

SSO Reduction Program

Capacity, Management, Operation & Maintenance (CMOM) Program Revision 1 January 21, 2015





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Capacity, Management, Operation & Maintenance (CMOM) Program

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ACRONYM AND ABBREVIATION LIST

BMP	Best Management Practice
CD	Consent Decree
ССТV	Closed Circuit Television
СМ	Corrective Maintenance
CMMS	Computerized Maintenance Management System
СМОМ	Capacity, Management, Operation and Maintenance
CPMS	Capital Project Management System
CoSA	City of San Antonio
CWA	Clean Water Act
DOJ	Department of Justice
DP	Dipstick Pro
EARZ	Edwards Aquifer Recharge Zone
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ESRI	Environmental Systems Research Institute
FOG	Fats, Oils and Grease
FPE	Food Processing Establishment





FSE	Food Service Establishment
GI	Grease Interceptor
GIS	Geographic Information System
GPD	Gallons per Day
КРІ	Key Performance Indicator
MGD	Million Gallons per Day
NOV	Notice of Violation
0&M	Operations and Maintenance
РМ	Preventative Maintenance
RPC	Resource Protection and Compliance
SAWS	San Antonio Water System
SCADA	Supervisory Control and Data Acquisition
SDE	Spatial Data Engine
SQL	Structured Query Language
SR	Service Request
SSO	Sanitary Sewer Overflow
SORP	Sewer Overflow Response Plan
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
WCTS	Wastewater Collection and Transmission System
WO	Work Order





1.0 INTRODUCTION

The San Antonio Water System (SAWS) entered into a Consent Decree (CD) with the United States of America and the State of Texas that was lodged with the United States District Court for the Western District of Texas on July 23, 2013 and that was signed and entered by the Court on October 15, 2013 (a copy of the CD is posted on SAWS website at www.saws.org). Article V Section A of the CD acknowledged that SAWS has been and is implementing a variety of sewer system capacity, management, operation and maintenance (CMOM)-related programs and requires that SAWS develop a written CMOM Program and submit the written CMOM Program to the Environmental Protection Agency (EPA) no later than one (1) year from Date of Lodging. SAWS has prepared this CMOM Program in compliance with CD requirements.

1.1 Purpose & Goals

SAWS CMOM Program is designed to provide for proper operation and maintenance of the wastewater collection and transmission system (WCTS) with policies and guidelines intended to reduce the number of sanitary sewer overflows (SSOs). SAWS has implemented practices that meet CD requirements and will continue to improve programs and guidelines through a proactive use of information and data obtained from operational experience.

1.2 Organization System Parameters

An overview of SAWS WCTS and a description of SAWS organization that will implement the CMOM Program are contained in the following sections.

1.2.1 Organization and System Parameters

SAWS WCTS includes gravity sewer mains, force mains, lift stations and manholes. The WCTS is interconnected with other sanitary sewer collection systems pursuant to an agreement with each entity. SAWS has agreements with the following entities that discharge sanitary sewage into SAWS WCTS:

City of Alamo Heights City of Balcones Heights City of Hill Country Village Town of Hollywood Park City of Kirby City of Leon Valley City of Olmos Park City of Windcrest Fort Sam Houston, a United States Army Base Lackland AFB, a United States Air Force Base

A map illustrating SAWS service area is provided in **Appendix A.** The WCTS profile is as follows:





Table 1-1 Summary System Profile			
Total Population Served	1,756,173		
Population of Primary Community	1,359,758		
Total Customers	335,295 Retail & 91,968 Wholesale		
Miles of Gravity Sewers	5,099		
Miles of Force Mains	77.8		
Number of Lift Stations	155		
Number of Manholes	101,928		

Ret	ail	Wholesale		
Residential	314,003	Residential	12,649	
Commercial	17,413	Commercial	594	
Apartment	3,355	Apartment	89	
Industrial	158	Industrial	4	
Municipal	366	SAWS Metered	50	
		Sewer Only	78,582	
Total	335,295	Total	91,968	

A Lift Station Map illustrating the location of SAWS lift stations is presented in Appendix B.

1.2.2 Edwards Aquifer Recharge Zone

System components located in the Edwards Aquifer Recharge Zone (EARZ) are currently evaluated through cleaning and closed circuit television (CCTV) inspection every five years as required by Texas law. SAWS is currently required by State of Texas regulations to repair defects that are found within one year after identification. Annual reports are submitted to the Texas Commission on Environmental Quality (TCEQ) that describe SAWS inspection and repair activities within the EARZ. A map illustrating the EARZ boundaries, including 12-inch and greater diameter sewer mains and lift stations, is presented as **Appendix C**.





1.2.3 Organizational Structure

SAWS organization is led by a President/Chief Executive Officer who reports to SAWS Board of Trustees. SAWS budget is subject to approval by the City of San Antonio City Council.

There are two departmental groups within SAWS that are primarily responsible for the management and implementation of the CMOM Program. The first departmental Group is the Operations Group led by the Chief Operating Officer and the second departmental Group is led by the Vice President of Strategic Resources, which includes Engineering and Resource Protection and Compliance functions.

The Operations Group is comprised of the Distribution and Collection Department, the Sewer System Improvements Department, Production Treatment Operations, and the Operations Services Department. The Distribution and Collection Department is responsible for the operation and maintenance of the WCTS. The Sewer System Improvements Department provides regulatory SSO reporting services, planning and scheduling of sewer maintenance activities, and review of inspection data. This Department determines management of assets and provides data support services. The Production Treatment Operations Group provides operations and maintenance of the Lift Stations and the Wastewater Recycling Centers (i.e. Wastewater Treatment Plants). Operations Services provides equipment maintenance, environmental compliance services including laboratory operations, real estate support and facility operations.

The Strategic Resources Group is comprised of the Geographic Information System (GIS), Infrastructure Planning, Production-Recycle-Treatment Engineering, Collection and Distribution Engineering, Governmental Engineering, Pipeline Inspections, Conservation, Water Resources, and Resource Protection and Compliance (RPC). The GIS Department maintains infrastructure maps and asset inventory. Infrastructure Planning provides capacity analysis; Production-Recycle-Treatment Engineering is responsible for engineering for lift stations; Collection and Distribution Engineering provides engineering for gravity sewer mains. Governmental Engineering provides engineering associated with WCTS assets which must be relocated because of other infrastructure work, such as roadways and drainage. Pipeline Inspection provides construction inspection during the construction and rehabilitation of WCTS assets. RPC is responsible for the Fats, Oils and Grease (FOG) program and industrial pre-treatment and permitting.

The CMOM Program is supported by several other Departments. The overall organizational structure is illustrated as **Figure 1-1**.







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1.3 Legal Authority

SAWS is an agency of the City of San Antonio, a Texas home rule city. SAWS was created pursuant to Art. 1115, Tex. Rev. Civ. Stat. Ann. (now codified as §552.142, Tex. Local Gov't Code). Pursuant to these statutes a municipality may, by ordinance, transfer management and control of a wastewater system to a board of trustees.

The City of San Antonio City Council passed and approved Ordinance No. 75686 on April 30, 1992 in which the "complete management and control of the System" was vested in SAWS Board of Trustees (Ord. No. 75686, §32.A). The Ordinance provides that the SAWS Board of Trustees "shall have absolute and complete authority and power to control, manage and operate the System" and that the "Board shall be vested with all of the powers of the City with respect thereto" (Ord. No. 75686, §32.E), with the exception that the rates charged for services are subject to approval by the City Council (Ord. No. 75686, §32.F).

