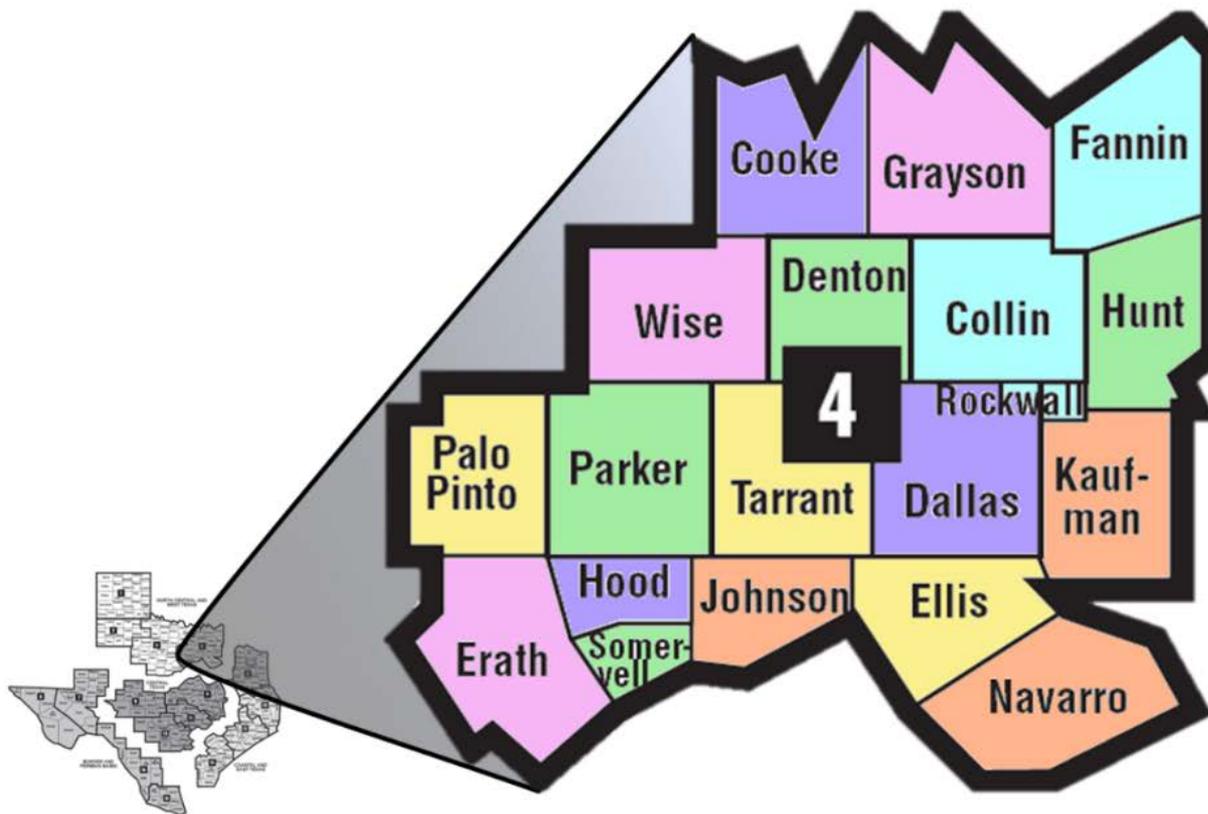


# Response to Potable Water Discharges

A white pipe with a jagged crack and blue flanges, with water spraying from the hole.

Eric Agnew, Water Quality Investigator  
TCEQ Region 4

# TCEQ Region 4 Map



AUDREY ARINGO	
BISMARK OTORINO	
CAROL MOULTON	
DOMINIQUE LUCIO	
ERIC AGNEW	
IMRAN KHAWAJA	



# TCEQ Mission Statement

“The Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.”



# Enforcement Initiation Criteria (EIC)

- A.6 “Major” - Unauthorized or noncompliant discharge, release, spill...which results in a documented effect on human health or safety or a documented serious impact to the environment
- A7.a “Moderate” - Upon becoming aware of the violation, failure to immediately abate and contain a reportable spill/discharge...
- A9.c “Moderate” - Failure to submit/maintain required data, documents, reports, or notifications or monitor, and the violation results in substantial interference with the TCEQ’s ability to perform regulatory oversight and/or determine compliance status.



