

TESTING REQUIREMENTS FOR PRIVATE WELLS

Private well water that is used for processing, cleaning and/or as an ingredient in a facility that manufactures food and does not fall under the jurisdiction of TCEQ as a public water system, 30 TAC 290.38(63), will be subject to DSHS rules under 25 TAC 229.217(1)(B)(ii) and require special testing. [Private wells serve less than 25 employees/customers.] Wells that serve 25 or more employees/customers in a food processing facility are required to be registered with TCEQ as a public water system (PWS). TCEQ Water Supply Division: (512) 239-4691.

Private Wells not required to be registered with TCEQ as a PWS and used in food manufacturing operations must conduct the following testing:

Monthly - Bacteriology Analysis or documentation of free chlorine residual (0.2 ppm – 4.0 ppm) if well is chlorinated. Most local health departments perform water bacteriological analysis to determine the presence of coliform. For seasonal operations, testing can be done just prior to operation startup and monthly thereafter as long as production occurs.

Once every 3 years

Inorganic contaminants: Firms must test for the following at least once every three years and may not exceed the following limits:

Contaminant	Max level (mg/L)
Nitrate	10 (as Nitrogen)
Nitrite	1 (as Nitrogen)
Nitrate & Nitrite (total)	10 (as Nitrogen)

Secondary Constituent Levels: Firms must test water for the following every three years and may not exceed the following limits:

Constituent	Max level (mg/L unless otherwise noted)
Aluminum	0.2
Chloride	300
Color	15 color units
Copper	1.0
Corrosivity*	Non-corrosive
Fluoride	2.0
Foaming agents*	0.5
Hydrogen sulfide*	0.05
Iron	0.3
Manganese	0.05
Odor	3 Threshold Odor Number
PH	>7.0
Silver	0.1
Sulfate	300
Total Dissolved Solids	1,000
Zinc	5.0

**DSHS Lab does not perform these tests.*

Laboratories certified for chemical analysis and microbiological analysis are listed on the TCEQ website at: https://www.tceq.texas.gov/field/qa/env_lab_accreditation.html

Click on the “List of Accredited Laboratories” link. If not working call (512) 239-3754. For questions, e-mail labprgrms@tceq.texas.gov. **Not all labs will do testing for individuals. Some labs listed are only certified to do their own testing such as for a city water system.**

TCEQ General Information Phone Number (512) 239-6343.

Texas Department of State Health Services Lab Environmental Sciences Branch (888) 963-7111 ext. 7587 toll free
(512) 458-7587 Fax: (512) 458-7757

ADDRESSING PRIVATE WATER WELL TESTING ISSUES

If water tests positive for coliform:

1. **Retesting:** If a sample is found to be coliform-positive, four repeat samples must be taken. The four repeat samples may be collected all on the same day, or one per day for four consecutive days. If any of the repeat samples are found to be coliform-positive, four repeats must be submitted again. This process continues until one set of four coliform-negative sample results are obtained. If your firm was processing between the time that the water was sampled, and coliform-positive sample results were received, any product produced during that time frame may be subject to recall.
2. **Water Well Disinfection:**

TCEQ Water Well Disinfection Instructions:

<http://www.tceq.state.tx.us/assets/public/response/storm/ike/safewell.pdf>

TCEQ Approved Bleaches for Well Disinfection:

http://www.tceq.state.tx.us/permitting/water_supply/pdw/disinfection/approved_bleach.html

If inorganic contaminants and/or secondary constituent levels exceed maximum levels (MCLs):

1. 40 CFR 141.62(c) which can be found at: <https://www.gpo.gov/fdsys/pkg/CFR-2002-title40-vol19/pdf/CFR-2002-title40-vol19-sec141-62.pdf> specifies the following approved methods to reduce the levels of nitrate and nitrite:

<u>Nitrate</u>	<u>Nitrite</u>
Ion Exchange	Ion Exchange
Reverse Osmosis	Reverse Osmosis
Electrodialysis	

2. EPA Guidance : <http://www.epa.gov/safewater/consumer/2ndstandards.html>
 - Conventional treatments will remove a variety of secondary contaminants. *Coagulation/flocculation* and *filtration* removes metals like iron, manganese and zinc. *Aeration* removes odors, iron and manganese. *Granular activated carbon* will remove most of the contaminants which cause odors, color, and foaming.
 - Non-conventional treatments like *distillation*, *reverse osmosis* and *electrodialysis* are effective for removal of chloride, nitrates, total dissolved solids and other inorganic substances. However, these are fairly expensive technologies and may be impractical for smaller systems.

EPA Ground Water Rule Corrective Actions Guidance Manual, Nov 2008:

<http://yosemite.epa.gov/water/owrccatalog.nsf/7322259e90d060c885256f0a0055db68/f310b3b78421047285257513005694e4!opendocument>

3. Contact a company with a Licensed Water Treatment Specialist or Licensed Water Operator.

TCEQ website: http://www.tceq.state.tx.us/nav/main/business_licensing.html