



Industrial Reclaimed Water

30 Texas Administrative Code Chapter 210 – Subchapter E

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Overview



What does it mean to reuse reclaimed water under a 210E authorization?



What is industrial reclaimed water and why re-use it?



Requirements to obtain a 210E authorization.

What is 30 Texas Administrative Cod (TAC) Chapter 210, Subchapter E?

Texas Administrative Code

TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 210 USE OF RECLAIMED WATER

Subchapters

SUBCHAPTER A GENERAL PROVISIONS

SUBCHAPTER B GENERAL REQUIREMENTS FOR THE PRODUCTION, CONVEYANCE, AND USE OF RECLAIMED WATER

SUBCHAPTER C QUALITY CRITERIA AND SPECIFIC USES FOR RECLAIMED WATER

SUBCHAPTER D ALTERNATIVE AND PRE-EXISTING RECLAIMED WATER SYSTEMS

SUBCHAPTER E **SPECIAL REQUIREMENTS FOR USE OF INDUSTRIAL RECLAIMED WATER**

SUBCHAPTER F **USE OF GRAYWATER SYSTEMS**



What is industrial reclaimed water?

Non-domestic wastewater re-used for a beneficial purpose



Why re-use industrial reclaimed water?

- ▶ **Conserve raw or potable water resources**
- ▶ **Provide an alternative to existing water supplies**
- ▶ **Enhance water security, sustainability, and resilience**



Requirements for reuse of industrial reclaimed water



▶ 210E - Level I

▶ 210E - Level II

Level I

No notification to TCEQ

No periodic testing (except for cooling tower blowdown)

No application

No fee

No written authorization from TCEQ (beyond the rule itself)

No TLAP or TPDES permit

No expiration date



Level I conditions

**Wastewater is reused
onsite**

**Wastewater listed in
210.53(a)**

**Alternative to reuse
listed in 210.56(b)(1)**

**End use listed in
210.56(b)(2)**

Re-use is not Level I if...

- **Waste-stream is not listed in 30 TAC 210.53(a)**
- **Re-use is offsite**
- **Wastewater is comingled**
- **Pollutant concentration exceeds Table I threshold levels**

(§210.53, Table 1)

| Parameter | Threshold (mg/l) | MAL (mg/l) | Parameter | Threshold (mg/l) | MAL (mg/l) |
|---|------------------|------------|-----------------|------------------|------------|
| Conventionals & Nonconventionals | | | Metals | | |
| Total Organic Carbon | 55 | --- | Copper, total | 0.030 | 0.010 |
| Oil and Grease | 10 | --- | Lead, total | 0.015 | 0.005 |
| Total Dissolved Solids | 2000 | --- | Manganese | 0.05 | --- |
| Nitrate Nitrogen | 10 | --- | Mercury, total | 0.0002 | 0.0002 |
| Metals | | | Nickel, total | 0.030 | 0.010 |
| Antimony, total | 0.09 | 0.03 | Selenium, total | 0.030 | 0.010 |
| Arsenic, total | 0.030 | 0.010 | Silver, total | 0.006 | 0.002 |
| Barium, total | 0.030 | 0.010 | Thallium, total | 0.030 | 0.010 |
| Beryllium, total | 0.015 | 0.005 | Zinc, total | 0.015 | 0.005 |
| Cadmium, total | 0.003 | 0.001 | Cyanide, free | 0.200 | --- |

Threshold Levels

Level II

TCEQ Application (Form No. 20094)

Application fee (\$100.00)

