SUBCHAPTER E: SPECIAL REQUIREMENTS FOR USE OF INDUSTRIAL RECLAIMED WATER §§210.51 - 210.60 Effective December 11, 2002

§210.51. Applicability, Purpose, and Scope.

(a) A person proposing to use industrial wastewater as industrial reclaimed water may obtain authorization under this subchapter if all of the requirements of the subchapter are met. The purpose of this subchapter is to establish the applicable requirements for industrial reclaimed water use which may be used instead of potable water or raw water. As defined and specified in this subchapter, the requirements must be met by the producers, providers, and users of industrial reclaimed water. These requirements are intended to allow the safe utilization of reclaimed water for conservation of surface water and groundwater, to ensure the protection of public health, to protect surface water and groundwater from contamination, and to help ensure an adequate supply of water resources for present and future needs.

(b) This subchapter establishes the following requirements for producers, providers, and users of industrial reclaimed water:

(1) general requirements applicable to producers, providers, and users;

(2) requirements and specifications for transfer, storage, irrigation, and other end uses;

(3) requirements and specifications necessary to minimize the impact of discharge of waste into or adjacent to water in the state;

(4) specific uses of industrial reclaimed water;

(5) standards for the quality of industrial reclaimed water;

(6) standards for monitoring and recordkeeping; and

(7) payment of fees.

(c) The requirements of this subchapter to obtain an authorization do not apply to the end use of industrial reclaimed water when the end use is authorized by permit, including, but not limited to, a Texas Pollutant Discharge Elimination System permit or a Texas Land Application permit, or by commission rules other than those in this subchapter. The end uses of industrial wastewater that are subject to the requirements of this subchapter include landscape irrigation, dust suppression, soil

compaction, impoundment maintenance, or industrial wastewater that is otherwise land applied for a beneficial purpose. When a use of industrial reclaimed water is regulated under Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste), that use shall comply with the requirements of Chapter 335 of this title in addition to the requirements of this subchapter.

(d) Internal recycling systems, closed loop systems, and systems that use industrial wastewater as makeup water within a facility are not subject to the requirements of this subchapter.

(e) The use of industrial wastewater as industrial reclaimed water as authorized by this subchapter does not require an amendment of any issued industrial wastewater discharge permit to recognize the activity authorized under this subchapter. Effluent limitations in the industrial wastewater discharge permit remain in effect for and during industrial reclaimed water use activities.

(f) Industrial reclaimed water projects approved under this subchapter do not require a new or amended permit from the commission except as provided by §210.5 of this title (relating to Authorization for the Use of Reclaimed Water). To develop projects not specifically authorized by this subchapter, a person may seek authorization for a new or amended waste discharge permit under Chapter 305 of this title (relating to Consolidated Permits).

(g) Nothing in this subchapter shall alter any requirement to obtain a water right authorization.

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§210.52. Definitions.

The following words and terms, when used in this subchapter, have the following meanings unless the context clearly indicates otherwise.

(1) Blowdown--The discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts that could damage or impair machinery, equipment, or systems.

(2) CFR--Code of Federal Regulations.

(3) Commingled wastewater--Industrial wastewater that contains any amount of domestic wastewater.

(4) Containing--When the pollutant(s) of concern are measured at levels that exceed the minimum analytical level.

(5) Discharge--The release or disposal of waste into or adjacent to any water in the state that in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water in the state.

(6) Dioxins and furans**--**Tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

(7) End use--Landscape irrigation, soil compaction, dust suppression, impoundment maintenance, or industrial wastewater that is otherwise land applied in accordance with all applicable regulations.

(8) Industrial reclaimed water--Any industrial wastewater which has been treated, if necessary, to a quality suitable for land application for beneficial use.

(9) Industrial wastewater--A non-domestic or non-municipal wastewater.

(10) Land application--The discharge of waste adjacent to water in the state.

(11) MGD--Million gallons per day.

(12) Minimum analytical level (MAL)--The lowest concentration at which a particular substance can be quantitatively measured in the matrix of concern (i.e., wastewater) with a defined precision level, using approved analytical methods.

(13) Non-contact cooling water--Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, by-product, or finished product.

(14) On-site--The use of industrial reclaimed water within the boundaries of the industrial facility or within the boundaries of property that is contiguous to the facility and owned or operated by the producer.