# EIC Potable Water Spill Enforcement Exception Criteria

- A violation may not be addressed via NOV or NOE, or Order against a regulated entity for the discharge of potable water, if:
  - 1) proper and complete notice (according to TWC 26.039) is provided to the appropriate TCEQ regional office; AND
  - 2) Reasonable steps were taken *as soon as possible* to stop and/or minimize the actual/possible environmental impact of the potable water discharge; and



# EIC Potable Water Spill Enforcement Exception Criteria (continued)

- 3a) The discharge was unavoidable due to proper maintenance (which must include adequate dechlorination when practicable) or servicing of the water system and/or due to the negligent actions of a third party (excluding contracted services that were performed per the responsible party's instruction); or
- 3b) The discharge was caused by the subsidence of soil due to drought conditions (exceptional, extreme or severe drought intensity)\* or other natural causes outside the control of or anticipation by the responsible party.

*\* The drought intensity determination shall be based on the U.S. Drought Monitor reading (<http://droughtmonitor.unl.edu/>)*



# Statutes

- Texas Water Code 26.121 – Unauthorized Discharges Prohibited
- Texas Water Code 26.039 – Accidental Discharges and Spills



# TWC 26.121 – Unauthorized Discharges Prohibited

- (a) Except as authorized by the commission, no person may:
  - (1) discharge sewage, municipal waste, recreational waste, agricultural waste, or industrial waste into or adjacent to any water in the state;
  - (2) discharge other waste into or adjacent to any water in the state...
  - (3) ...unless the activity is under the jurisdiction of the TPWD, the GLO, the Department of Agriculture, or the Texas RRC



# Definition of “other waste”

- Per Texas Water Code 26.001:
  - garbage, refuse, decayed wood, sawdust, shavings, bark, sand, lime, cinders, ashes, offal, oil, tar, dyestuffs, acids, chemicals, salt water, or any other substance, other than sewage, industrial waste, municipal waste, recreational waste, or agricultural waste.



# TWC 26.039 – Accidental Discharges and Spills

- (a) As used in this section:
  - (1) "Accidental discharge" means an act or omission through which waste or other substances are inadvertently discharged into water in the state.
  - (2) "Spill" means an act or omission through which waste or other substances ...will drain, seep, run, or otherwise enter water in the state.
  - (3) "Other substances" means substances which may be useful or valuable and therefore are not ordinarily considered to be waste, but which will cause pollution if discharged into water in the state.
- (b) Whenever an *accidental* discharge or spill occurs...which causes or may cause pollution,
  - the individual operating, in charge of, or responsible for the activity or facility shall notify the commission as soon as possible and not later than 24 hours after the occurrence.
  - The individual 's notice to the commission must include the location, volume, and content of the discharge or spill.



# Potable Water discharges versus Sanitary Sewer Overflows

- Sanitary Sewer Overflows at unpermitted locations
  - Must always be reported, regardless of cause or volume
  - Are violations unless responsible party is a Sanitary Sewer Overflow Initiative (SSOI) participant in good standing and there is no environmental impact
- Potable Water discharges
  - Reporting is required if there is the potential of an environmental impact
  - Can be considered a violation if the discharge results in environmental impact



# Reporting a Potable Water Discharge

- Notification is not required for all discharges but is required if possible impact to the environment
- Quantity and circumstance requiring notification is at discretion of responsible party
  - No minimum volume required
  - Circumstance typically depends on location of discharge or cause is an extreme failure



# Reporting a Potable Water Discharge (continued)

- For routine potable water discharges
  - Send e-mail to [WWTeamR4@tceq.texas.gov](mailto:WWTeamR4@tceq.texas.gov)
  - Send fax to (817) 588-5701
  - Call TCEQ R4 main number, (817) 588-5800
    - During business hours, ask to speak with person answering calls for the Water Section
    - After hours, dial "1" to leave message
- For serious environmental impacts
  - During business hours
    - Call TCEQ R4 main number, (817) 588-5800, ask to speak with person answering calls for the Water Section
  - Outside business hours
    - Dial ER Emergency/Spill Hotline at (800) 832-8224



# Reporting a Potable Water Discharge (continued)

- Timely notice required
  - Must be reported as soon as possible and at least within 24 hours
- Complete notice required
  - Must include all details known at time of call
    - Location
    - Date/time of break
    - Initial volume estimate (or discharge rate if ongoing)
    - Response actions taken, in progress, or planned
- Initial notification is first step to providing protection from enforcement



# Recommended Response Actions

- Public Works should coordinate with Health Department (or Environmental Services Department) if possible
- If complaint or otherwise discovered/notified, Health Department should contact Public Works to search for a potential source and to stop discharge
  - Allows Health Department to concentrate on lessening environmental impact
  - Allows Public Works Department to concentrate on stopping discharge
- Evaluate the affected stream to determine impact