Pursuant to authority granted in Chapter 34 of the City of San Antonio Code of Ordinances, SAWS administers and enforces programs designed to regulate discharges into the sanitary sewer system.

SAWS operates the WCTS pursuant to Texas Pollutant Discharge Elimination System (TPDES) permits issued to SAWS by the TCEQ pursuant to Chapter 26, Texas Water Code and under authority of a delegation of permitting authority received by the State of Texas from the U.S. EPA in September 1998. Both documents, Chapter 34 and Chapter 26, are presented in **Appendix D**.





2.0 TRAINING PROGRAM

CD Requirement:

<u>"Training Program.</u> The Training Program shall include technical and skills training for appropriate categories of SAWS employees. The training shall be directly related to operation and maintenance of the sanitary sewer collection system for the purpose of responding to and preventing SSOs."

"Technical and Skills Training. The technical and skills training program shall be designed to facilitate compliance with the Clean Water Act (CWA) regarding SSO prevention and response."

SAWS Training Program is designed to provide appropriate personnel with the proper technical and skills training related to the operation and maintenance of the WCTS. SAWS Training Program is intended to create a competent cadre of employees and to facilitate compliance with the Clean Water Act (CWA).

The Training Program provides training in the following areas:

- Safety
- Technical Skills
- Licensing/Certification
- Supervisory/Soft Skill

TCEQ-required water/wastewater courses and SAWS-required safety courses are offered based on categories of employees. Equipment manufacturers often provide training for the operation of their equipment. Instructor-led and online training opportunities are available to SAWS employees. SAWS also provides on-the-job training activities when appropriate.

2.1 List and Description of Employees

CD Requirement:

"A list and description of the categories of employees that will be provided training in specific topics related to SSO prevention and response measures that can be addressed through operation and maintenance of the collection system, with the specified training commensurate with the specific job responsibilities of each category of employee."

SAWS has developed a list and description of the categories of employees that will be provided training in specific topics related to the operation and maintenance of the WCTS and SSO



2-2



response measures which corresponds to Appendix A of the Consent Decree; both are provided in **Appendix E** of this document. The list provides a summary of the different types of employees that SAWS utilizes to manage SSO reduction and mitigation and describes the specific training received by employees based on the type of work assigned.

Job descriptions lay out the guidelines for the training requirements and responsibilities of each category of employee. Descriptions are reviewed periodically and updated as necessary to reflect new or changing requirements. Employees are typically expected to comply with the elements of the job descriptions including requirements for professional licenses, commercial driver's license and/or continuing education.

2.2 List and Description Topics Covered

CD Requirement:

"A list and description of the topics to be covered in the technical and skills training for each relevant category of employee (including, where appropriate, training on sewer cleaning, FOG inspection, collection system inspection, collection system repair, replacement and rehabilitation techniques, data collection, information management, reporting and recordkeeping necessary to implement SAWS CMOM Program). The list of SAWS employee training categories and description of the technical and skills training to be covered for each relevant category of employee is attached as Appendix A."

SAWS has provided a list and description of the topics covered in the technical and skills training for each relevant category of employee (see Section 2.1).

2.3 How Training Relates to Employee Certification Required by Law

CD Requirement:

"A description of how the training relates to any applicable employee certification required by State or federal law."

Title 30 of the Texas Administrative Code, Section 30.331 (see **Appendix F**) requires that every person who directly supervises the WCTS operation or maintenance crews must be either a licensed wastewater collection system operator or a licensed wastewater treatment plant operator. At least one collection supervisor must hold a license class equal to or higher than that category of the WCTS. All other supervisors must hold a valid license.





Specialized technical training offered by SAWS includes training for all levels of wastewater and water certification, as required by TCEQ. This includes wastewater collection system operator, water distribution system operator, and wastewater treatment operator, and industrial and laboratory certifications. In addition, operator certification renewal hours are obtained by employees through these classes.

Table 2-1 Wastewater Collection System Categories					
Collection System	Daily Average Flow	Minimum License Class Required			
Category I	Less than 100,000 GPD	I (collection) or D (treatment)			
Category II	100,000 GPD to 1 MGD	II (collection) or C (treatment)			
Category III	Greater than 1.0 MGD	III (collection) or B (treatment)			

Title 30 of the Texas Administrative Code, Section 30.331

GPD = Gallons per day

MGD = Million gallons per day





Table 2-2 Type of Training Required for a Wastewater Collection System License				
R = Required E = Elective* N/A = Not Applicable as initial training requirement	111	II	I	
Basic Wastewater Operations	R	R	N/A	
Wastewater Collection	R	R	R	
Water Utility Safety	R	E	N/A	
Water Utility Calculations	E	N/A	N/A	
Water Utility Management	E	N/A	N/A	
Pump & Motor Maintenance	R	E	N/A	
Pretreatment Facility Inspection	E	N/A	N/A	
* For the Class III and II licenses, the applicant must take at least one elective course shown in that column.				
All courses listed above are 20 hour courses. These training courses may also be applied towards renewal				

All courses listed above are 20 hour courses. These training courses may also be applied towards renewal credit hours. Data from TCEQ (<u>http://www.tceq.state.tx.us/licensing/licenses/wwlic</u>)

2.4 Types of Training Records

CD Requirement:

"Identification of the types of training records that SAWS maintains and of the information management system used to plan and document completed training."

Training activities for SAWS employees are documented and tracked by the appropriate department responsible for maintaining records and copies of applicable certificates of staff to ensure that regulatory and organizational requirements are met. Applicable training activities are documented using sign-in sheets to track attendance and document subjects briefed. SAWS uses a computer database as the information management system to plan and document completed training.





3.0 CAPACITY ASSURANCE PROGRAM

CD Requirement:

<u>"Capacity Assurance Program.</u> SAWS requirements under this Consent Decree with regard to Capacity Assurance are specified in the Capacity Assessment and Remedial Measures provisions under Subsection V(D). The written CMOM Program shall describe SAWS plans to periodically reassess existing and future capacity of the WCTS following completion of and in a manner consistent with the Capacity Assessment and Remedial Measures Program described in Appendix D, as modified from time to time based on adaptive management principles, subject to the provisions of Section XVIII regarding modifications of the terms of the Consent Decree. SAWS shall give priority in this Capacity Assurance Program to prevention of SSOs."

SAWS Capacity Assurance Program consists of conducting Capacity Assessments to identify capacity constraints within the WCTS that have caused or significantly contributed to previous capacity-related SSOs and/or are likely to cause or significantly contribute to the future occurrence of capacity-related SSOs. Through January 22, 2018, SAWS Capacity Assessment program will be conducted as outlined in **Appendix G** (Appendix D of the Consent Decree).

SAWS will follow these guidelines to produce a Capacity Remedial Measures Plan by January 22, 2019. This plan will include a list of remedial measures projects that SAWS will implement to address verified capacity constraints in its WCTS.

3.1 Future Capacity Assessment

SAWS will continue its Capacity Assurance Program after submittal of the Capacity Remedial Measures Plan in January 2019. SAWS future Capacity Assessment Program will generally follow the guidelines laid out in Appendix D of the CD and as described in the following paragraphs. These guidelines may change as additional knowledge is gained and best business practices are implemented.

3.1.1 Flow Monitoring Plan

SAWS will measure the flow response in its WCTS in order to assist in the prediction of potential SSOs due to capacity constraints. When appropriate, SAWS will monitor the flow response in the WCTS by means of any one of the following monitoring devices or a combination thereof:

• Flow monitors, rain gauges, smart covers, chalking, visual inspections or any new technology SAWS deems viable for measuring flows in the WCTS





SAWS will determine the number of monitoring devices, their location and frequency of monitoring based on engineering and professional judgment. SAWS will typically consider high development areas, predicted growth, and age of the system when determining where and how frequently to monitor the WCTS. When appropriate, SAWS will continue to utilize monitoring for ongoing hydraulic model calibration, field investigations of suspected capacity constraints and Remedial Measures Alternatives Analysis.