(15) Once-through cooling water--Water passed through main cooling condensers in one or two passes for the purpose of removing waste heat.

(16) Playa lake--A shallow (generally less than one meter deep), isolated, naturally ephemeral approximately circular lake located in an enclosed basin in the High Plains and West Central Plains areas of the state.

(17) POTW--Publicly-owned treatment works.

(18) Priority pollutants--The pollutants as listed in 40 CFR Part 122, Appendix D, Tables 2 and 3, plus 2,3,7,8-Tetrachlorodibenzo-p-dioxin and asbestos.

(19) Process wastewater--Any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

(20) Producer--A person who produces industrial reclaimed water as identified in this subchapter.

(21) SU--Standard units.

(22) Tail water--The runoff of irrigation water from the lower end of an irrigated field.

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§210.53. Wastes Eligible for Coverage.

(a) Level I eligibility. A producer is eligible for Level I authorization if the producer uses any of the following wastes on-site and has a primary disposal method as an alternative to reuse and an end use listed in §210.56(b) of this title (relating to Authorization Requirements):

(1) air conditioner condensate; compressor condensate; steam condensate; or condensate that forms externally on steam lines and is not process wastewater;

(2) washwater from washing whole fruits and vegetables;

(3) non-contact cooling water;

(4) once through cooling water;

(5) water treatment filter backwash;

(6) water from routine external washing of buildings, conducted without the use of detergents or other chemicals;

(7) water from routine washing of pavement conducted without the use of detergents or other chemicals and where spills or leaks of toxic or hazardous waste have not occurred (unless spilled material has been removed);

(8) cooling tower blowdown with a total dissolved solids concentration less than 2,000 milligrams per liter; or

(9) wastewater with measured effluent concentrations at or below threshold levels listed in the figure contained in this paragraph that is not a waste source listed in §210.54(a) of this title (relating to Wastes Not Eligible for Coverage). For all other priority pollutants in 40 CFR Part 122 Appendix D, Tables II and III, the threshold level is set at the minimum analytical level.

Figure: 30 TAC §210.53(a)(9)

Threshold Levels for Industrial Reclaimed Water					
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,	0.200	---

(b) Level II eligibility. A producer is eligible to apply for Level II authorization for any of the following:

(1) industrial reclaimed water containing pollutant concentration levels which exceed threshold levels listed in the figure contained in subsection (a)(9) of this section, but which is not a listed waste in §210.54(a) of this title;

(2) industrial reclaimed water that contains any amount of domestic wastewater;

(3) the proposed end use of industrial reclaimed water is not on-site;

(4) the proposed end use is not listed in §210.56(b)(2) of this title; or

(5) the disposal method proposed as an alternative to reuse is not listed in §210.56(b)(1) of this title.

§210.54. Wastes Not Eligible for Coverage.

(a) The following wastes are not eligible for authorization under this subchapter regardless of effluent quality or end use:

(1) wastewater containing radioactive material regulated under Texas Health and Safety Code, Chapter 401;

(2) wastewater containing dioxin and furans;

(3) wastewater containing pesticides;

(4) wastewater classified as or which is characteristically hazardous as defined by 40 Code of Federal Regulations (CFR) Part 261;

(5) process wastewater regulated under 40 CFR Parts 400 - 471 with the following exceptions:

(A) Part 405 - dairy products processing;

(B) Part 406 - grain mills;

(C) Part 407 - canned and preserved fruits and vegetables;

(D) Part 408 - canned and preserved seafood processing;

(E) Part 409 - sugar processing;

(F) Part 411 - cement manufacturing;

(G) Part 417 - soap and detergent manufacturing;

(H) Part 423 - steam electric power generating;

(I) Part 434 - coal mining;

(J) Part 436 - mineral mining and processing;

(K) Part 454 - gum and wood chemicals manufacturing; and

(L) Part 460 - hospital;

(6) septic tank waste, chemical toilet waste, grit trap waste, or grease trap waste;

(7) barge cleaning washwater;

(8) air scrubber wastewater;

(9) any wastewater where a permit by rule authorized under Chapter 321 of this title (relating to Control of Certain Activities by Rule) or commission-issued general permit for land application is available; or

(10) remediated/contaminated groundwater generated from facilities where process wastewater is prohibited for use as listed in paragraph (5) of this subsection.

(b) Producers who could otherwise be eligible to obtain authorization under this chapter, but who do not implement all required applicable conditions of this authorization must apply for and obtain permit coverage.

