will be financially stable, technically sound, and can supply adequate quantities of safe drinking water.

The following data quality objectives apply to the review and approval of PWS engineering plans. A combination of the following: management oversight, peer review, staff training, experience, staff coordination, standardized review processes pursuant to 30 TAC §290 and the SDWA, plan review checklists, and strict adherence to allotted timeframes ensure the data quality objectives described below are met.

#### **Accuracy**

Accuracy is a reflection of correctness. The accuracy of the plans and specifications, Core Data Forms, Plan Review Submittal Forms and the Business Plan is assessed



by the engineers on the PRT and BP staff and the DWSF. To ensure accuracy, plans are compared to appropriate checklist(s) which contain applicable rule citations from Title 30 §290.

### **Completeness and Timeliness**

Completeness reflects a relationship of how much of the data or information are available for use compared to the total potential data. All engineering plans must be complete and contain all required components pursuant to state rule. Timeliness refers to the time allotted for the review and approval process to ensure compliance with TCEQ policy regarding permit reviews. Engineering plans are reviewed within a 60-day timeframe to which the PRT strictly adheres.

### **Compliance**

All TCEQ requirements associated with PWS engineering plans have been developed to be consistent with state rules and federal regulations pursuant to the SDWA. Plans are reviewed by technical reviewers who have the required experience and training to ensure engineering plans comply with TCEQ requirements, rules, and regulations. Staff training and coordination, as well as standardized checklists which include rule citations, also contribute to compliance.

### **Data Integrity**

Data and information collected by the TCEQ from the PWSs are managed in such a way to ensure the confidentiality, integrity, and availability of data and information. Data management policies and procedures ensure data and information are recoverable and only used for their intended purposes.

## **A8 Special Training/Certifications**

TCEQ personnel performing work on this project are qualified and trained to perform their assigned work per Section A8 of the Programmatic QAPP document.

The personnel described below have had specialized training in the subject matter related to the operations described in this addendum in order to successfully manage and assess PWS engineering plans.

### **A8.1 PRT Team Leader**

The PRT Leader has an engineering degree and is registered as a professional engineer in the State of Texas. This designation gives the Team Leader the expertise to ensure the technical activities associated with reviewing and approving PWS engineering plan are performed accurately and conform to applicable rules and regulations. As a professional engineer, the Team Leader attends annual training for professional development. The TCEQ also arranges for onsite professional development provided by vendors, trade associations, and senior staff which the Team Leader may also attend.

## **A8.2 Engineering Staff Reviewers**

All engineering staff reviewers have degrees in engineering, and the majority are registered as Professional Engineers (P.E.) in the State of Texas. Engineering curricula and on-the-job training to become a P.E. provides background and expertise on PWS design. The team leader assigns each new staff person to a senior level P.E. to provide mentoring and one-on-one training. The engineering staff is encouraged and funded to attend additional specific training on applicable drinking water topics annually. The engineering staff also attends onsite professional development provided by vendors, trade associations, and senior staff. The engineering staff also reads and researches trade journals and EPA documents for specific information needed for reviewers.

## **A9 Documents and Records**

### **A9.1 QA Project Plan Distribution**

The distribution of the QAPP is described in Section A3 of this QAPP Addendum.

### **A9.2 Documents and Records**

The documents and records that describe, specify, instruct, and report engineering plan review and approval activities are listed in Table A9.2.