3.1.2 System-Wide Hydraulic Modeling

SAWS maintains a dynamic hydraulic model of its WCTS within five major sewer sheds. The model generally includes 12-inch diameter and larger pipes and lift stations with a flow of a minimum of 2 MGD and above. The current computer software for the model is Innovyze Integrated Catchment Modeling, ICM, version 4, which is periodically updated. SAWS will continue to maintain a hydraulic model of the WCTS by updating the model with new infrastructure information, as warranted.

SAWS will calibrate the model as appropriate, and generally utilize it to support the following Capacity Assurance Program activities when appropriate:

- Identify future potential capacity constraints to assist in validating whether a reported wet weather SSO¹ is caused by inadequate capacity
- Design new infrastructure utilizing a 5-year, 6-hour storm as the design storm
- Evaluate the impact on system capacity for proposed large developments and population growth within the WCTS. SAWS may identify capacity improvements as a result of new developments and incorporate necessary improvements in the Development's Utility Service Agreement
- Assist in Remedial Measures Alternative Analysis. Support evaluation of alternative solutions for verified existing capacity constraints and future conditions using future year population projections
- Evaluate the capacity of large lift stations (generally 2 MGD and greater) or lift stations that have a potential for additional flow in undeveloped areas

¹ A wet weather SSO is defined as any overflow that is reported during a rain event greater than 1 inch over 24 hours.





3.1.3 Evaluation of Reported Wet Weather SSOs and Model Predicted SSOs

If appropriate, SAWS will continue to document and evaluate reported wet weather SSOs during rain events greater than 1 inch over 24 hours but less than the design storm. These will be evaluated against model predicted SSOs and SAWS will consider, as appropriate, maintenance and cleaning history, televising data, monitoring data, and field observed data to confirm whether a model predicted SSO or reported wet weather SSO was caused by inadequate capacity. The evaluation findings will be documented and if the evaluation confirms a capacity constraint exists, it will be subject to Remedial Measures Alternative Analysis. If through evaluation SAWS determines the SSO was not caused by a capacity constraint, the pipe segments in question will be removed from monitoring as a capacity constraint.

3.2 Remedial Measures Alternative Analysis

SAWS will perform a Remedial Measures Alternatives Analysis on assets with verified capacity constraints. This process may include obtaining additional data through smoke or dye testing, flow metering, CCTV inspection or other analysis, if appropriate. Data obtained and analyzed will determine which remedial measure will most likely resolve the constraint to provide the most cost-effective long term solution.

Remedial measures may include one or a combination of the following:

- Re-routing a portion of upstream wastewater flows
- Reducing flow entering the WCTS from customers
- Reducing inflow
- Reducing infiltration
- Increasing conveyance capacity of the WCTS
- Using upstream flow detention facilities
- Continuing to monitor
- Utilizing other engineering solutions

3.3 Plan and Implement Remedial Measures

After preparation of the Capacity Remedial Measures Plan, SAWS will generally plan and implement capacity-related remedial measures projects using the following steps as a guideline:



3-3



- Prioritize Capacity Projects: Prioritize all projects identified for remedial measures and periodically evaluate and reprioritize as warranted. Capacity projects will be coordinated and prioritized with condition projects
- Allocate Funds: SAWS will request funding once the projects have been identified and prioritized
- Design: Engineering construction plans will be designed to handle the anticipated flows in the WCTS. SAWS will typically consider selection of the next larger commercially available pipe size to provide for adequate capacity, if appropriate
- Implement: Commence and complete selected remedial measure

When new infrastructure is designed, SAWS will apply flows based on the design storm and population projections to determine the appropriate pipe sizing. SAWS will use the hydraulic model to size the pipes and for smaller pipes not contained in the hydraulic model, SAWS will use the Manning's Equation along with SAWS current standard flow regulations.

3.4 Tracking Future Capacity Remedial Measures Activities

SAWS is currently in the process of designing and implementing a Capital Project Management System (CPMS) to track capital improvement projects.

In the Capacity Remedial Measures Plan that will be completed by SAWS pursuant to the CD, SAWS will describe the guidelines and systems that will be utilized to track remedial measures activities implemented under this CMOM Program.

3.5 Reporting Capacity Remedial Measures Work Performed Under CMOM

Remedial measures activities performed under this section will be documented in the Annual Report for the calendar year in which these activities are completed as required by the CD.





4.0 SEWER REPORTING AND DOCUMENTATION PROCEDURES

CD Requirement:

<u>"Sewer Reporting and Documentation Procedures.</u> As part of the CMOM Program, SAWS shall evaluate its SSO reporting and documentation procedures, and modify such procedures as necessary to satisfy the requirements of Subparagraphs 12.a to 12.f below. SAWS modified procedures shall be described in the written CMOM Program to be submitted no later than one (1) year from the Date of Lodging. In addition to providing a written summary of SAWS sewer reporting and documentation procedures in the CMOM Program, SAWS shall begin providing the following reports to EPA ("EPA Reports") within ninety (90) days of Lodging;"

4.1 Monthly Compliance Report

CD Requirement:

"SAWS shall provide EPA a copy of the monthly compliance report required by its TPDES permits at the same time it is submitted to TCEQ"

SAWS operates its wastewater treatment plants pursuant to the Treatment Facility TPDES permits that require a monthly Sewer Overflow report be submitted to TCEQ for each Treatment Facility. SAWS provides the total monthly SSOs, followed by data sheets on all SSOs that are segregated by Treatment Facility TPDES Permit. SAWS also provides the U.S. EPA and the U.S. Department of Justice (DOJ) a copy of the monthly compliance report required by its TPDES permits at the same time it is submitted to TCEQ. An example of one transmittal letter to EPA and DOJ with one monthly compliance report is provided in **Appendix H**.

4.2 Five-Day Report

CD Requirement:

"SAWS shall provide EPA a copy of any five-day report submitted under its TPDES permit at the same time it is submitted to TCEQ"

SAWS is required to submit Water Quality Noncompliance Notification to TCEQ using the required TCEQ Form #0501 within 5 days of an SSO. In addition, SAWS is required to provide EPA and DOJ a copy of any five-day report submitted under its TPDES permits at the same time it is submitted to TCEQ. An example of one transmittal letter to EPA and DOJ with TCEQ Forms #0501 are provided in **Appendix I**.





4.3 Annual Report

CD Requirement:

"SAWS shall provide EPA with an Annual Report, as described in Paragraph 52 of this Consent Decree, containing the following information for each SSO: Location of the SSO by street address, asset identification number or any other appropriate method (i.e., by latitude and longitude); Name of the receiving water, if applicable; An estimate of the volume (in gallons) of sewage discharged and recovered; Description of the collection system component from which the SSO was released (e.g., manhole, gravity main, pump station wet well, etc.); Description of the overflow's potential impact, if any, on public health and to water quality in the receiving water body; Cause or suspected cause of the SSO; Description of whether the SSO is a repeat SSO (defined as an SSO that occurred at the same Pipe Segment within the past 24 months), including the date of the last SSO that occurred at the same location; Estimated date and time when the overflow began and stopped or the anticipated time the SSO is expected to discontinue; Steps taken to respond to the SSO; Steps taken to reduce, eliminate, and prevent reoccurrence of the SSO including a summary of when such steps were taken or are planned; and Report of all notifications to the public and other agencies or departments, as required by law or regulation."