Individual written authorization from TCEQ

Effluent limitations and monitoring requirements

Annual testing

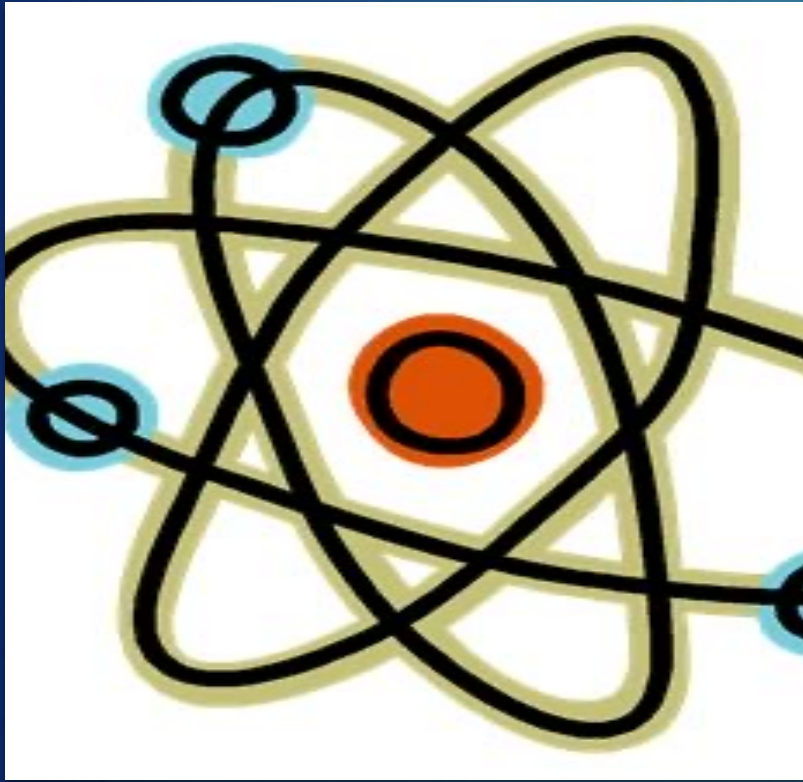


Wastes not eligible for a re-use authorization under 210E

- **Septic tank, chemical toilet, and grit or grease trap waste**
- **Barge cleaning or air scrubber wastewater**
- **Any wastewater eligible for coverage under:**
 - **Permit By Rule (30 TAC Chapter 321), or**
 - **Evaporation Pond General Permit.**



Wastes not eligible for a re-use authorization under 210E (cont.)



- ▶ **Wastewater containing:**
 - ▶ **radioactive materials,**
 - ▶ **dioxins or furans,**
 - ▶ **pesticides**
- ▶ **Wastewater classified as hazardous, defined by 40 Code of Federal Regulations (CFR) Part 261**
- ▶ **Process wastewater regulated under 40 CFR Parts 400-471 (with exceptions)**

Exceptions to 40 CFR

Parts 400-471

**Part 405 -
dairy products
processing**

**Part 406 -
grain mills**

**Part 407 -
canned and
preserved fruits
and vegetables**

**Part 408 -
canned and
preserved seafood
processing**

**Part 409 -
sugar processing**

**Part 411 -
cement
manufacturing**

**Part 417 -
soap and
detergent
manufacturing**

**Part 423 -
steam electric
power
generating**

**Part 434 -
coal mining**

**Part 436 -
mineral mining
and processing**

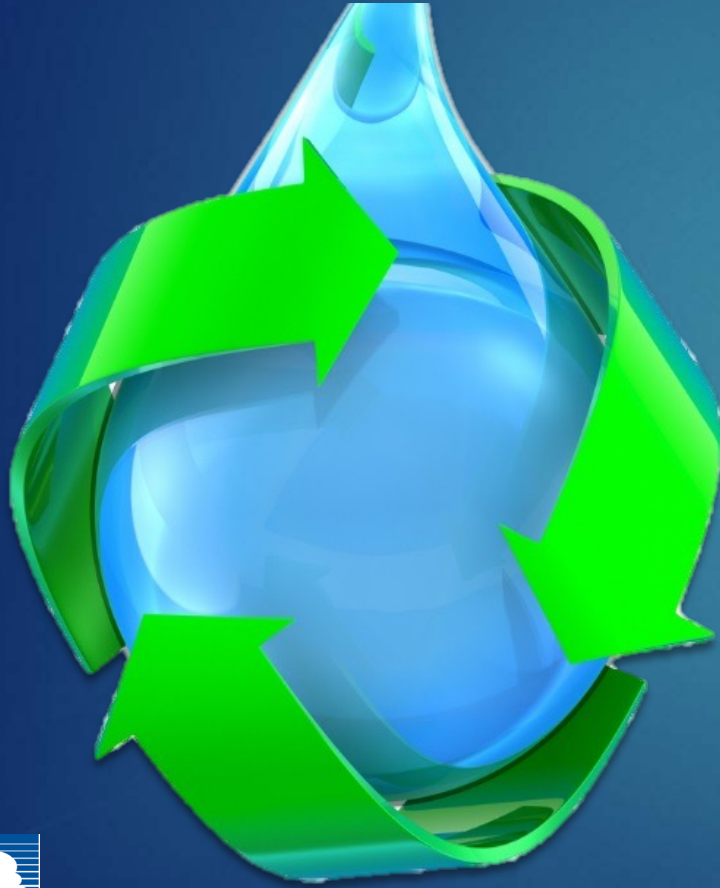
**Part 454 -
gum and wood
chemicals
manufacturing**

**Part 460 -
hospital**

Am I subject to other requirements in Chapter 210?

- ▶ **If the end use is irrigation – See Subchapter B**
- ▶ **If any type of impoundment is used to store reclaimed water – See Subchapter B**
- ▶ **If reuse is off-site – See Subchapters A & B**
- ▶ **If any amount of domestic wastewater is commingled with the industrial reclaimed water – See Subchapters A, B, & C**

A 210E authorization is not needed for:



- ▶ Internal recycling
- ▶ Closed-loop systems
- ▶ Use of industrial wastewater as makeup water within a facility

What about greywater?

Re-use of greywater is subject to the requirements of 30 TAC Chapter 210, Subchapter F

[HTTPS://WWW.TCEQ.TEXAS.GOV/PERMITTING/WASTEWATER/GRAYWATER](https://www.tceq.texas.gov/permitting/wastewater/graywater)



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TCEQ Website:

https://www.tceq.texas.gov/assistance/water/reclaimed_water.html



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Questions