

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 95. WASTEWATER TREATMENT REQUIREMENTS

Sec.

95.1 [Reserved]

95.2. [Quality standards and oil-bearing wastewaters.] Effluent Standards for Industrial Wastes.

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95.10. [Effluent standards for new discharges of wastewaters containing high Total Dissolved Solids (TDS) concentrations.] TREATMENT REQUIREMENTS FOR NEW AND EXPANDING MASS LOADINGS OF TOTAL DISSOLVED SOLIDS (TDS).

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§ 95.2. [Quality standards and oil-bearing wastewaters.] Effluent Standards for Industrial Wastes.

Industrial [waste shall] wastes must meet the following [quality] effluent standards:

(1) [There may be no discharge of wastes which are acid.

(2)] Wastes [shall] must have a pH of not less than 6 and not greater than 9, except where:

\* \* \* \* \*

[(3)] (2) Oil-bearing wastewaters, except those subject to paragraph [(4), shall] (3), must comply with [all of] the following:

\* \* \* \* \*

[(4)] (3) Petroleum marketing terminals [shall] must:

\* \* \* \* \*

[(5)] (4) Waste may not contain more than 7 milligrams per liter of dissolved iron.

\* \* \* \* \*

[(6)] (5) When surface waters are used in the industrial plant, the quality of the effluent need not exceed the quality of the raw water supply if the source or supply would normally drain to the point of effluent discharge, unless otherwise required under the [State act] act or Federal Act or regulations promulgated thereunder.

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*(Editor's Note: Section 95 is new and printed in regular print to enhance readability).*

**95.10 [Effluent standards for new discharges of wastewaters containing high Total Dissolved Solids (TDS) concentrations.] TREATMENT REQUIREMENTS FOR NEW AND EXPANDING MASS LOADINGS OF TOTAL DISSOLVED SOLIDS (TDS).**

**(a) [For the purpose of implementing this section, a new discharge of High-TDS wastewater is a discharge that did not exist on April 1, 2009, and includes a TDS concentration that exceeds 2,000 mg/L or a TDS loading that exceeds 100,000 pounds per day. The term "new discharge" includes an additional discharge, an expanded discharge or an increased discharge from a facility in existence prior to April 1, 2009.] THE**

**FOLLOWING ARE NOT CONSIDERED NEW AND EXPANDING MASS LOADINGS OF TDS AND ARE EXEMPT FROM THE TREATMENT REQUIREMENTS IN THIS SECTION:**

**(1) MAXIMUM DAILY DISCHARGE LOADS OF TDS OR SPECIFIC CONDUCTIVITY LEVELS THAT WERE AUTHORIZED BY THE DEPARTMENT PRIOR TO [INSERT EFFECTIVE DATE OF REGULATION]. SUCH DISCHARGE LOADS SHALL BE CONSIDERED EXISTING MASS LOADINGS BY THE DEPARTMENT.**

**(I) RELOCATION OR COMBINATION OF EXISTING DISCHARGE POINTS OF EXISTING MASS LOADINGS OF TDS DO NOT CONSTITUTE A NEW OR EXPANDING MASS LOADING UNLESS TOTAL MASS LOADINGS ARE INCREASED.**

**(II) EXISTING PUBLICLY OWNED TREATMENT WORKS (POTW) AS DEFINED IN 25 PA. CODE § 92.1 AND INDUSTRIAL WASTE TREATMENT FACILITIES AUTHORIZED PRIOR TO THE EFFECTIVE DATE OF THIS REGULATION UNDER PERMITS AUTHORIZING THE ACCEPTANCE, TREATMENT AND DISCHARGE OF TDS DO NOT CONSTITUTE A NEW OR EXPANDING MASS LOADING UNLESS TOTAL MASS LOADINGS ACCEPTED, TREATED AND DISCHARGED ARE TO BE INCREASED. ONLY THE NET INCREASE IN TDS MASS LOADINGS FROM THESE FACILITIES WILL BE CONSIDERED A NEW AND EXPANDING MASS LOADING OF TDS.**