SAWS provides EPA with an Annual Report, as described in Paragraph 52 of the CD, containing the following information for each SSO:

- Location of the SSO by street address, asset identification number or any other appropriate method (i.e., by latitude and longitude)
- Name of the receiving water, if applicable
- Estimate of the volume (in gallons) of sewage discharged and recovered
- Description of the collection system component from which the SSO was released (e.g., manhole, gravity main, pump station wet well, etc.)
- Description of the SSO's potential impact, if any, on public health and to water quality in the receiving water body
- Cause or suspected cause of the SSO
- Description of whether the SSO is a repeat SSO (defined as an SSO that occurred at the same pipe segment within the past 24 months), including the date of the last SSO that occurred at the same location
- Estimated date and time when the overflow began and stopped or the anticipated time the SSO is expected to discontinue





- Steps taken to respond to the SSO
- Steps taken to minimize the probability of reoccurrence of the SSO including a summary of when such steps were taken or are planned
- Report of all notifications to the public and other agencies or departments, as required by law or regulation

4.4 Customer Complaints from Private Laterals

CD Requirement:

"The Annual Report shall also include any information that SAWS obtained or received (e.g., customer complaints) regarding discharges from Private Laterals, including any information received specifying the location of the discharge, a description of the circumstances of the discharge, and a description of how the discharge was remediated"

The Annual Report includes customer complaints that SAWS received regarding discharges from private laterals. The summary may include information received concerning the date, location of a discharge and a description of the circumstances of the discharge, as applicable.

4.5 Record Retention

CD Requirement:

"SAWS shall maintain records of the EPA SSO Reports described above for a period of five years from the date of submittal of such Report to EPA. In addition to maintaining these records, SAWS shall also maintain records reflecting the actions SAWS has taken and will take to prevent the SSO from recurring and a timeframe for undertaking those steps, including any work orders or similar records associated with investigation and/or repair of problems related to SSOs."

SAWS will maintain records of the EPA SSO Reports for a period of five years from the date of submittal to EPA. In addition to maintaining these records, SAWS will also maintain information reflecting the actions outlined and/or completed to minimize the likelihood of the SSO recurring. Information will include the timeframe for undertaking those steps, including any maintenance modifications, monitoring, work orders, rehabilitation projects or similar records associated with investigation and/or repair of problems related to SSOs.





4.6 Customer Complaints

CD Requirement:

"SAWS shall maintain a list and description of complaints from customers or others regarding SSOs that occur from the Date of Lodging through December 31 of the Calendar Year of Lodging and thereafter for each Calendar Year during the term of this Decree."

Customer complaints regarding SSOs are received by SAWS Emergency Operation Center (EOC) and information is captured in Computerized Maintenance Management System (CMMS) in a Service Request (SR). SAWS is maintaining a list and description of complaints received from customers or others regarding SSOs that occur from the Date of Lodging through December 31 of the Calendar Year of Lodging and thereafter for each Calendar Year during the term of this CD.

4.7 Notice of Implementation

CD Requirement:

"SAWS shall implement the procedures and requirements set forth above in Subparagraphs 12.a to 12.e within ninety (90) days of the Date of Lodging of the Consent Decree. Following the 90day deadline, SAWS shall provide notice in accordance with Section XV (Notices) and certify in accordance with Section XIX (Certification) to EPA that the SSO reporting and documentation procedures are being implemented."

SAWS implemented the procedures and requirements set forth in Subparagraphs 12.a to 12.e of the CD within ninety (90) days of the Date of Lodging. Following the 90-day deadline, SAWS provided notice herein, in accordance with Section XV (Notices) and certified in accordance with Section XIX (Certification) to EPA that the SSO reporting and documentation procedures have been implemented.

A copy of the Notice of Implementation letter submitted to EPA on October 15, 2013, is presented as **Appendix J**.





5.0 SEWER OVERFLOW RESPONSE PLAN (SORP)

CD Requirement:

<u>"Sewer Overflow Response Plan ("SORP</u>"). No later than 150 days from the Date of Lodging of the Consent Decree, SAWS shall develop, submit to EPA for review and comment, and implement a SORP that is designed to accomplish the following goals:

- a. Respond to and halt SSOs as rapidly as technically feasible consistent with safety and legal requirements;
- b. Employ SSO mitigation measures whenever appropriate;
- c. Implement appropriate measures to prevent SSO recurrence; and
- d. Incorporate in the SORP procedures for responding to SSOs and procedures to minimize the environmental impact and potential human health risk of SSOs. At a minimum, the SORP shall include the following:
 - i. A description of the actions SAWS will undertake to provide notice to the public (through the local news media or other means, including signs or barricades to restrict access) and to any applicable government authorities of the SSO from the WCTS when such notice is required by SAWS TPDES permits or applicable law;
 - *ii.* A detailed description (including as appropriate the development of standard response procedures) to minimize the volume of untreated wastewater from the WCTS during an SSO event
 - *iii.* A detailed plan describing the standard operating procedures to be followed by SAWS personnel in responding to a Building/Private Property Backup, including
 - 1. A description of SAWS response practices and methods for communicating with customers about:
 - A. How to report Building/Private Property Backups; an
 - B. How to obtain clean-up support from SAWS, as warranted;
 - 2. The typical timeframe objectives for both initial response and completion of cleanup activities; and
 - 3. The types of measures that may be taken by SAWS to cleanup Building/Private Property Backups found to be caused by conditions in SAWS WCTS, including, as warranted by specific circumstances, procedures necessary to disinfect and/or remove items potentially contaminated by Building/Private Property Backups, wet vacuuming or other removal of spillage, wiping floors and walls with cleaning solution and disinfectant, flushing out and disinfecting plumbing fixtures, carpet cleaning and/or replacement or other appropriate measures to disinfect



and/or remove items potentially contaminated by Building/Private Property Backups.

- *iv.* A description of the process by which measures to correct or repair conditions in the WCTS causing or contributing to Building/Private Property Backups are selected;
- v. An inspection of each sewer pipe that experiences an SSO using CCTV, Pole Camera or other appropriate inspection methods as soon as practicable, but not later than forty-eight hours following the cessation of the SSO. In general, such inspection shall typically involve the first adjacent Pipe Segment upstream and downstream of the specific WCTS asset experiencing an SSO;"
- vi. A description of how SAWS will complete cleanup activities of SSOs greater than 10,000 gallons, including:
 - 1. Time frame for completion of SSO cleanup activities;
 - 2. Photographic evidence that SSO cleanup is complete; and
 - 3. Supervisor approval to confirm that the SSO cleanup is complete.
- vii. A description of standard response procedures for SSOs that occur at Lift Stations or Force Mains. In the event that a repair at a Lift Station or Force Main may cause or lengthen the time of an SSO, the SORP shall provide a procedure for determining when a wastewater pump-around will be provided.

A copy of SAWS SORP, which addresses the CD requirements, was submitted to EPA on December 16, 2013 and is presented in **Appendix K**.





6.0 SYSTEM-WIDE CLEANING PROGRAM

CD Requirement:

<u>"System-Wide Cleaning Program</u>. Within ninety (90) days after the Date of Lodging of the Consent Decree, SAWS shall continue to implement its sewer collection system cleaning program as specifically set forth below and as described in Appendix B. For purposes of this Paragraph, cleaning is defined as removal from the gravity sewer system of FOG, debris, roots and/or any other obstructions that have caused or significantly contributed to previous SSOs; and/or, that are likely to cause or significantly contribute to the future occurrence of SSOs. All cleaning activities conducted by SAWS since January 1, 2009 shall be credited towards compliance with these requirements."