**Table A9.2 Documents and Records**

<b>Document or Record</b>	<b>Purpose</b>	<b>Format/Location</b>
QAPP for the PWSS Program Relating to the SDWA	Programmatic QAPP describes requirements and activities of the PWSS Program to assure quality and quantity of drinking water in Texas as well as compliance with the SDWA	Electronic: <a href="https://www.tceq.texas.gov/drinkingwater/pwss.html">https://www.tceq.texas.gov/drinkingwater/pwss.html</a>
Review and Approval of Public Water System Engineering Plans - QAPP Addendum # 7	Project specific addendum to the overall Programmatic QAPP that addresses QA processes for engineering plan review and approvals to plan, implement, and assess associated activities. This addendum format facilitates review and future revisions to the Programmatic QAPP.	Electronic: <a href="https://www.tceq.texas.gov/drinkingwater/pwss.html">https://www.tceq.texas.gov/drinkingwater/pwss.html</a>
TCEQ QMP	TCEQ document that describes the organizational arrangements, processes, procedures, and requirements of the TCEQ QA Program	Electronic: <a href="https://www.tceq.texas.gov/agency/qa">https://www.tceq.texas.gov/agency/qa</a>
PRT Standard Operating Procedures for Administrative Review of New PWS Submittals	Describes the administrative procedure in the PRT review for new PWSs	WSD Network Drives
PRT Standard Operating Procedures for Plans Technical Review Process and Generating a Response Letter from WUD	Describes the TCEQ procedure for reviewing and approving engineering plans for construction of PWS facilities	WSD Network Drives
PRT Standard Operating Procedures for Processing Mail, Logging Plan Submittals into the WUD and Plan Assignment	Describes the administrative procedure in the PRT for logging submittals received into the WUD	WSD Network Drives
Forms and Checklists for PWS Operators Submitting Plans or specifications	Checklists for water systems submitting plans or specifications for review to ensure completeness of plan packages	Electronic: <a href="https://www.tceq.texas.gov/drinkingwater/udpubs.html">https://www.tceq.texas.gov/drinkingwater/udpubs.html</a>
Engineering plan submittal information and TCEQ approval/disapproval letters	Records that may include PWS engineering package and TCEQ correspondence	Submittals stored in TCEQ's Central File Room
Submittal data	Data records including name of PWS, contact information, ID numbers, etc,	Electronic: Water Utility Database/Water Districts Database

## **(B) Data Generation and Acquisition**

### **B1 Sampling Process Design**

Not Applicable.

### **B2 Sampling Methods**

Not Applicable.

### **B3 Sample Handling and Custody**

Not Applicable.

### **B4 Analytical Methods**

Not Applicable.

## **B5 Quality Control**

The PRT reviews and approves engineering plans to ensure adherence to the quality control objectives described in Section A7. As stated in Section A7, a combination of management oversight; peer review, staff training, experience, and coordination; standardized review processes pursuant to 30 TAC §290 and the SDWA; plan review checklists; and strict adherence to allotted timeframes ensure the data quality objectives are met.

Quality control checks such as positive and negative controls, etc. which apply to the analysis of environmental samples are not applicable to this project.

## **B6 Instrument/ Equipment Testing, Inspection, and Maintenance**

Not Applicable.

## **B7 Instrument/Equipment Calibration and Frequency**

Not Applicable.

## **B8 Inspection/Acceptance of Supplies and Consumables**

Not Applicable.

## **B9 Non-Direct Measurements**

Water quality data are required to be submitted to the TCEQ as part of the engineering plan package per 30 TAC §290.41(a). Water quality data are acquired and evaluated by the TCEQ based on its source-ground or surface water.

For surface water sources, a PWS or proposed PWS submits water quality data according to 30 TAC §290.41(e)(1)(F). Before TCEQ approval of a new surface water source, the system provides results of source water quality analyses including total coliform, *E. coli*, turbidity, alkalinity, hardness, bromide, total organic carbon, temperature, color, taste and odor, regulated volatile organic compounds, regulated synthetic organic compounds, regulated organic compounds, and possible sources of contamination.

For ground water, PWSs are required to submit the water quality data following the *Public Well Completion Data Checklist for Approval to Use* guidance. See Exhibit 1. Plans are reviewed for compliance with Rules and Regulations for PWSs Title 30 TAC §290.38-49.

Water quality samples for both surface and groundwater sources are required to be analyzed at an accredited laboratory per 30 TAC §25.

## **B10 Data Management**

The data management process for engineering plan reviews, from generation to final use or storage, is similar for both new systems and modifications to current systems. Specific data management practices described below ensure proper tracking and control to ensure integrity and maintenance of data and information as well as compliance with allotted timeframes for review.

## **B10.1 New PWSs Engineering Plans**

The administrative reviewer of the PRT determines if the plan includes all major components as described Section A6. If so, reviewer creates a memo, that's saved on the server and updates the Excel tracking log with the status of the plan (accepted/unaccepted) within seven days. If it is determined that the plan is incomplete due to lack of the major items in the submittal package, the administrative reviewer drafts an administrative review letter requesting additional information within 30 days. If the responses are not received within 30 days, then the entire submittal package is rejected and needs to be resubmitted.