(c) Discharges into or adjacent to water in the state shall not be authorized under this chapter where prohibited by applicable rules including, but not limited to, Chapter 213 of this title (relating to Edwards Aquifer); Chapter 311 of this title (relating to Watershed Protection); and Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste).

(d) Any user proposing to irrigate or store wastewater within the boundaries of a playa lake may not obtain authorization under this subchapter and must obtain a Texas Pollutant Discharge Elimination System discharge permit for authorization to discharge into a playa lake.

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§210.55. Application Requirements for Authorization.

(a) Level I authorization. Producers eligible for Level I authorization under this subchapter are authorized to use industrial reclaimed water without any notification or approval by the executive director. Effluent sampling is not required for wastes listed in §210.53(a)(1) - (8) of this title (relating to Wastes Eligible for Coverage) with the exception of cooling tower blowdown which must meet the 2,000 milligrams per liter threshold level for total dissolved solids.

(b) Level II authorization. Producers requesting Level II authorization for industrial reclaimed water activities under this subchapter must submit a complete application to the executive director on a form approved by the executive director to request authorization. The use of industrial reclaimed water shall not begin until written authorization is received from the executive director. The application shall include, at a minimum, the following information:

(1) the legal names and addresses of the user, provider, and producer;

(2) contact representative for the applicant and telephone number;

(3) specific description of the producer's and user's facility location including physical address;

(4) specific description of the proposed industrial reclaimed water use site (if different than the producer's site);

(5) the proposed end use for the industrial reclaimed water;

(6) description of the waste source of the industrial reclaimed water;

(7) the primary disposal method which would be used as an alternative to re-use;

(8) the volume of industrial reclaimed water proposed for end use and the frequency of application;

(9) effluent testing results;

(10) the location of the producer's and user's site in relation to the Edwards Aquifer, if applicable, and;

(11) liner certification, if applicable.

(c) If the end use is not on-site, the producer shall also provide all information described in §210.4 of this title (relating to Notification).

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§210.56. Authorization Requirements.

(a) Requirements in other subchapters.

(1) Paragraphs (2) - (6) of this subsection do not apply to commingled water. The commingled wastewater is subject to all requirements of §§210.1 - 210.9 of this title (relating to Applicability; Purpose and Scope; Definitions; Notification; Authorization for the Use of Reclaimed Water; Responsibilities; Transfer and Conveyance of Reclaimed Water; Restrictions; and Enforcement), §§210.21 - 210.25 of this title (relating to Applicability; General Requirements; Storage Requirements for Reclaimed Water; Irrigation Using Reclaimed Water; and Special Design Criteria for Reclaimed Water Systems), and §§210.31 - 210.36 of this title

(relating to Applicability; Specific Uses of Reclaimed Water; Quality Standards for Using Reclaimed Water; Sampling and Analysis; Guidelines for Certain Distribution Systems; and Record Keeping and Reporting).

(2) Except as specified in this subchapter, the requirements for a reclaimed water producer, provider, and user described in Subchapters A - D of this chapter (relating to General Provisions; General Requirements for the Production, Conveyance, and Use of Reclaimed Water; Quality Criteria and Specific Uses For Reclaimed Water; and Alternative and Pre-Existing Reclaimed Water Systems) apply to a producer, provider, and user of industrial reclaimed water.

(3) A producer, provider, or user of industrial reclaimed water is not required to treat industrial water or hold a permit for treatment and disposal as described in §210.1 and §210.5(a) of this title.

(4) A producer who uses industrial reclaimed water on-site only is not required to comply with §210.4 of this title. The producer must comply with all applicable requirements of this subchapter pertaining to the industrial reclaimed water use.

(5) The requirements of §210.25(e), (f), and (h) of this title do not apply to the producer, provider, or user of industrial reclaimed water used on-site only.

(6) The requirements of §§210.22(a) and (e) and 210.31 - 210.36 of this title, do not apply to the producer, provider, or user of industrial reclaimed water.