Cleaning sewer mains is a key element of SAWS operation and maintenance strategy. Materials such as grease, rags, roots, debris and other foreign objects can create blockages within the WCTS. Regular maintenance and cleaning regimens can minimize these occurrences.

SAWS System-Wide Cleaning Program includes preventative and proactive maintenance. Scheduled cleaning varies by asset type, condition, age, and operating history, with assets with a known history of roots, grease, debris or other maintenance issues receiving maintenance at greater frequencies (Repeat "Hot Spot" cleaning), when appropriate. Periodic factors may necessitate ad-hoc cleaning of individual components. SAWS utilizes cleaning findings to help determine appropriate corrective actions or temporary mitigation measures.

SAWS plans, schedules and assigns system-wide cleaning inspections as outlined in the SAWS System-Wide Cleaning Program Process and Guidelines, provided in **Appendix L** (as provided as Appendix B of the CD).

SAWS System-Wide Cleaning Program utilizes appropriate sewer cleaning equipment including rodding trucks, combination sewer cleaning trucks, and a bucket rig, as appropriate. Additional cleaning equipment and staffing resources can be made available as required via contract(s) with third-party contractors to augment in-house cleaning operations.

6.1 Small Diameter Gravity Sewer Main Cleaning Program

CD Requirement:

<u>"Small Diameter Gravity Sewer Main Cleaning Program</u>. For Small Diameter Gravity Sewer Mains, SAWS shall clean all such pipes on a 10-year cycle. SAWS shall clean a minimum of 12% of Small Diameter Gravity Sewer Mains each Calendar Year (prorated for any partial Calendar





Year after Lodging in which these requirements apply). SAWS may count Small Diameter Gravity Sewer Main Cleaning and Repeat Gravity Sewer Main Cleaning to comply with the 12% annual requirement."

The objective of the Small Diameter (<24-inch) Gravity Sewer Main Cleaning Program is to clean small diameter gravity sewer mains on a 10-year cycle for the period ending on July 22, 2023, while completing a minimum of 12% of the total small diameter pipe annually. The 12% includes Hot Spot or repeat cleaning activities.

Assets may be recommended for CCTV inspection when the cleaning tool cannot pass through the entire length of the pipe or when pieces of broken pipe or a significant amount of fresh soil is observed at the downstream manhole. This recommendation is captured in the CMMS.

Based on system-wide cleaning data collected through July 22, 2023, SAWS will develop an updated system-wide sewer cleaning program for the period beginning July 23, 2023.

6.2 Repeat "Hot Spot" Gravity Sewer Main Cleaning Program

CD Requirement:

<u>"Repeat ("Hot Spot") Gravity Sewer Main Cleaning Program</u>. SAWS shall implement its Repeat Cleaning Program at the areas and with the frequencies that are determined to be appropriate based on SSO information, CCTV findings and previous sewer cleaning findings. SAWS Repeat Cleaning Program shall be conducted consistent with Appendix B (Cleaning Program)."

The Repeat ("Hot Spot") Gravity Sewer Main Cleaning Program focuses on small diameter assets identified as a recurring problem area based on historical SSO data, CCTV information, cleaning inspection data and/or professional judgment. Hot Spot assets are defined as those assets that have a 24 month scheduled cleaning frequency or less.

The Small Diameter and Repeat Gravity Sewer Main Cleaning Programs utilize a computerbased algorithm which helps optimize the cleaning schedule based on the amount of grease, debris and roots as reported by the equipment operators. SAWS evaluates the computergenerated recommendations and, based on professional judgment, accepts the recommendation and/or adjusts the frequency of the cleaning.

The algorithm develops maintenance frequency adjustment recommendations based on the following three recommendations:





- 1. Decrease in cleaning frequency: Pipes with a trend of cleanings that result in the recovery of light to no amount of grease, debris or roots
- 2. No change in cleaning frequency: Pipes with a trend of moderate to light grease, debris, or roots
- 3. Increase in cleaning frequency: Pipes with a trend of heavy to moderate grease, debris, or roots

6.3 Large Diameter Gravity Sewer Main Cleaning Program

CD Requirement:

"Large Diameter Gravity Sewer Main Cleaning Program. For Large Diameter Gravity Sewer Mains, SAWS shall clean all such pipes on a 10-year cycle as warranted. SAWS shall clean each Large Diameter Gravity Sewer Main Pipe Segment that SAWS determines based on inspection results and other analyses to have a depth of debris in any part of that Pipe Segment that exceeds twenty (20) percent of the pipe diameter unless the hydraulic modeling performed by SAWS confirms that the depth of debris present will not constitute a Capacity Constraint as defined in this Consent Decree. Those pipes determined to have a depth of debris exceeding twenty (20) percent, but were not cleaned, shall be visually re-checked no less often than once every five (5) years to monitor ongoing grit/debris build-up and respective influences on hydraulic capacity; and shall be cleaned as frequently as warranted to prevent the development of Capacity Constraints that are likely to cause or significantly contribute to the future occurrence of SSOs."

SAWS Large Diameter (\geq 24-inch) Gravity Sewer Main Cleaning Program consists of cleaning all such pipes on a 10-year cycle as warranted. SAWS will clean large diameter gravity sewer main pipe segments based on inspection results and other analyses. The pipe segment will be cleaned when there is a depth of debris that exceeds twenty (20) percent of the pipe diameter unless the hydraulic modeling confirms that the depth of debris will not constitute a capacity constraint.

Those pipes determined to have a depth of debris exceeding twenty (20) percent, but did not constitute a capacity constraint, will be visually re-checked no less often than once every five (5) years to monitor ongoing grit/debris build-up and respective influences on hydraulic capacity; and will be cleaned as frequently as warranted to prevent the development of capacity constraints that are likely to cause or significantly contribute to the future occurrence of SSOs.





7.0 CONDITION ASSURANCE PROGRAM

CD Requirement:

<u>"Condition Assurance Program.</u> SAWS requirements under the Consent Decree with regard to Condition Assessment and associated Remedial Measures are specified under Subsection V(C) of this Decree. The written CMOM Program shall describe SAWS plans to periodically reassess the condition of the WCTS following completion of and in a manner consistent with the Condition Assessment and Remedial Measures Program described in Appendix C as modified from time to time based on adaptive management principles, subject to the provisions of Section XVIII regarding modifications of the terms of this Consent Decree. SAWS shall give priority in this Condition Assurance Program to prevention of SSOs."

7.1 Initial Condition Assessment of the WCTS

Through July 22, 2023, SAWS Condition Assessment Program for the WCTS will be conducted in accordance with the Condition Assessment and Remedial Measures Program Process and Guidelines (see **Appendix M**) as outlined in Subsection V (C) and Appendix C of the CD.

The Condition Assessment Program is comprised of performing a system-wide inspection and assessment of the structural condition of gravity sewer mains and manholes within the WCTS. These activities are designed to identify structural defects in the WCTS that have caused or significantly contributed to previous SSOs; and/or, that are likely to cause or significantly contribute to the future occurrence of SSOs.