If the plan is accepted by the administrative reviewer and submitted electronically, the memo is shared with administrative staff who log in the submittal. If accepted and submitted by hard copy only, the procedure is the same except one copy of the submittal is forwarded to the business plan reviewer and the other copy gets reviewed by engineering staff on the Plan Review Team. The business plan reviewer and the engineering staff are allotted approximately 30 days to review the plan. Once the plan is approved, the DWSF assigns the system a number and adds it to the PWS inventory with a proposed monitoring schedule. Also, Central Registry assigns the system a CN and a RN. An approval letter is drafted, signed, and sent to the PWS. The letter is logged into the WUD database by entry of the Final Action Date and project status. The administrative staff will email a signed copy of the letter to the reviewer who will then save that copy of the letter in a common directory on the network J Drive. After the review is final, the submittal cover letter and the associated submittal form, reports, and contracts (if applicable) are routed to TCEQ's Central File Room for record keeping purposes.

## **B10.2 Changes or Modifications to Existing PWSs**

The data management process for changes or modifications to existing PWS engineering plans is similar to new PWS engineering plan requests except the business plan reviewers do not get a copy of the submittal forms and Central Registry does not assign and log new CNs and RNs to the pre-existing systems. The DWSF also does not assign and log a system ID number.

# **(C) Assessment and Oversight**

## **C1 Assessments and Response Actions**

### **C1.1 Corrective Actions (CA)**

All TCEQ staff working on behalf of this QAPP are responsible for identifying deficiencies when there are nonconformances with established procedures involving the performance of their work. Deficiencies may be identified during the performance of routine work, or during audits and oversight.

Most nonconformances are not "deficiencies" as addressed in this section. Staff routinely encounter, document, and correct technical and procedural nonconformances at the point of origin using established procedures defined in SOPs that include documentation of problem, solution, implementation and follow-

up. These nonconformances are documented at the point of origin and maintained with the applicable project records. However, the level of corrective action described in this section may be warranted when established procedures don't prevent a situation from recurring.

### **C1.1.1 Deficiencies Requiring a Corrective Action Plan**

Deficiencies are unique nonconformances that cannot be corrected by established procedures and will require actions to be defined and documented in a corrective action plan (CAP) within 14 days. Upon detection of a deficiency, staff are responsible for notifying their management in writing.

For this project, deficiencies may involve, but are not limited to the following situations.

- Plan review results or conclusions that are jeopardized
- Nonconformances with state or federal regulations
- Intentional misrepresentation of data or information
- Repeat nonconformances or deviations from standard practices

The preparation of CAPs is assigned to appropriate staff by managers who are responsible for assuring that CAPS are:

- Appropriately prepared, reported, implemented, and verified effective.
- Implemented in ways that will most likely eliminate the problem and prevent recurrence.
- Forwarded to PWSQA@tceq.texas.gov within 14 days of initial notification.

The PWSS Program Lead Quality Assurance Specialist, or designee, receives and reviews CAPs to determine if actions planned to resolve the deficiency are acceptable, provides feedback on any items determined to be insufficient, tracks reported CAPs, and may monitor implementation. Appropriate staff may be designated to review and track corrective actions that are not deemed significant, as described in C1.1.3.

### **C1.1.2 Required Content for a CAP**

The procedure for preparing a CAP following the identification of a deficiency begins with an investigation to determine the root cause(s). Procedures for CAPs are specified in laboratory, contractor, or PWSS Program SOPs. Management selects and implements CAPs that will mostly like eliminate the problem, prevent recurrence, and are appropriate for the magnitude and degree of risk of the deficiency.

CAPs must include the following information:

- Description of the deficiency
  - What happened, how was it identified, and the date identified?
- Root cause

- What was the underlying cause? Why did the deficiency occur?
- Programmatic or data impact(s)
  - How did the deficiency affect data or program decisions and what was reviewed (including timeframe) to determine the impact?
- Corrective action taken
  - What was done to correct the deficiency?
- Timeline for corrective action(s)
- Documentation
  - How will the corrective action(s) be documented?
- Actions to prevent recurrence
  - What actions will be taken to prevent the deficiency from occurring again? These must be distinctly different from the corrective actions.
- Timeline for action(s) to prevent recurrence
- Documentation
  - How will the preventative action(s) be documented?
- Verification of effectiveness
  - Who will verify effectiveness, when will verification occur, and how will verification be documented?