**(2) FACILITIES TREATING POSTMINING POLLUTIONAL DISCHARGES FROM ABANDONED MINE SITES. FOR PURPOSES OF THIS SECTION,**

**ABANDONED MINE SITES INCLUDE ALL LANDS AND WATER ELIGIBLE FOR RECLAMATION OR DRAINAGE ABATEMENT OR TREATMENT EXPENDITURES PURSUANT TO 30 U.S.C. §§ 1232(G)(4) OR 1234.**

**(3) SURFACE MINING ACTIVITIES WITH PRE-EXISTING DISCHARGES SUBJECT TO REQUIREMENTS IN 25 PA. CODE CH. 87, SUBCHAPTER F (RELATING TO SURFACE COAL MINES: MINIMUM REQUIREMENTS FOR REMINING AREAS WITH POLLUTIONAL DISCHARGES) OR 25 PA. CODE CH. 88, SUBCHAPTER G (RELATING TO ANTHRACITE SURFACE MINING ACTIVITIES AND ANTHRACITE BANK REMOVAL AND RECLAMATION ACTIVITIES: MINIMUM REQUIREMENTS FOR REMINING AREAS WITH POLLUTIONAL DISCHARGES) , AND PRE-EXISTING DISCHARGES SUBJECT TO 25 PA. CODE CH. 90, SUBCHAPTER F (RELATING TO COAL REFUSE DISPOSAL ACTIVITIES ON AREAS WITH PREEXISTING POLLUTIONAL DISCHARGES).**

**(4) DISCHARGES FROM ACTIVE SURFACE COAL MINING OPERATIONS WITH AN OPEN PIT DIMENSION OF LESS THAN 450,000 SQUARE FEET EXPOSED AT ANY TIME.**

**(5) DISCHARGES FROM EROSION AND SEDIMENT CONTROL FACILITIES USED AT SURFACE MINING ACTIVITIES AS DEFINED IN 25 PA. CODE § 86.1 (RELATING TO DEFINITIONS).**

**(6) EXISTING MINE DRAINAGE DIRECTED TO A MINE POOL WHERE THE MINE POOL IS BEING TREATED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS IN 25 PA. CODE CHAPTERS 91—96.**

(7) NEW AND EXPANDING DISCHARGE LOADINGS OF TDS EQUAL TO OR LESS THAN 5,000 POUNDS PER DAY, MEASURED AS AN AVERAGE DAILY DISCHARGE OVER THE COURSE OF A CALENDAR YEAR, OTHERWISE KNOWN AS THE ANNUAL AVERAGE DAILY LOAD.

(8) DISCHARGES OF WASTEWATER PRODUCED FROM INDUSTRIAL SUBCATEGORIES WITH APPLICABLE EFFLUENT LIMIT GUIDELINES FOR TDS, CHLORIDES OR SULFATES ESTABLISHED AS BEST AVAILABLE TECHNOLOGY ECONOMICALLY ACHIEVABLE (BAT), BEST CONVENTIONAL POLLUTANT CONTROL TECHNOLOGY (BCT), OR NEW SOURCE STANDARDS OF PERFORMANCE, BY THE ADMINISTRATOR OF THE EPA UNDER SECTIONS 303(B) AND 306 OF THE FEDERAL ACT (33 U.S.C. §§ 1314(B) AND 1316).