(b) General requirements. Producers required to obtain Level I authorization to use industrial reclaimed water under this subchapter must comply with the following:

(1) have an authorized means of disposal as an alternative to reuse, which includes one or more of the following:

(A) have authority to discharge under a permit;

(B) have authority to route to a publicly-owned treatment works (POTW); or

(C) have the ability to recycle the industrial reclaimed water in a manner that does not discharge into or adjacent to water in the state;

(2) have an end use which includes one or more of the following and is on-site:

(A) irrigation, including landscape irrigation;

(B) fire protection;

(C) dust suppression and soil compaction;

(D) maintenance of impoundments;

(E) irrigation of non-food crops, including, but not limited to, sod farms and silviculture; and

(F) irrigation of pastures for milking animals.

(3) If the producer's facility is within the service area of a POTW, the producer must provide notice to the POTW of the producer's intent to use industrial wastewater under this subchapter.

(4) The distribution, use, and storage of industrial reclaimed water may not cause or result in nuisance conditions.

(5) The producer, provider, and user also shall comply with all applicable rules under Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste).

(c) Eligible Level I authorizations not able to meet §210.56(b). If the producer is eligible for Level I authorization but cannot meet the requirements of subsection (b) of this section, the producer shall submit an application for a Level II authorization to use reclaimed water.

(d) Industrial reclaimed limitations for Level II authorizations.

(1) The producer shall comply with the limitations and monitoring frequencies outlined in subparagraphs (A) - (C) of this paragraph for an authorization request which has been approved by the executive director:

(A) total organic carbon is limited to 55 milligrams per liter and shall be monitored once per month by grab sample;

(B) pH is limited to a minimum of 6.0 standards units (su) and a maximum of 9.0 su and shall be monitored once per week by grab sample; and

(C) the executive director may include additional limitations or increased monitoring frequencies based on information provided by the applicant, or any other available information.

(2) Sampling shall be conducted only if industrial reclaimed water use occurs during the monitoring period. If industrial reclaimed water use occurs less than the specified frequency, samples shall be obtained during use.

(e) General or individual permits. Level II authorization does not change any general or individual permit limits or requirements for an industrial wastewater discharge activity.

(f) Irrigation requirements.

(1) The provider or user shall comply with all requirements regarding irrigation in §210.24 of this title, as well as the requirements of this subchapter.

(2) Irrigation practices shall be designed and managed to prevent contamination of groundwater or surface water and to prevent the occurrence of nuisance conditions. Tail water control facilities shall be provided, where necessary, to prevent the discharge of any industrial reclaimed water from irrigated lands into or adjacent to water in the state.

(3) No industrial reclaimed water may be land applied when the ground is frozen or saturated or during rainfall events.

(4) When applying industrial reclaimed water to land, a buffer area must be maintained around water wells to prevent the possibility of waste transport to groundwater via the well or well casing. Industrial reclaimed water shall not be applied within 250 feet of a private water well (used for domestic or irrigation use) or 500 feet of a public water supply well.

(5) The user shall provide adequate maintenance of the irrigation facilities to ensure that the facilities are in good working condition.

(g) Storage requirements.

(1) All industrial reclaimed water retention, holding, and transfer ponds shall be operated in such a manner as to maintain a minimum freeboard of two feet.

(2) Ponds shall not be used for disposal.

(h) Liner requirements. Under Level I and Level II authorizations, industrial reclaimed water is considered equivalent to Type I reclaimed water. The producer, provider, or user shall comply with liner requirements outlined in §210.23 of this title.

(i) Off-site use.

(1) Any proposed use of industrial reclaimed water which is not considered on-site must comply with the requirements in the following sections in addition to the applicable requirements of this subchapter:

(A) §210.4 of this title;

(B) §210.6 of this title;

(C) §210.7 of this title; and

(D) §210.25 of this title.

(2) If the producer provides domestic water or wastewater services to the public such as at a university, hospital, hotel, or similar institution then all exposed or buried piping receiving industrial reclaimed water constructed within the boundaries of the industrial facility is exempt from the color coding requirements of §210.25 of this title.

(j) Authorization to use industrial reclaimed water. Authorization to use industrial reclaimed water is separate from the general and individual permit requirements for wastewater discharges under Chapter 205 and Chapter 305 of this title (relating to General Permits for Waste Discharges; and Consolidated Permits).

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§210.57. Sampling and Record Keeping Requirements.

(a) Level I authorizations. No additional sampling or monitoring is required by the producer, user, or provider other than the requirements already established in this subchapter.

(b) Level II authorizations.

(1) Sampling.

