

REUSE OF INDUSTRIAL RECLAIMED WATER

30 TEXAS ADMINISTRATIVE CODE CHAPTER 210, SUBCHAPTER E

2018 ENVIRONMENTAL TRADE FAIR

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WHAT IS INDUSTRIAL RECLAIMED WATER?

- NON-DOMESTIC WASTEWATER RE-USED FOR A BENEFICIAL PURPOSE



WHY RE-USE INDUSTRIAL WASTEWATER?

- CONSERVES RAW OR POTABLE WATER RESOURCES.



WHERE ARE THE REQUIREMENTS FOR REUSE OF INDUSTRIAL RECLAIMED WATER?

- 30 TEXAS ADMINISTRATIVE CODE CHAPTER 210, SUBCHAPTER E
OR '210E' FOR SHORT.

Texas Administrative Code

TITLE 30 ENVIRONMENTAL QUALITY
PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 210 USE OF RECLAIMED WATER

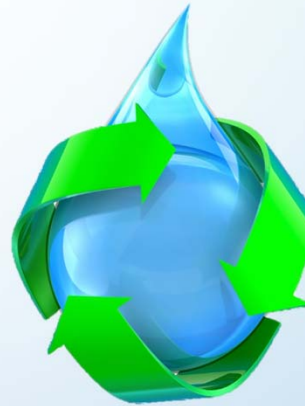
Subchapters

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**



A 210E AUTHORIZATION IS NOT NEEDED FOR:

- INTERNAL RECYCLING SYSTEMS
- CLOSED LOOP SYSTEMS
- USE OF INDUSTRIAL WASTEWATER AS MAKEUP WATER WITHIN A FACILITY



THE FOLLOWING WASTES ARE NOT ELIGIBLE FOR A REUSE AUTHORIZATION UNDER 210E:

- WASTEWATER CONTAINING:
 - RADIOACTIVE MATERIALS
 - DIOXINS OR FURANS
 - PESTICIDES
- WASTEWATER CLASSIFIED AS, OR WHICH IS, HAZARDOUS AS DEFINED BY 40
CODE OF FEDERAL REGULATIONS (CFR) PART 261



ADDITIONAL WASTES NOT ELIGIBLE FOR REUSE UNDER 210E:

- SEPTIC TANK, CHEMICAL TOILET, 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.



ADDITIONAL WASTES NOT ELIGIBLE FOR REUSE UNDER 210E CONT.:

- PROCESS WASTEWATER REGULATED UNDER 40 CFR PARTS 400-471 (WITH SOME EXCEPTIONS)
- REMEDIATED OR CONTAMINATED GROUNDWATER GENERATED BY FACILITIES WHOSE PROCESS WASTEWATER IS PROHIBITED FOR AUTHORIZATION UNDER 210E



FEATURES OF A 210E AUTHORIZATION:

- AUTHORIZES REUSE OF INDUSTRIAL WASTEWATER FOR BENEFICIAL LAND APPLICATION — **DOES NOT** AUTHORIZE DISCHARGE
- ISSUED TO THE PRODUCER OF THE WASTEWATER TO BE REUSED.
- DOES NOT REQUIRE THE PRODUCER TO HAVE A TPDES OR TLAP PERMIT
- DOES NOT EXPIRE / NO NEED TO RENEW
- TWO LEVELS OF COVERAGE AVAILABLE



LEVEL I COVERAGE IS AVAILABLE UNDER FOUR CONDITIONS:

- WASTEWATER IS ONE OF THE SPECIFIC TYPES LISTED AT § 210.53(a)(1)-(9)
- WASTEWATER IS REUSED ON-SITE
- REUSE IS FOR ONE OF THE SPECIFIC END USES LISTED IN § 210.56(b)(2)
- PRODUCER HAS AN AUTHORIZED PRIMARY DISPOSAL METHOD

LEVEL I COVERAGE — WASTEWATER TYPES:

- CONDENSATE — AIR CONDITIONER, COMPRESSOR, STEAM, OR OTHER CONDENSATE THAT FORMS ON STEAM LINES AND IS NOT CONSIDERED A PROCESS WASTEWATER.
- WASHWATER FROM WHOLE FRUIT OR VEGETABLE WASHING.
- COOLING WATER — NON-CONTACT OR ONCE-THROUGH COOLING WATER
- FILTER BACKWASH FROM WATER TREATMENT PROCESSES (**NOT** RO REJECT)
- WASHWATER FROM ROUTINE WASHING OF BUILDINGS CONDUCTED WITHOUT THE USE OF DETERGENTS OR OTHER CHEMICALS

LEVEL I COVERAGE – WASTEWATER TYPES

CONT.:

- WASHWATER FROM ROUTING WASHING OF PAVEMENT
 - CONDUCTED WITHOUT THE USE OF DETERGENTS OR OTHER CHEMICALS
 - WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS WASTE HAVE NOT OCCURRED (UNLESS SPILLED MATERIAL HAS BEEN REMOVED)
- COOLING TOWER BLOWDOWN WITH A TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATION OF LESS THAN 2,000 mg/L
- OTHER INDUSTRIAL WASTEWATER
 - WITH MEASURED EFFLUENT CONCENTRATIONS AT OR BELOW THRESHOLDS LISTED IN TABLE 1 OF 210E
 - THAT IS NOT A WASTE SOURCE PROHIBITED BY 210E



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	---

LEVEL I COVERAGE — LOCATION OF REUSE

- WASTEWATER MUST BE REUSED ON-SITE, WHICH MEANS WITHIN THE BOUNDARIES OF:
 - THE INDUSTRIAL FACILITY, OR
 - PROPERTY THAT IS CONTIGUOUS TO THE FACILITY AND THAT IS OWNED OR OPERATED BY THE PRODUCER OF THE INDUSTRIAL RECLAIMED WATER.