(b) ~~Unless specifically exempted under paragraph (6), all new discharges of wastewater with High-TDS must comply with the following:~~

~~(1) Section 95.2 (relating to effluent standards for industrial wastes).~~

~~(2) The discharge may not contain more than 500 mg/L of TDS as a monthly average.~~

~~(3) The discharge may not contain more than 250 mg/L of total chlorides as a monthly average.~~

~~(4) The discharge may not contain more than 250 mg/L of total sulfates as a monthly average.~~

~~(5) In addition to paragraphs (1) through (4), discharges to groundwater, including land application and discharges to existing mine pools, must comply with §§ 91.51 and 91.52 (relating to underground disposal).~~

~~(6) — Discharges of wastewater produced from industrial subcategories with applicable Effluent Limit Guidelines for TDS, Chlorides or Sulfates established as Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), or new source standards of performance, by the Administrator of the EPA under sections 303(b) and 306 of the Federal Act (33 U.S.C.A. §§ 1314(b) and 1316) are exempt from the effluent standards in this section.]~~

OPERATIONS WITH WASTEWATER RESULTING FROM FRACTURING, PRODUCTION, FIELD EXPLORATION, DRILLING OR COMPLETION OF NATURAL GAS WELLS MUST COMPLY WITH THE FOLLOWING REQUIREMENTS:

(1) EXCEPT AS PROVIDED IN SUBSECTION (3), THERE MAY BE NO DISCHARGE OF WASTEWATER INTO WATERS OF THIS COMMONWEALTH FROM ANY SOURCE ASSOCIATED WITH FRACTURING, PRODUCTION, FIELD EXPLORATION, DRILLING OR WELL COMPLETION OF NATURAL GAS WELLS.

(2) A WASTEWATER SOURCE REDUCTION STRATEGY MUST BE DEVELOPED BY THE WELL OPERATOR WITHIN ONE YEAR AFTER THE EFFECTIVE DATE OF THIS REGULATION AND SUBMITTED TO THE DEPARTMENT UPON REQUEST. THE SOURCE REDUCTION STRATEGY MUST IDENTIFY THE METHODS AND PROCEDURES THE OPERATOR WILL USE TO MAXIMIZE THE RECYCLING AND REUSE OF FLOW BACK OR PRODUCTION FLUID EITHER TO FRACTURE OTHER NATURAL GAS WELLS, OR FOR OTHER BENEFICIAL USES APPROVED PURSUANT TO 25 PA. CODE

**CHAPTER 287 (RELATING TO RESIDUAL WASTE MANAGEMENT). THE STRATEGY SHALL BE UPDATED ANNUALLY AND INCLUDE, AT A MINIMUM, THE FOLLOWING INFORMATION:**

**(I) A COMPLETE CHARACTERIZATION OF THE OPERATOR'S WASTEWATER STREAM INCLUDING CHEMICAL ANALYSES, TDS CONCENTRATIONS AND MONTHLY GENERATION RATE OF FLOWBACK AND PRODUCTION FLUID AT EACH NATURAL GAS WELL;**

**(II) A DESCRIPTION AND EVALUATION OF POTENTIAL WASTEWATER SOURCE REDUCTION OPTIONS THROUGH RECYCLING, REUSE OR OTHER BENEFICIAL USES;**

**(III) THE RATIONALE FOR SELECTING THE SOURCE REDUCTION METHODS TO BE EMPLOYED BY THE OPERATOR;**

**(IV) QUANTIFICATION OF THE FLOWBACK AND PRODUCTION FLUID GENERATED BY EACH WELL WHICH IS RECYCLED OR REUSED EITHER TO FRACTURE OTHER NATURAL GAS WELLS OR FOR OTHER APPROVED BENEFICIAL USES.**

**(3) NEW AND EXPANDING TREATED DISCHARGES OF WASTEWATER RESULTING FROM FRACTURING, PRODUCTION, FIELD EXPLORATION, DRILLING, OR WELL COMPLETION OF NATURAL GAS WELLS MAY BE AUTHORIZED BY THE DEPARTMENT UNDER 25 PA. CODE CH. 92 (RELATING TO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITTING, MONITORING AND COMPLIANCE) PROVIDED THAT ALL OF THE FOLLOWING REQUIREMENTS ARE MET:**

(I) SUCH DISCHARGES MAY BE AUTHORIZED ONLY FROM CENTRALIZED WASTE TREATMENT FACILITIES (CWT), AS DEFINED IN 40 CFR § 437.2(C);

