

CONSENT AGENDA
ITEM NO. 41

**CITY OF SAN ANTONIO
PUBLIC WORKS DEPARTMENT
CITY COUNCIL AGENDA MEMORANDUM**

TO: Mayor and City Council

FROM: Thomas G. Wendorf, P.E., Director of Public Works

SUBJECT: Ordinance Approving Amendments to Modify the San Antonio Water System's Industrial Wastewater Pretreatment Program

DATE: November 17, 2005

SUMMARY AND RECOMMENDATIONS

This ordinance further amends Chapter 34 of the City, modifying local regulations to implement the San Antonio Water System's (SAWS) Pretreatment Program.

By resolution, the SAWS board of Trustees has reviewed and approved these modifications and recommended amendment of the City Code, Chapter 34, Water and Sewers, accordingly. The City Council acted on July 22, 2004, to enact Ordinance No. 99480, extensively updating the local regulations to comply with state and federal requirements. The proposed ordinance removes one additional pollutant from the list of regulated local limits and removes the pollutant abbreviations for all regulated local limits. The particular pollutant, Molybdenum, has been directed for removal by the Texas Commission on Environmental Quality (TCEQ).

BACKGROUND INFORMATION

The Industrial Wastewater Pretreatment Program is a federally mandated system of protocols, pollutant limits, and regulations intended to control the types and concentrations of pollutants discharged by commercial and industrial sources into the SAWS sanitary sewer system. The controls are intended to protect the operational integrity of the water recycling centers (WRCs). Without such controls, excessive concentrations of pollutants, corrosives, toxins, etc., could interfere with SAWS' sewage treatment and possibly result in damage to the system and /or wastewater treatment plants as well as create a hazardous working environment for SAWS personnel working in or around the collection system.

The Pretreatment Amendments proposed here are mainly adjustments to the abbreviations for limits of various pollutants received by the treatment plants. Under state and federal regulations, such pollutant limitations must be periodically reviewed and adjusted as necessary. The ordinance at hand is a response to the directions from TCEQ, updating pollutant loading limits and abbreviations for SAWS' sanitary sewer collection and treatment facilities.

The Resource Compliance Division of the San Antonio Water System (SAWS) has received Texas Commission on Environmental Quality (TCEQ) approval of certain modifications to the Pretreatment Program.

A statement of endorsement or approval of the Pretreatment Program from the SAWS Board of Trustees and San Antonio City Council must be included in the Program documents on file with TCEQ pursuant to 40 CFR §403.9 (b) (2).

TCEQ and the United States Environmental Protection Agency (EPA) require local limits reevaluation and program modification (as necessary) or at least every five years. SAWS Board of Trustees is responsible for funding the Pretreatment Program, as modified and approved by TCEQ and said funding of the operations of the required Pretreatment Program is supported by the general fund of the SAWS as part of the Resource Protection and Compliance Department annual operating budget with no additional funding required.

The SAWS Board of Trustees approved the proposed modifications to the current Pretreatment Program in an open meeting of the Board on October 18, 2005.

POLICY ANALYSIS

The requested action is in accordance with the City of San Antonio's and San Antonio Water System's policy of environmental responsibility and the development and implementation of the appropriate regulations to maintain wastewater pretreatment and treatment effectiveness. The requested action is also required by and in accordance with the requirements of the City's NPDES (National Pollutant Discharge Elimination System) permits. The SAWS Board approved on October 18, 2005 by resolution 05-417.

FISCAL IMPACT

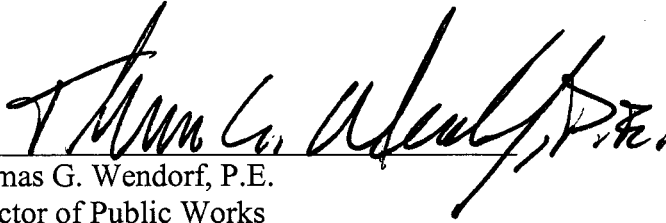
There will be no financial impact to either the San Antonio Water System or the City of San Antonio. All expenses related to the operation of the approved established Pretreatment Program are included in the normal operating budget of the Resource Compliance Division of the SAWS' Resource Protection and Compliance Department.

COORDINATION

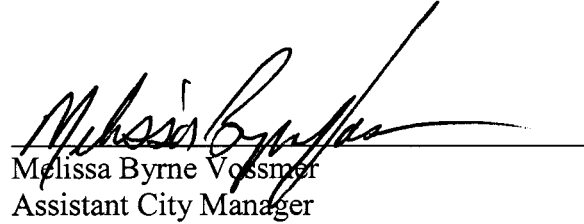
This request for ordinance has been coordinated with SAWS and the City Attorney's Office.

