

# ATTACHMENT A-1

## *Public Water Supply*

The following violations are PWS violations for which TCEQ has agreed with the EPA to take formal enforcement action upon discovery of the violation (Category A8).

a. Public Water Supply

(1) In accordance with EPA's revised Enforcement Response Policy (ERP) for the Public Water System Supervision Program under the Safe Drinking Water Act and implementation of EPA's Enforcement Targeting Tool (ETT), any public water system with a score resulting from the application of the ETT which is greater than or equal to 11 points will escalate to formal enforcement action.

**Calculation method utilizing the ETT formula:**

For each public water system, a point score of noncompliance is calculated using the following formula:

$\text{ETT Score} = \text{Sum } (S_1+S_2+S_3 \dots) + \text{max } (n)$
--

Where:

**S** = violation severity factor

Tier	Severity Points	Description
1	10	Acute, health-based violations, such as: AMCLs, AMRDLs, SWTR and GWR Treatment Technique violations.
2	5	Any other health-based violations, such as MCLs, MRDLs, and non-SWTR and GWR Treatment Techniques and Nitrate monitoring and reporting.
3	1	Any other Monitoring and Reporting (M/R) violations such as public notice, consumer confidence, chemical M/R, and microbiological M/R.

**n** = violation age

The violation age "n" is the difference, in years, between the current date and the violation date for the oldest violation which has not returned to compliance or been formally enforced upon. "n" is calculated as the number of months between the

violation date and the current date divided by 12. After calculating for “n”, all digits after the decimal point shall default to 0 (i.e., if the n is 3.8, then n = 3, if n = 0.9, then n = 0). The “n” value shall be a maximum of 5.

The following table illustrates examples of how a public water system may exceed the 11-point threshold:

<b>Violations (S)</b>	<b>Years since first unaddressed violation (n)</b>	<b>Score (ΣS)+ n</b>	<b>Total Score</b>
2 acute turbidity exceedances	8 months between first violation and current date (8/12 = 0.6)	(10+10) +0	20
2 nitrate monitoring violation	12 months between the first violation date to current date (12/12 = 1)	(5+5) +1	11
11 monthly public notice violations	11months between first violation to current date (11/12 = 0.91)	(1+1+1+1+1+1+1+1+1+1+1) + 0	11
6 quarterly TTHM monitoring violations, 1 annual nitrate monitoring violation	18 months between the first violation to the current date (18/12 = 1.5)	[(1+1+1+1+1+1) +5] + 1	12
Failure to monitor annual VOC, SOC, IOC, DBP2 and 2 nitrate monitoring violations	28 months between the first violation to the current date (28/12 = 2.3)	[(1+1+1+1) +5+5] + 2	16

## Significant Deficiencies for Groundwater Facilities

Beginning December 1, 2009, when identified at a groundwater system, the following violations should be a category A or B violation as specified in the EIC and could be subject to 40 CFR Subpart S and 30 TAC 290 Subchapter D regarding significant deficiencies of the Groundwater Rule. Significant deficiencies must be corrected within 120 days or less, unless otherwise a part of a state approved corrective action plan. (NOV)

### 1. Source

No well site which is within 50 feet of a tile or concrete sanitary sewer, sewerage appurtenance, septic tank, storm sewer, or cemetery; or which is within 150 feet of a septic tank perforated drainfield, areas irrigated by low dosage, low angle spray on-site sewage facilities, absorption bed, evapotranspiration bed, improperly constructed water well, or underground petroleum and chemical storage tank or liquid transmission pipeline will be acceptable for use as a public drinking water supply. Sanitary or storm sewers constructed of ductile iron or polyvinyl chloride (PVC) pipe meeting American Water Works Association (AWWA) standards, having a minimum working pressure of 150 pounds per square inch (psi) or greater, and equipped with pressure type joints may be located at distances of less than 50 feet from a proposed well site, but in no case shall the distance be less than ten feet. (TD or SS)

### 2. Treatment

- (a) All groundwater must be disinfected prior to distribution. The point of application must be ahead of the water storage tank(s) if storage is provided prior to distribution. Permission to use alternate disinfectant application points must be obtained in writing from the executive director. (TD)
- (b) Disinfection equipment shall have a capacity at least 50% greater than the highest expected dosage to be applied at any time. It shall be capable of satisfactory operation under every prevailing hydraulic condition. (TD)
- (c) All processes involving exposure of the water to atmospheric contamination shall provide for subsequent disinfection of the water ahead of ground storage tanks. Likewise, all exposure of water to atmospheric contamination shall be accomplished in a manner such that insects, birds, and other foreign materials will be excluded from the water. Aerators and all other such openings shall be screened with 16-mesh or finer corrosion-resistant screen. (TD)

### 3. Distribution

- (a) Testing equipment. Accurate testing equipment or some other means of monitoring the effectiveness of any chemical treatment or pathogen inactivation or removal processes must be used by the system. (TD)
- (b) The disinfection equipment shall be operated to maintain the following minimum disinfectant residuals in each finished water storage tank and throughout the distribution system at all times:
  - a free chlorine residual of 0.2 milligrams per liter (mg/L); or (24 hours)
  - a chloramine residual of 0.5 mg/L (measured as total chlorine) for those systems that feed ammonia. (24 hours)

### 4. Finished Water Storage

No public water supply elevated storage or ground storage tank shall be located within 500 feet of any municipal or industrial sewage treatment plant or any land which is spray irrigated with treated sewage effluent or sludge disposal. (TD or SS)

### 5. Pumps, Pump Facilities, and Controls

- (a) Upon well completion, or after an existing well has been reworked, the well shall be disinfected in accordance with current AWWA standards for well disinfection except that the disinfectant shall remain in the well for at least six hours. (7 days)
- (b) Service connections that require booster pumps taking suction from the public water system lines must be equipped with automatic pressure cut-off devices so that the pumping units become inoperative at a suction pressure of less than 20 psi. Where these types of installations are necessary, the preferred method of pressure maintenance consists of an air gapped connection with a storage tank and subsequent re-pressurization facilities. (TD)

### 6. Monitoring, Reporting, and Data Verification

The following records shall be retained for at least five years:

- The results of microbiological analyses; (30 days)
- Documentation of the reason for an invalidated fecal indicator source sample (30 days)

## 7. System Management and Operation

Emergency power for systems which serve more than 250 connections and do not meet the elevated storage requirement. Sufficient emergency power must be provided to deliver a minimum of 0.35 gpm per connection to the distribution system in the event of the loss of normal power supply. Alternately, an emergency interconnection can be provided with another public water system that has emergency power and is able to supply at least 0.35 gpm for each connection in the combined system. Emergency power facilities in systems serving 1,000 connections or greater must be serviced and maintained in accordance with level 2 maintenance requirements contained in the current National Fire Protection Association (NFPA) 110 standards. Although not required, compliance with NFPA 110 standards is highly recommended for systems serving less than 1,000 connections. Logs of all emergency power use and maintenance must be maintained and kept on file for a period of not less than three years. These records must be made available, upon request, for executive director review. (180 days)

## 8. Operator Compliance with State Requirements

- (a) Groundwater systems serving no more than 250 connections must employ or use an operator with a Class "D" or higher license. (30 days)
- (b) Groundwater systems serving more than 250 connections, but no more than 1,000 connections, must employ or use an operator with a Class "C" or higher groundwater license. (30 days)
- (c) Groundwater systems serving more than 1,000 connections must employ or use at least two operators who hold a Class "C" or higher groundwater license and who each work at least 16 hours per month at the public water system's production, treatment, or distribution facilities. (30 days)