(II) SUCH DISCHARGES MAY NOT BE AUTHORIZED FROM A POTW, AS DEFINED IN 25 PA. CODE § 92.1, UNLESS TREATMENT AT A CWT MEETING ALL OF THE REQUIREMENTS OF THIS CHAPTER PRECEDES TREATMENT BY THE POTW;

(III) THE DISCHARGE MAY NOT CONTAIN MORE THAN 500 MG/L OF TOTAL DISSOLVED SOLIDS AS A MONTHLY AVERAGE;

(IV) THE DISCHARGE MAY NOT CONTAIN MORE THAN 250 MG/L OF TOTAL CHLORIDES AS A MONTHLY AVERAGE;

(V) THE DISCHARGE MAY NOT CONTAIN MORE THAN 10 MG/L OF TOTAL BARIUM AS A MONTHLY AVERAGE;

(VI) THE DISCHARGE MAY NOT CONTAIN MORE THAN 10 MG/L OF TOTAL STRONTIUM AS A MONTHLY AVERAGE;

(VII) THE DISCHARGE COMPLIES WITH THE PERFORMANCE STANDARDS IN 40 CFR § 437.45(B) (RELATING TO NEW SOURCE PERFORMANCE STANDARDS (NSPS)).

(4) DEEP WELL INJECTION OF WASTEWATER RESULTING FROM FRACTURING, PRODUCTION, FIELD EXPLORATION, DRILLING OR WELL COMPLETION OF NATURAL GAS WELLS MUST COMPLY WITH 25 PA. CODE § 78.18 (RELATING TO DISPOSAL AND ENHANCED RECOVERY WELL PERMITS).



(c)  ~~[New discharges of wastewaters resulting from fracturing, production, field exploration, drilling or completion of oil and gas wells must comply with the following provisions, in addition to the provisions in subsection (b):~~

~~(1) — There may be no discharge of wastewater into waters of this Commonwealth from any direct source or site of fracturing, production, field exploration, drilling, or well completion, (that is, produced water, drilling muds, drill cuttings, and produced sand).~~

~~(2) — Treated discharges of wastewater generated from fracturing, production, field exploration, drilling, or well completion may be authorized by the Department under Chapter 92 (relating to National Pollutant Discharge Elimination System Permitting, Monitoring and Compliance). The discharges shall be authorized only from centralized waste treatment (CWT) facilities and approved Publicly Owned Treatment Works (POTWs).~~

~~(3) — The discharge may not contain more than 10 mg/L of total barium as a monthly average.~~

~~(4) — The discharge may not contain more than 10 mg/L of total strontium as a monthly average.~~

~~(5) — Where a discharge from a CWT facility is proposed, the discharge must comply with the performance standards in 40 CFR 437.34 (relating to new source performance standards (NSPS)), in addition to complying with paragraphs (2)–(4).~~

~~(6) — Where a discharge through a POTW is proposed, in addition to compliance with the requirements of paragraphs (2)–(4) the following apply:~~

~~(i) Pretreatment shall be provided and comply with the performance standards found in 40 CFR 437.36 (relating to pretreatment standards for new sources).~~

~~(ii) The POTW shall develop and implement a Federal pretreatment program meeting the applicable standards found in 40 CFR 403.8 (relating to pretreatment program requirements: development and implementation by POTW).]~~

ALL NEW AND EXPANDING MASS LOADINGS OF TDS NOT ADDRESSED IN SUBSECTIONS (A) AND (B) MAY NOT CONTAIN MORE THAN 2,000 MG/L OF TOTAL DISSOLVED SOLIDS AS A MONTHLY AVERAGE, UNLESS A VARIANCE IS APPROVED BY THE DEPARTMENT PURSUANT TO THIS SECTION. FOR PURPOSES OF THIS SUBSECTION, ANY NET INCREASE IN EXISTING TDS LOADINGS AUTHORIZED AFTER *[INSERT EFFECTIVE DATE]* WILL BE CONSIDERED A NEW AND EXPANDING MASS LOADING OF TDS.