(A) The producer shall sample the reclaimed water after final treatment, if any, but before distribution to a provider or user and analyze such samples to assure that the water quality meets the limitations required by the authorization. The producer shall sample for the parameters listed in §210.56(d) of this title (relating to Authorization Requirements) and any additional parameters required by the executive director in the authorization.

(B) If any of the sample results exceed the limitations in the authorization, the producer may not use the wastewater, may not route the

industrial wastewater to a user or provider, and shall use the means of disposal instead of reuse. The producer has the option to provide additional treatment to meet the limitations and, if the limitations are met, the water may be used as industrial reclaimed water.

(C) Analytical methods for the analyses shall meet the requirements specified in Chapter 319 of this title (related to General Regulations Incorporated into Permits).

(D) Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

(2) Recordkeeping requirements.

(A) The producer shall maintain records of notifications made to the executive director under this subchapter concerning industrial reclaimed water use.

(B) The producer shall maintain records of all monitoring activities. These records shall be readily available for inspection by the executive director for a minimum period of five years. Records of monitoring activities shall include:

(i) date, time, and place of sample or measurement;

(ii) identity of individual who collected the sample or made the measurement;

(iii) date of analysis;

(iv) identity of the individual and laboratory who performed the analysis;

(v) the technique or method of analysis; and

(vi) the results of the analysis or measurement.

(C) The user shall maintain an operating log which records irrigation activities and shall be readily available for inspection by the executive director for a minimum period of five years. The operating log shall record irrigation activities which include:

(i) the volume of industrial reclaimed water used for irrigation each day; and

(ii) the actual surface area wetted each day.

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§210.58. Existing Authorizations.

(a) A person who has obtained executive director written approval to use industrial reclaimed water under this subchapter is authorized to continue as currently authorized.

(b) If a person is no longer authorized under a Level I authorization, the producer shall obtain authorization for the reuse of industrial wastewater within 180 days of the effective date of this subchapter.

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§210.59. Executive Director Denial or Suspension Authorization.

(a) The executive director may deny or suspend an authorization request to use industrial reclaimed water under this subchapter based on potential or actual adverse impact to the environment or on close proximity to a public park, school, recreational area, spring, aquifer, water supply well, surface water supply intake, water treatment plant intake, potable water storage facility, sewage treatment plant, or other location of concern. A determination of potential adverse impact may arise from consideration of such factors as, but not limited to, proposed flow rate, production rate, industrial reclaimed water quality, nature of the groundwater, soils, or geology of the disposal area. In making a determination of potential adverse impacts, the executive director may also consider such other factors, as he deems appropriate.

(b) The following requirements apply to suspensions of authorizations.

(1) The suspension issued under this subchapter will include a statement that requires the executive director to provide written notice to a person stating that the executive director intends to suspend a person's authority to use reclaimed water under the authorization, including:

(A) a brief statement of the basis for this decision under this subsection;

(B) a statement by the executive director of whether the person shall immediately cease the use of industrial reclaimed water; and

(C) a deadline for obtaining authorization under Texas Water Code (TWC), Chapter 26.

(2) The executive director may require the person whose authorization to use reclaimed water is suspended to apply for and obtain an individual permit.

(3) The executive director may suspend authorization to use industrial reclaimed water under an existing authorization issued under this subchapter for the following reasons:

(A) the quantity of industrial reclaimed water used, the type of waste or reclaimed water, or the type of operation does not comply with this chapter;

(B) the use, irrigation, or discharge causes a violation of the Texas Surface Water Quality Standards; or

(C) the wastewater used as industrial reclaimed water contains pollutants that cause or contribute to significant adverse effects on water quality. In making this determination, the executive director shall consider the following factors:

(i) the location of the end use for industrial reclaimed water;

(ii) the volume of wastewater used as industrial reclaimed water;

(iii) the quantity and nature of pollutants contained in the wastewater used as industrial reclaimed water;

(iv) whether the use of industrial reclaimed water would adversely affect groundwater quality, inconsistent with the policy specified in TWC, §26.401; and

(v) other factors relating to the protection of water quality.

(c) The compliance history of the producer, provider, and user will be evaluated prior to approval of any Level II authorization under this subchapter. Authorization may be suspended or denied or additional requirements may be established based on the evaluation of compliance history as outlined in Chapter 60 of this title (relating to Compliance History).

§210.60. Fees.

Each application submitted to the executive director for Level II authorization under this subchapter shall include a fee of $100.

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