The Condition Assessment Program will evaluate the condition of the WCTS through a series of investigative steps. The following is a summary of SAWS planned sewer inspection and condition assessment activities:

- Inspection of the WCTS:
 - Small diameter clay sewers installed prior to 1973, concrete sewers, and large diameter sewers will be CCTV inspected by July 22, 2017²
 - Small diameter clay sewers installed from 1973 through 1982 will be inspected via pole camera or other appropriate method by July 22, 2017

² For large diameter gravity sewer mains, in lieu of CCTV, sonar, 360-degree video, laser imaging, or other methods normally utilized by other sewer management agencies, physical inspection or appropriate new technologies may be utilized





- The remainder of SAWS small diameter pipes and manholes will be visually inspected by July 22, 2023
- SAWS will perform condition assessment to determine those structural defects that warrant Remedial Measures Alternatives Analysis and possibly remedial measures in contrast to those that can be addressed via monitoring or maintenance within the CMOM Program
- By January 22, 2018, SAWS will prepare a Condition Assessment Report summarizing SAWS condition assessment findings for the inspections completed through July 22, 2017
 - Notes: No A-E ratings are assigned for pole or visual inspections. If a concern is identified as a result of a pole or visual inspection, that asset is referred to CCTV to determine the condition of the pipe and to assign an A-E condition rating.

Additional information regarding SAWS Remedial Measures Program is included in Section 12, Condition Work to Be Performed under the CMOM Program, of this CMOM Program.

7.2 Ongoing Inspection and Reassessment

After obtaining WCTS inspection data that will be utilized to prepare the Condition Assessment Report, SAWS will continue to perform condition assessment activities for the remaining portions of the WCTS as described previously.

For WCTS assets that are selected for monitoring during condition assessment activities performed through July 22, 2017, SAWS will reassess the condition of these assets based on the information obtained in the Condition Assessment and professional judgment. The re-inspection and reassessment schedule for assets selected for monitoring will be included in the Condition Assessment Report.

For gravity sewer assets inspected after July 22, 2017 that are selected for monitoring during Condition Assessment, SAWS will establish a re-inspection and reassessment schedule for these assets. The schedule will be determined after the condition assessment is completed based on information obtained in the Condition Assessment and professional judgment.





7.2.1 Inspection of Gravity Sewers in the EARZ

SAWS will continue to perform an inspection and assessment of small and large diameter gravity sewers located within the EARZ as required by Texas law.

7.2.2 Ongoing Small Diameter Gravity Sewer Main Inspection Methods

For the portions of the WCTS inspected after July 22, 2017, visual inspection methods will primarily be utilized. Visual inspection methods may include sewer line cleaning findings, mechanical proofing and smoke testing.

Where visual inspections reveal the presence of structural defects that have caused or significantly contributed to previous SSOs and/or that are likely to cause or significantly contribute to the future occurrence of SSOs, SAWS may perform pole camera inspections, CCTV inspections and/or other inspection technology as appropriate to determine the nature and severity of the sewer defects.

For the gravity sewer assets that are selected for monitoring during condition assessment and/or alternatives analysis activities, SAWS will select an appropriate re-inspection method using data obtained during previous Condition Assessment and/or other appropriate criteria such as pipe age and materials, past SSO history, proximity to surface waters, and other appropriate criteria.

7.3 Condition Assessment of Re-inspected Assets

SAWS will perform Condition Assessment of assets selected for monitoring during the initial Condition Assessment and Remedial Measures Alternatives Analysis process. SAWS will utilize the guidelines presented in **Table 7-1** to perform a condition assessment based on inspection data considering appropriate criteria which may include the following factors: type and severity of structural defect; historical operation and maintenance data (SSOs, inspection findings, cleaning frequency, previous remediation, customer complaints, etc.); site conditions (property rights, site access, depth, soil type, environmental sensitivity, surface restoration, etc.) and inspection data.





Table 7-1 Condition Assessment Categorization Table		
Category	Example Structural Conditions SAWS Anticipates for Each Category	Likely Outcome
E – Very Poor Condition	Structural collapse, which has or could likely cause SSO; or collapse imminent	Alternatives Analysis
D – Poor Condition	Significant missing material or broken material, severe corrosion with exposed pipe wall reinforcement, or pipe wall deformation greater than 25% from structural deterioration combined with hinge fractures	Alternatives Analysis or Monitoring
C – Fair Condition	Pipe wall deformation less than 25% from structural deterioration combined with hinge cracks, displaced fractures, or moderate corrosion – but no pipe wall reinforcement visible	Monitoring or Maintenance Analysis
B – Good Condition	Pipe wall deformation from construction impacts or less than 10% of diameter from structural deterioration, minor corrosion, slightly open non-displaced fractures, or other moderate material degradation	Maintenance Analysis
A – Very Good Condition	Mild defects which may include tight non-displaced cracks or other mild material degradation	Maintenance Analysis

Based on the Condition Assessment Categorization results and professional judgment, one of three management options will be selected by SAWS:

- 1. Maintenance Analysis, see Section 6 System Wide Cleaning Program
- 2. **Monitoring**, see Section 7.2.2 Ongoing Small Diameter Gravity Sewer Main Inspection Methods
- 3. **Remedial Measures**, see Section 12 Condition Work to be Performed Under the CMOM Program




8.0 LIFT STATION OPERATION AND MAINTENANCE PROGAM

CD Requirement:

"SAWS is currently performing Lift Station operation and maintenance programs. SAWS shall continue to perform these programs as part of the CMOM Program. In order to minimize the risk of future SSOs at Lift Stations, SAWS shall review its current Lift Station operation and maintenance procedures and shall include an updated description of these procedures in the written CMOM Program as appropriate. The Lift Station Operation and Maintenance Program shall include procedures for reading and recording relevant information appropriate to proper operation and maintenance for Lift Stations, including where appropriate, pump run-time meter readings, pump control settings, SCADA operation, wetwell float levels, grease accumulations and other information that is necessary for the proper operation of SAWS Lift Stations."

SAWS Lift Station Operations & Maintenance (O&M) Program is designed to maintain design functionality and/or restore system components. SAWS reviewed its current lift station O&M procedures and included an updated description of these procedures herein.

8.1 Background

SAWS Treatment Maintenance Group is responsible for the operation and maintenance of all the sanitary sewer lift stations under SAWS jurisdiction. All the lift stations are grouped by geographical zone and divided into routes.

SAWS has implemented a Night Program for managing lift stations after normal business hours. When SAWS receives a call or alarm related to the pump station after normal business hours, appropriate personnel are notified immediately. Night crews generally perform route inspections and preventative maintenance activities and take and respond to emergency callouts.

8.2 Lift Stations

On April 30, 2014, SAWS WCTS included 155 lift stations. The number of lift stations changes as new lift stations are constructed and older lift stations are eliminated by connection to gravity mains when practical.

8.3 On-Call Program

SAWS monitors the lift stations 24 hours a day, 7 days a week and receives alarms from lift stations via a Supervisory Control and Data Acquisition (SCADA) system and/or Verbatim





autodialers. Once SAWS receives an alarm, approved personnel are notified immediately. If the alarm is generated after hours or during the weekend, SAWS dispatches personnel listed on an On-Call list. The On-Call list is updated and communicated to appropriate SAWS staff when applicable. EOC creates an SR and information is captured in the CMMS.

8.4 Continuous Monitoring

Of the 155 lift stations, approximately 91 are currently monitored via SCADA system. This number will continue to increase as older lift stations receive a SCADA system as part of the lift station rehabilitation program. The SCADA system for lift stations monitors a variety of alarms and controls, which may include one or more of the following components, as appropriate:

- Wet Well Level
- Force Main Discharge Pressure
- SCADA Panel Internal Temperature
- Pump in Hand
- Pump in Auto
- Motor Hi Temp
- Pump Seal Leak
- Motor Overload
- Wet Well Low & High Level
- Pump Controller Failure
- Utility Power On
- Generator On (if generator on site)
- Transfer Fail (in automatic transfer switches)

The SCADA system stores data for each lift station monitored, providing historical data pertaining to lift station operations. For stations without a SCADA system, a Verbatim autodialer device is typically utilized. The Verbatim autodialer uses telephone communication, either land line or cellular. The Verbatim autodialer is programmed to generate a call to EOC and delivers one of the following pre-recorded messages: power outage, high wet well level or generators running.