The TCEQ QA Program has developed a standardized template form that may be used, TCEQ QAF-005. This template can be accessed through the [TCEQ Quality Assurance](#)<sup>2</sup> webpage under the Corrective Action Process section. The form is also available by request at PWSQA@tceq.texas.gov.

### **C1.1.3 Significant Deviations**

The PWSS Program Lead Quality Assurance Specialist determines whether an identified or reported deficiency is a significant deviation as defined by, but not limited to, any of the following:

- It jeopardizes the integrity of results or conclusions.
- Results in non-conformance with state or federal regulations.
- Was associated with the intentional misrepresentation of data or information.

The PWSS Program Lead Quality Assurance Specialist will forward information related to CAPs for significant deviations to the TCEQ QA Manager, WSD Grant Manager, affected Deputy Director(s), Program and Section Managers within 30 days of receipt of the CAP, as applicable. The Lead Quality Assurance Specialist will monitor the implementation and completion of CAPs related to significant deviations and advise management of the status of the CAP (recurring, closed, etc.).

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<sup>2</sup> [www.tceq.texas.gov/agency/qa](http://www.tceq.texas.gov/agency/qa)

## **C1.2 Authorization to Stop Work**

TCEQ management will authorize work stoppage if conditions are identified that indicate compliance is in jeopardy or if primacy requirements are not being met. The PWSS Program Lead Quality Assurance Specialist, Grant Manager, or TCEQ QA Manager may also request a work stoppage.

## **C2 Reports to Management**

The PRT provides status reports to TCEQ management monthly. The reports contain the number of plan reviews received, number processed, total pending under review, average processing time, maximum processing time, minimum processing time, number exceeding target, and list of PWS reviews completed. These reports help to ensure timeliness of reviews. CA reports and reports of significant deviations are reported as described in Section C1.

## **(D) Data Review and Usability**

### **D1 Data Review, Verification, and Validation**

For the purpose of this activity, verification refers to the evaluation of completeness, correctness, and conformance/compliance of the engineering plans, data, information, and letters with regulatory and procedural requirements to determine exceptions. In general, validation extends the evaluation of data beyond regulatory and procedural requirements (i.e. data verification) to determine its quality so it can be qualified appropriately. Engineering plan reviews result in approvals or disapprovals of plans based on the implementation of TCEQ processes. Situations do not exist in which data or information is validated for subsequent use.

### **D2 Verification and Validation Methods**

The TCEQ review of engineering plans is overseen by professional engineers who mentor junior level engineers who have not yet received their licenses and review their work. Weekly staff meetings are used to communicate, discuss issues, review decisions, coordinate reviews and provide training. The team leader reviews all approval and disapproval letters before being sent out.

### **D3 Reconciliation with User Requirements**

The “users” of the engineering plan reviews include both the TCEQ and the PWSs who have requested the review. The TCEQ either approves plans or disapproves plans during multiple steps in the review process as described in Section A6. Plans which are disapproved do not comply with the quality objectives described in Section A7; plans which are approved comply with those quality objectives. The TCEQ documents the reasons for disapproval or approval and all correspondence with the PWS. For each PWS engineering plan disapproval, the PWS has the opportunity to address the deficiency described in the letter and resubmit the plans.



## Exhibit 1: Public Well Completion Data Checklist

The current version of the Public Well Completion Data Checklist for Approval to Use (Step 2) can be found on the TCEQ webpage for [Forms and Checklists for Submitting Plans or Specifications for Public Water Systems](#)<sup>3</sup>.

It is listed under the "Checklists" header as "Well Completion Data Checklist For Approval To Use - Step 2" and available for download as a [PDF](#)<sup>4</sup> or [Word](#)<sup>5</sup> document.

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<sup>3</sup> [www.tceq.texas.gov/drinkingwater/udpubs.html](http://www.tceq.texas.gov/drinkingwater/udpubs.html)

<sup>4</sup> [www.tceq.texas.gov/downloads/drinking-water/plan-technical-review/forms/checklist-well-completion-data.pdf](http://www.tceq.texas.gov/downloads/drinking-water/plan-technical-review/forms/checklist-well-completion-data.pdf)

<sup>5</sup> [www.tceq.texas.gov/downloads/drinking-water/plan-technical-review/forms/checklist-well-completion-data.docx](http://www.tceq.texas.gov/downloads/drinking-water/plan-technical-review/forms/checklist-well-completion-data.docx)