(d) ~~[Any wastewater treatment requirement established under this chapter does not apply if an NPDES permit limitation established under Chapter 92 provides a more stringent effluent limitation requirement than would be provided by application of this chapter.]~~ A REQUEST FOR A VARIANCE TO THE REQUIREMENT IN SUBSECTION (C) MUST BE SUBMITTED TO THE DEPARTMENT AND BE ACCOMPANIED BY THE FOLLOWING INFORMATION:

(1) AN ANALYSIS OF THE APPLICANT'S EXISTING DISCHARGE LOADS OF TDS, AND THE PROJECTED NEW DISCHARGE LOADS ASSOCIATED WITH THE PROPOSED NEW AND EXPANDING MASS LOADINGS OF TDS,

(2) AN ANALYSIS OF THE APPLICANT'S EXISTING TREATMENT FACILITIES AND THE ABILITY OF THOSE FACILITIES TO MEET THE REQUIREMENT IN SUBSECTION (C),

(3) AN ANALYSIS OF UPGRADES NECESSARY TO BRING THE APPLICANT'S EXISTING FACILITY INTO COMPLIANCE WITH THE REQUIREMENT IN SUBSECTION (C) AND THE ESTIMATED COSTS ASSOCIATED WITH SUCH UPGRADES, AND

(4) AN ANALYSIS OF THE RECEIVING STREAM'S WATER QUALITY FOR TDS AT, OR UPSTREAM FROM, THE PROPOSED POINT OF DISCHARGE.

(E) A REQUEST FOR A VARIANCE TO THE REQUIREMENTS IN SUBSECTION (C) WILL BE SUBJECT TO THE PUBLIC NOTICE REQUIREMENTS FOR PERMIT APPLICATIONS CONTAINED IN 25 PA. CODE § 92.61 (RELATING TO PUBLIC NOTICE OF PERMIT APPLICATION AND PUBLIC HEARING).

(F) A VARIANCE TO THE REQUIREMENTS IN SUBSECTION (C) MAY BE APPROVED BY THE DEPARTMENT ONLY UNDER THE FOLLOWING CONDITIONS:

(1) A WATERSHED ANALYSIS CONDUCTED BY THE DEPARTMENT DETERMINES THAT SUCH A VARIANCE WILL NOT RESULT IN A REDUCTION OF AVAILABLE ASSIMILATIVE CAPACITY FOR TDS TO LESS THAN TWENTY FIVE PERCENT (25%) OF THE TOTAL AVAILABLE ASSIMILATIVE CAPACITY AT THE NEXT DOWNSTREAM POINT OF WATER QUALITY STANDARDS COMPLIANCE. AVAILABLE ASSIMILATIVE CAPACITY SHALL BE CALCULATED USING DESIGN FLOW CONDITIONS PURSUANT TO 25 PA. CODE § 96.4(G) (RELATED TO WATER QUALITY STANDARDS IMPLEMENTATION); AND

(2) THE RESULTING INSTREAM CONCENTRATION OF TDS AT THE POINT OF DISCHARGE FROM THE NEW OR EXPANDING LOADING WILL NOT

**VIOLATE WATER QUALITY STANDARDS CONTAINED IN 25 PA. CODE CH. 93  
(RELATING TO WATER QUALITY STANDARDS).**

**(G) COAL-FIRED ELECTRIC STEAM GENERATING UNITS SUBJECT TO  
EFFLUENT LIMITATIONS CONTAINED IN 40 CFR PART 423, INCLUDING ANY  
TDS EFFLUENT LIMITATIONS CREATED BY THE EPA RULEMAKING ON  
EFFLUENT LIMITATIONS SCHEDULED FOR COMPLETION BY MARCH 2014  
(DOCKET NO. EPA-HQ-OW-2009-0819), MUST COMPLY WITH THE  
REQUIREMENTS IN SUBSECTION (C) BY NO LATER THAN DECEMBER 31, 2018,  
UNLESS EXEMPTED BY SUBSECTION (A).**