ATTACHMENTS

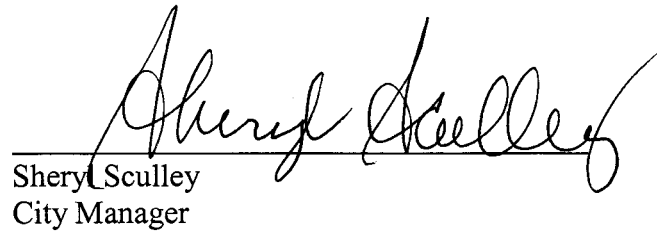
- 1.) SAWS Board Resolution No. 05-417
- 2.) Chapter 34, Article V, Division 3 strikeout changes



Thomas G. Wendorf, P.E.
Director of Public Works



Melissa Byrne Vossmer
Assistant City Manager



Sheryl Sculley
City Manager

Wastewater: The liquid and water-borne industrial or domestic wastes from commercial buildings, industrial and manufacturing facilities and institutions, whether treated or untreated, which are discharged into the POTW.

Water pollution: The manmade or man induced alteration of the chemical, physical, biological, or radiological characteristics of water below certain minimum desirable quality standards.

Water recycling center: That portion of the POTW which is designed to provide treatment of municipal sewage (formerly referred to as a wastewater treatment plant).

Waters of the United States: All navigable waters of the United States as defined at 33 USC 1362(7).
(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97)

Sec. 34-472. Regulations.

(1) *General discharge prohibitions.* No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.

(2) *Specific discharge prohibitions.* No user shall introduce or cause to be introduced into the POTW the following pollutants, substances, or wastewater:

- (a) There shall be no discharge of pollutants in amounts which would cause the discharge from a facility to have a closed cup flashpoint of less than 60° centigrade or 140° Fahrenheit using the test methods specified in 40 CFR 261.21;
- (b) Any wastewater having a pH less than 5.5 or greater than 10.5 standard units, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the POTW. (Any wastewater having a pH below 2.5 and above 12.5 standard units is considered hazardous under 40 CFR 261.22);
- (c) Solid or viscous substances in such quantities and/or qualities which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, solids or solids accumulation greater than one-half (1/2) inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, asbestos, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, paint or chemical residues, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes, fatty acids or esters of fatty acids, or food and vegetable wastes, or any material which can be disposed of as trash;
- (d) Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which contributes, either singly or by interaction with other pollutants, to interference to the POTW. In no case shall a slug load have a flow rate or contain concentrations or quantities of pollutants that exceed, for any time period longer than fifteen (15) minutes, more than five (5) times the average daily concentration, quantities, or flow produced during normal operations;
- (e) Any wastewater having a temperature which will inhibit biological activity in the POTW plant contributing to interference, but in no case wastewater with a temperature at the introduction into the POTW treatment plant which exceeds 40° centigrade (104° Fahrenheit) unless the POTW treatment plant is designed to accommodate such temperature. Wastewater entering the regional collection system cannot exceed 65.5°

centigrade (150° Fahrenheit) unless the quantity of heated discharge is of such volume that the total wastewater temperature at the nearest downstream manhole does not exceed 40° centigrade (104° Fahrenheit);

- (f) There shall be no discharge of any petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that may contribute, either singly or by interaction with other products, to interference or pass through;
- (g) In accordance with 40 CFR 403.5(b)(7) there shall be no discharge of any pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, asbestos, and any other substances which the Control Authority, the State or EPA has notified the user is a fire or explosion hazard to the system, or presents an imminent threat to the health and safety of persons operating the system;
- (h) Any trucked or hauled pollutants, except at discharge points designated by the the Control Authority, and in accordance with the Liquid Waste Transportation and Disposal Regulations (Article V, Division 4 of this chapter), as amended or replaced, and section 34-476 of this division;
- (i) Any noxious or malodorous liquids, gases, solids, or other wastewater which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to physically prevent reasonably safe entry of humans and/or equipment into the sewers for inspection, maintenance and repair purposes;
- (j) Any wastewater with any objectionable color not removed in the treatment process, such as, but not limited to, dye wastes, ink or printer waste, and vegetable tanning solutions;
- (k) Any stormwaters, surface water, groundwater, or subsurface drainage, except as specifically authorized by the Control Authority;
- (l) Sludges, screenings, or other residues from the pretreatment of industrial wastes;
- (m) Any substance which will cause the Control Authority to violate its NPDES / TPDES and/or state disposal system permit or the receiving water effluent quality standards, or fail a toxicity test;
- (n) Any agent, including but not limited to emulsifiers, surface active agents, detergents, etc. added to sand traps, grease traps, or the like, capable of passing the solid or semi-solid contents of the trap to the sewer system or any substance that may cause excessive foaming in the POTW;
- (o) Fats, oils, or greases of animal, mineral or vegetable origin in concentrations greater than two hundred (200) mg/L;
- (p) Any liquids, solids or gases, which by reason of their nature or quantity are, or may be sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system, or at any other point in the system, be more than five (5) percent, nor any single reading be over ten (10) percent of the lower explosive limit (LEL) of the meter. In accordance with 40 CFR 403.5(b)(1);