# Recommended Response Actions (continued)

- Cleanup of dead fish is expected if within City limits
- Cleanup should not begin until given verbal approval by TCEQ or TPWD
- Dechlorinate adequately
  - ANSI/AWWA C651-05
    - Thorough consideration should be given to the impact of highly chlorinated water flushed into the waste environment. If there is any question that damage may be caused by chlorinated-waste discharge (to fish life, plant life, physical installations, or other downstream water uses of any type), then an adequate amount of reducing agent should be applied to water being disposed of in order to thoroughly neutralize the chlorine residual remaining in the water.



# Reporting Requirements

- Initial notification is required as soon as possible, at least 24 hours from becoming aware
- If requested, a final report should include
  - Details of cause and response (cleanup activities and repairs)
  - Sample Results
  - Number of fish (as well as other life) identified and disposed, if applicable
  - Duration of discharge
  - Extent of stream evaluation
  - Updates if repair and/or cleanup are ongoing
  - Any other detail or supporting evidence to demonstrate exception to EIC



# TCEQ Response

- Will respond onsite when possible
- If case is referred to enforcement
  - responsible party will be notified as soon as possible
  - a written report of the investigator's findings will be provided
  - enforcement coordinator (EC) will contact regulated entity once case is received and assigned
  - the EC becomes the "lead" contact following regional referral



# Summary

- Make every effort to prevent potable water discharges into waterways
- Notify TCEQ immediately. Don't wait until after the cause is found or response is complete
- Coordination between Health Department and Public Works Department is essential
- Always evaluate the affected stream for level of impact
- Submit a final report when requested



# ANSI/AWWA Reference

## APPENDIX C

### Disposal of Heavily Chlorinated Water

*This appendix is for information only and is not a part of ANSI/AWWA C651.*

1. Check with the local sewer department for the conditions of disposal to the sanitary sewer.
2. Chlorine residual of water being disposed will be neutralized by treating with one of the chemicals listed in Table C.1.

**Table C.1 Amounts of chemicals required to neutralize various residual chlorine concentrations in 100,000 gal (378.5 m<sup>3</sup>) of water\***

Residual Chlorine Concentration (mg/L)	Sulfur Dioxide (SO <sub>2</sub> )		Sodium Bisulfite (NaHSO <sub>3</sub> )		Sodium Sulfite (Na <sub>2</sub> SO <sub>3</sub> )		Sodium Thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> · 5H <sub>2</sub> O)		Ascorbic Acid (C <sub>6</sub> O <sub>8</sub> H <sub>6</sub> ) <sup>†</sup>	
	lb	(kg)	lb	(kg)	lb	(kg)	lb	(kg)	lb	(kg)
1	0.8	(0.36)	1.2	(0.54)	1.4	(0.64)	1.2	(0.54)	2.1	(0.95)
2	1.7	(0.77)	2.5	(1.13)	2.9	(1.32)	2.4	(1.09)	4.2	(1.9)
10	8.3	(3.76)	12.5	(5.67)	14.6	(6.62)	12.0	(5.44)	20.9	(9.47)
50	41.7	(18.91)	62.6	(28.39)	73.0	(33.11)	60.0	(27.22)	104	(47.11)

\*Except for residual chlorine concentration, amounts are in pounds (kilograms).

<sup>†</sup>User should confirm required dosage with chemical supplier.



# Other Considerations When Disposing of Heavily Chlorinated Water

- Dechlorination with some reducing agents such as sodium bisulfite and sodium metabisulfite may deplete oxygen concentrations
- D.O. should be  $>2.0$  (minimum stream standard)
- Sodium thiosulfate is pH dependent so dosage requires calculation for each water body
- pH should be 6.5 – 9.0 SU (stream standard)



# References/Guidance

- [Texas Water Code, Chapter 26](#)
- [30 TAC, Chapter 327](#)
- [TCEQ-00501, Noncompliance Notification](#)
- Tikkanen, M.W, et al, "[Guidance Manual for the Disposal of Chlorinated Water](#)," accessed November 19, 2015
- [ANSI/AWWA C651](#)-05 Appendix C, "Disposal of Heavily Chlorinated Water"



# Questions



Eric Agnew, [eric.agnew@tceq.texas.gov](mailto:eric.agnew@tceq.texas.gov), (817) 588-5839