8.5 Lift Station Inspection and Maintenance

8.5.1 Routine Inspections

SAWS personnel are responsible for lift station route inspections, which are performed pursuant to a Routine Inspection Work Order (WO). Route inspection includes the following tasks as appropriate:

- Perform security check of fence, gates, locks equipment and signs
- Verify belt guards are securely mounted
- Manually operate each pump
- Check pumps for oil leaks, water leaks and noise
- Check all valves, gauges and plumbing for water leaks
- Tighten or replace noisy belts
- Check water level, floats, grease accumulation and debris in wet well
- Remove debris from floats, and schedule to clean wet well if necessary
- If equipped with Verbatim autodialer press "Dial Out" button and confirm dial tone; then press "Normal" button. (If not working notify electrician)
- Confirm "Out of Service" pumps and motors are tagged out and locked out
- Confirm "On Service" pump switches are in "Automatic" position
- Confirm all electrical panel doors are closed and secured
- Clean up trash and litter from area
- Lock all gates upon exiting

8.5.2 EARZ Annual Inspection Program

SAWS performs an EARZ Annual Inspection Program on lift stations and force mains located over the EARZ. A description of the results of these inspections is included in an annual report that is submitted to the TCEQ. This program consists of inspecting the entire lift station process, including as appropriate wet well, floats & suction line condition; pumps & motor alternating; bleeder valve hoses; force mains condition; emergency lights with the Verbatim alarm system; SCADA and the overall appearance of the lift station site. A visual inspection of the associated force mains is conducted in which the inspector walks and/or drives the path of the force main(s) looking for any evidence of leakage.

8.5.3 Preventative Maintenance (PM)

SAWS performs PM on all lift stations using a systematic approach for maintenance activities. The program is proactive and scheduled on the basis of specific criteria. SAWS CMMS has an



automatic WO Generation Program which generates Inspections on a preset frequency outlining parameters included in the inspection. Scheduled PM inspections include the following:

- Mechanical and Electrical Program
- Wet Well Cleaning Program
- Instrumentation Maintenance Program
- Generator Maintenance Program

8.5.4 Corrective Maintenance

SAWS performs Corrective Maintenance (CM) on lift stations when the equipment or systems require more than preventative maintenance. CM activities including repairs are prioritized based on criticality of the repair (redundancy available, size of lift station, size of wet well, location of lift station).

A CM WO is generated and a repair is planned and scheduled, unless it is an emergency. Emergency repairs are completed as soon as practical.





9.0 PRIVATE LATERAL PROGRAM

CD Requirement:

"Private Lateral Program. The Parties acknowledge the City of San Antonio's authority pursuant to City Code § 34-447(a) that provides that "[t]he improper maintenance and repair of sewer laterals is found to constitute a public health hazard" and provides for service of written notification to owners of Private Laterals to abate the condition causing the health hazard within three days of the notification (City Code § 34-448). If the owner of the Private Lateral does not repair or replace the faulty Private Lateral, the Parties further acknowledge that the City is authorized to institute a criminal prosecution to assess a fine as provided in City Code § 34-449 and that the City is authorized to seek an order to terminate water service to the premises where the Private Lateral is located (City Code § 34-450). To provide the City of San Antonio notice to address Private Laterals that have not been properly maintained or repaired by the owners of the Private Laterals pursuant to its ordinances regarding Private Laterals as specified in the City Code of Ordinances, Article V, §§ 34-442, 34-446, 34-447, 34-448, 34-449, and 34-450, SAWS shall do the following:

- a. Inform the City of damaged/improperly maintained Private Laterals whenever SAWS obtains information of damaged/improperly maintained Private Laterals.
- b. To foster coordination between SAWS and the City regarding Private Laterals, SAWS shall request that the City provide to SAWS each month a report of:
 - *i.* Addresses receiving notifications issued by the City pursuant to City Code § 34-448.
 - ii. Addresses of each Private Lateral that has been repaired following a notification issued pursuant to City Code § 34-448 and the date of completion of any such repair.
 - iii. Addresses of each connection for which the City is seeking to assess a fine pursuant to City Code § 34-449 and the address of each such connection in which the City is seeking to terminate water service pursuant to a hearing as provided in City Code § 34-450."

SAWS collaborated with the City of San Antonio (CoSA) and implemented a Private Lateral Program in October of 2013. A flow chart with general guidelines for collaboration between the two agencies is presented in **Appendix N**. An example monthly private lateral letter to CoSA is provided in **Appendix O**.





The EOC receives calls from customers and others who notify SAWS of a backup in a private lateral. The EOC subsequently generates an SR and dispatches a crew to investigate the complaint. SAWS investigates the condition of the WCTS by inspecting both upstream and downstream manholes to determine if there is a flow concern. If the flows are not impeded, a SAWS crew leaves a letter with the customer informing the customer that SAWS system is flowing and recommending that the customer hire a plumber to investigate the private lateral. This information is captured in the CMMS system. A representative from SAWS makes customer contact via telephone to ask if the issue has been resolved. All complaints that have not been resolved and/or if no confirmation that the issue has been resolved are crosschecked with CoSA's information listing pertaining to sewer complaints received from CoSA Code Compliance. In addition, any customer locations that have been investigated due to a sewer lateral issue by Code Compliance, as well as actions taken, are captured in a list sent from CoSA. SAWS provided a summary of this information in the Annual Report as required by the CD and is as follows:

- Addresses receiving notifications issued by the City pursuant to City Code § 34-448
- Addresses of each private lateral that has been repaired following a notification issued pursuant to City Code § 34-448 and the date of completion of any such repair
- Addresses of each connection for which the City is seeking to assess a fine pursuant to City Code § 34-449 and the address of each such connection in which the City is seeking to terminate water service pursuant to a hearing as provided in City Code § 34-450





10.0 FATS, OILS AND GREASE (FOG) CONTROL PROGRAM

CD Requirement:

"SAWS has implemented and continues to conduct a FOG Control Program. As part of the CMOM Program, SAWS continuing FOG Control Program shall include the following:"

10.1 Legal Authority & FOG Control Device Management

CD Requirement:

"The legal authority within the jurisdiction of the City of San Antonio to control the discharge of FOG into the WCTS, including the ability to implement an enforcement program;

SAWS RPC Department manages the FOG Control Program. The objective of the FOG Control Program is to minimize the quantity of FOG entering the WCTS.

As discussed in Section 1.3, the City of San Antonio City Council passed and approved Ordinance No. 75686 on April 30, 1992 in which the "complete management and control of the System" was vested in SAWS Board of Trustees (Ord. No. 75686, §32.A). The Ordinance provides that the SAWS Board of Trustees "shall have absolute and complete authority and power to control, manage and operate the System" and that the "Board shall be vested with all of the powers of the City with respect thereto" (Ord. No. 75686, §32.E), with the exception that the rates charged for services are subject to approval by the City Council (Ord. No. 75686, §32.F).

As stated in Section 1.3, pursuant to authority granted in Chapter 34 of the City of San Antonio Code of Ordinances, SAWS administers and enforces programs designed to regulate discharges into the sanitary sewer system.