- (q) Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, which may injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters at the effluent end of the POTW, or which exceeds the limitations set forth in a categorical pretreatment standard. A toxic pollutant shall include, but not be limited to spent antifreeze or any pollutant identified pursuant to Section 307(a) of the Act;
- (r) Wastewaters or leachates generated from the remediation of hazardous or non-hazardous waste sites, except as specifically authorized by the Control Authority;
- (s) Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges, or scums, to be unsuitable for normal landfill disposal, land application, reclamation or reuse, or which may interfere with the reclamation process where the POTW is pursuing a reuse and reclamation program. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria, guidelines, or regulations developed under Section 405 or 503 of the Clean Water Act, or with any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, Clean Air Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, or state criteria applicable to sludge management and/or disposal methods being used;
- (t) Hazardous waste other than that allowed under the Domestic Sewage Exemption, as provided for under 40 CFR 261.4(a)(1)(ii). Notwithstanding that exemption, there shall be no discharge of what would otherwise be considered hazardous waste unless a user can certify the following:
 - (i) The volume and toxicity of such waste has been minimized to the fullest extent possible by utilizing the best available technology and pretreatment practices.
 - (ii) The discharge of such waste is not a substitute for disposal and reporting thereof otherwise necessary under RCRA, CERCLA, SARA, TSCA, CAA, EPA, or TCEQ regulations.
- (u) Any wastewater containing antibiotics or any organism including viruses, considered pathogenic and/or detrimental to process organisms.
- (v) Wastewater containing any radioactive waste or isotopes except in compliance with applicable state or federal regulations. Greater than or in allowable concentrations by TDH regulations or other agencies.
- (w) Pesticides
- (x) Bulk food processing wastes
- (y) Discharge of slugs or flows which exceed the carrying capacity of the part of the collection system through which it is discharged

The above pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW. This division may be amended to regulate specific types and sources of such discharges in order to minimize or eliminate hazardous waste loadings into the POTW. When the director determines that a user is indirectly discharging to the POTW any of the above mentioned substances in such quantities or concentrations which may interfere with the operation or performance of the POTW, the director shall advise the user of the impact of the indirect discharge on the POTW and impose upon the

user a schedule for termination of the discharge causing the interference.

(3) *National categorical pretreatment standards.* The National Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471 are hereby fully incorporated into this division.

(a) Where a categorical pretreatment standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the Control Authority may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(e). The more stringent national categorical pretreatment standards shall supersede the limitations imposed under section 34-472(5) of this division for that particular category.

(b) When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the Control Authority shall impose an alternate limit using the combined wastestream formula in 40 CFR 403.6(e).

(4) *Technically based local limits.*

(a) Significant Industrial Users regulated by permit for identified specific pollutants and non-permitted users not regulated under BMPs yet identified as potential contributors of certain pollutants shall not discharge or allow the discharge to the regional system, wastewaters containing individually identified specific pollutants in concentrations, in solution or suspension, in excess of the limits below. Compliance with these limits shall be determined based on the analysis of a grab sample or a combination of grab samples, time composite samples, or flow composite samples.

(b) All samples shall be collected and analyzed in a manner consistent with the requirements of 40 CFR 136. No user as prescribed above shall discharge or allow the discharge of wastewater to the regional system having a pH less than 5.5 or greater than 10.5 standard units, and all concentrations and/or quality criteria shall apply where the effluent is discharged to the POTW. Wastewater entering the Regional Collection System shall not exceed 65.5 degrees Centigrade (150 degrees Fahrenheit).

Industrial User Local Limits:

(a) 0.7 Arsenic As

(b) 0.7 Cadmium Ca

(c) 5.0 Chromium Cr

(d) 1.50 Copper Cu

(e) 0.17 Total Cyanide CN-T

(f) 0.7 Lead Pb

(g) 0.05 Mercury Hg

(h) 0.12 Molybdenum

(i)(h) 5.5 Nickel Ni

(i)(i) 0.02 Selenium Se

~~(k)~~(j) 0.50 Silver ~~Ag~~

~~(l)~~(k) 2.20 Zinc ~~Zn~~

~~(m)~~(l) 200 Fats Oil & Grease

~~(n)~~(m) 5.5--10.5 pH

~~(o)~~(n) 150 degrees Fahrenheit

Note that the above mentioned limits are reflected in units of mg/L, with the exception of pH and temperature. All limits with the exception of TSS represent the total concentration of the substance, both suspended and dissolved.