LEVEL I COVERAGE — END USES

- IRRIGATION
 - LANDSCAPING
 - NON-FOOD CROPS
 - PASTURES OF MILKING ANIMALS
- FIRE PROTECTION
- DUST SUPPRESSION AND SOIL COMPACTION
- MAINTENANCE OF IMPOUNDMENTS



LEVEL I COVERAGE — PRIMARY DISPOSAL METHODS

- DISPOSAL UNDER ANY TPDES OR TLAP PERMIT
- AUTHORITY TO ROUTE WASTEWATER TO A PUBLICLY OWNED TREATMENT WORKS (POTW) , EITHER BY
 - DISCHARGE TO THE SANITARY SEWER SYSTEM, OR
 - USE OF A SUITABLE HAULER
- ABILITY TO RECYCLE IN A MANNER THAT DOES NOT DISCHARGE INTO OR ADJACENT TO WATER IN THE STATE



LEVEL I COVERAGE DOES NOT REQUIRE:

- NOTIFYING THE TCEQ
- SUBMITTING AN APPLICATION
- FEES
- APPROVAL FROM THE TCEQ



LEVEL II COVERAGE IS NEEDED IF ANY OF THE FOLLOWING ARE TRUE:

- INDUSTRIAL RECLAIMED WATER IS NOT ONE OF THE SPECIFIED WASTES ELIGIBLE FOR LEVEL I COVERAGE
- INDUSTRIAL RECLAIMED WATER CONTAINS POLLUTANT CONCENTRATIONS THAT EXCEED ANY OF THE TABLE 1 THRESHOLDS
- REUSE WILL BE OFF-SITE
- RECLAIMED WATER CONTAINS ANY AMOUNT OF DOMESTIC WASTEWATER

LEVEL II COVERAGE REQUIRES THE **PRODUCER** TO:

- HAVE A PRIMARY DISPOSAL METHOD
- SUBMIT AN APPLICATION TO THE TCEQ USING FORM 20094 – USUALLY PROCESSED WITHIN 60 DAYS OF RECEIPT
- PAY A \$100 FEE (BUT NO ONGOING OR OTHER FEES)
- RECEIVE WRITTEN AUTHORIZATION FROM THE TCEQ PRIOR TO REUSING THE INDUSTRIAL WASTEWATER.



LEVEL II COVERAGE REQUIRES THE **PRODUCER** TO (CONT.):

- SAMPLE AND MEET EFFLUENT LIMITATIONS FOR
 - TOTAL ORGANIC CARBON – 55 mg/L (1/MONTH)
 - PH – 6.0-9.0 STANDARD UNITS (1/WEEK)
 - OTHER POLLUTANTS AS NEEDED
- USE PRIMARY DISPOSAL METHOD IF ANY TEST RESULTS EXCEED PERMIT LIMITATIONS
- MAINTAIN RECORDS OF
 - ALL NOTIFICATIONS MADE TO THE TCEQ UNDER 210E
 - ALL MONITORING ACTIVITIES
- CONDUCT ANNUAL TESTING OF RECLAIMED WATER
 - UNLESS REUSING ONLY LEVEL I WASTE STREAMS OFF-SITE



LEVEL II COVERAGE REQUIRES THE **USER** TO:

- MAINTAIN AN OPERATING LOG THAT RECORDS LAND APPLICATION ACTIVITIES

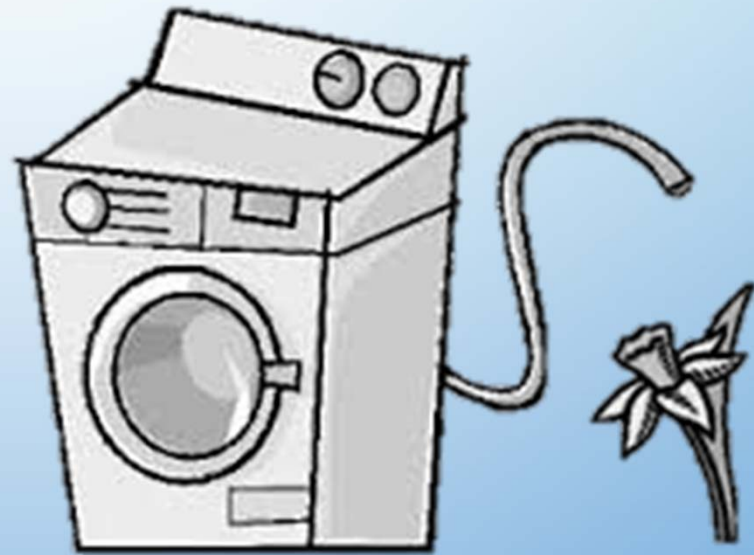


OTHER REQUIREMENTS IN CHAPTER 210 MAY APPLY

- 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

WHAT ABOUT GREYWATER?

- REUSE OF GREYWATER IS SUBJECT TO THE REQUIREMENTS OF 30 TAC
CHAPTER 210, SUBCHAPTER F



QUESTIONS?



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