Chapter 34, Article V, Division 5 of the City Code contains provisions requiring the installation of interceptors before discharging fats, oils or grease into the WCTS and prescribes management, operations and maintenance best management practices that address onsite recordkeeping requirements, cleaning frequency, cleaning standards, use of additives, and ultimate disposal (the "FOG Ordinance"). Chapter 34, Article V, Division 3 limits the concentration of FOG that may be discharged into the WCTS.





10.2 FOG Inspection Procedures

CD Requirement:

"Establishment of FOG Control Device management, operations and maintenance best management practices that address onsite recordkeeping requirements, cleaning frequency, cleaning standards, use of additives, and ultimate disposal;"

SAWS established a FOG Control Device Management Program responsible for implementation of the FOG Ordinance through FOG inspections. Best Management Practices (BMPs) are incorporated into the Ordinance and are outlined in the SAWS Grease Reduction Program Grease Trap Maintenance Procedures & Cleaning Logs (see **Appendix P**).

This document, available on SAWS public website, includes BMPs, FOG BMP Training Record Form, FOG BMP Observation Checklist for Restaurants, Tips on Grease Trap/Interceptor Cleaning Frequencies, Grease Trap/Interceptor Maintenance Procedures, Grease Interceptor (GI) Cleaning Logs per Quarter and Annual Grease Trap/Interceptor Certification Checklist.

RPC performs an onsite inspection as outlined below to ensure that food service establishments (FSEs) are in compliance. Inspection and sampling procedures include the following five steps:

- 1. Introduction
 - Meet with FSE staff
 - Introduce/Review FOG Program and provide an explanation of the inspection process
- 2. Document review:
 - Request to review manifest(s) and the annual inspection
- 3. Observations:
 - Observe and notate issues
- 4. Dipstick Pro (DP) Sampling:
 - Request to be shown the location of GI
 - Verify flow direction out of the GI and note the GI condition
 - Use DP in the second chamber to obtain sample
 - This is done by slowly lowering the DP until it touches bottom. The DP is removed and the percent solids and floatables are documented
 - Discuss findings/observations with FSE Representative/Manager
- 5. Complete Question and Information Form in CMMS

Information obtained during onsite inspections is captured in CMMS using the Question & Information Form (see **Appendix Q**). Inspection data/reports are available to meet the





recordkeeping requirements. Data includes: FOG control devices usage and maintenance records and the use of BMPs.

10.3 Enforcement Program

CD Requirement:

"An enforcement program, including specific enforcement mechanisms, to ensure compliance with the FOG Control Program;"

The FOG Ordinance provides for the imposition of civil and/or criminal penalties for violations of the Ordinance. SAWS Enforcement Program is designed to ensure that FSEs comply with the FOG Program. Described below is the enforcement process that is used to bring noncompliant facilities into compliance.

An Enforcement Response Guide was developed to maintain consistency (Appendix R).

10.3.1 Corrective Action

A written NOV is delivered to an FSE at the conclusion of the inspection in which any violations are determined. FSEs are notified that one or more of the following are violations:

- Over discharge limits as shown by sampling
- Manifest issues
- Not having a grease interceptor installed

FSEs are allotted a limited time to correct deficiencies.

A second inspection will be conducted by SAWS to ensure corrective actions have been taken by the FSE. If the FSE has corrected the violation, then no further enforcement actions will be initiated. If a violation is not corrected, then the violation may be referred to the City Attorney's office for criminal prosecution.

SAWS will conduct a third inspection of FSEs that did not correct violations. If the violation has not been corrected, SAWS will evaluate whether termination of water and/or sewer service is appropriate. This decision will be based on the severity of the violation or the type of facility such as, but not limited to, nursing homes, schools, hospitals or public service establishments. These may require alternative arrangements and other factors.





10.4 Compliance Assistance

CD Requirement:

"A compliance assistance program to facilitate training of FOG Generators and their employees;"

SAWS developed a compliance assistance program to facilitate training of FOG generators and their employees. FOG generators are encouraged to review Ordinance requirements at periodic Restaurant Association meetings. SAWS is a Restaurant Association Board Member.

SAWS also offers free FOG management training and provides presentations to other members of the food service community. SAWS can accommodate training of small groups at their location or schedule larger meetings at various venues. SAWS provides "No Grease" poster and stickers for management to post in a visible location as appropriate, such as above sinks and on the front of dishwashers. During onsite inspections, SAWS staff will also discuss FOG-related issues and BMPs with the FSE.

SAWS incentivizes FSEs that implement BMPs. Program fees paid by FSEs can be reduced when FSEs perform certain BMPs. BMPs include an internal training requirement for food service workers. SAWS offers free training to any FSE wanting to maintain and inspect their facility's grease interceptor.

10.5 Public Education Program

CD Requirement:

"Public education program directed at reducing the amount of FOG entering the WCTS from private residences;"

SAWS grease abatement program, "Don't Feed the Grease Monster", will continue to be supported via various forms of paid advertising. This campaign message will be seen via online, print (English and Spanish) and billboard advertisements throughout the year.

The Grease Monster message, where applicable, is also included as a part of presentations made by members of SAWS school education team. The education team's presentations cover elementary to high school grade levels.





An example of SAWS Grease Monster efforts includes the mailing of letters to residents in areas of grease-related SSOs, informing them of a recent incident and instructing them how to correctly dispose of their cooking grease.

Promotional materials incorporating instructions on how to properly dispose of cooking grease (pan/pot scrapers and 3-step can lid covers) are distributed as appropriate at community events.

Multi-language materials have been placed in restaurant kitchens throughout the City reminding workers to properly dispose of grease. This was a result of working in partnership with stakeholders like the San Antonio Restaurant Association.

10.6 Staffing and Equipment Requirements

CD Requirement:

"Staffing (technical and legal) and equipment requirements to ensure effective implementation of the FOG Control Program;"

SAWS has staff primarily dedicated to ensuring compliance with FOG Ordinance requirements. All have access to individual equipment, computers with aircards and transportation. Staff is trained on both data capturing and data entry into a combined database. Additionally, all Inspectors must meet state licensing requirements. Staff also trains on proper field inspection techniques and meets frequently to discuss technology and field issues.

10.7 Tiered Inspection Frequency

CD Requirement:

"A tiered inspection frequency schedule that shall identify the number of regulated commercial establishment FOG Generators in each tier and the frequency of inspection for each tier, at the time the CMOM document is finalized, including an explanation of the tiered frequency of inspection schedule and SAWS plan for inspecting all FOG Generators at least once every two years"

SAWS has implemented a three tier inspection program that is described hereafter.

10.7.1 Tier 1 Inspections

Tier 1 Inspections include all of the FSEs and food processing establishments (FPEs) that will be inspected once every other calendar year. At the conclusion of a Tier 1 Inspection, those





establishments that are compliant will remain in Tier 1 and subsequently be scheduled for an inspection in two calendar years.

Those establishments that are not compliant will receive an NOV that describes violations discovered during the inspection and provides the FSE/FPE with a period of time in which to correct each violation (see previous section 10.3). Those FSE/FPEs that receive an NOV will be placed in Tier 2 Inspection frequency status.

10.7.2 Tier 2 Inspections

Tier 2 Inspections are for FSE/FPEs with one or more of the following: receiving an NOV in the last twelve months, a FOG-related SSO has occurred in close proximity, a Tier 3 Inspection that has been modified to Tier 2 or as warranted. Tier 2 inspections will be performed once each calendar year. The FSE/FPE will remain on a Tier 2 Inspection frequency or move to Tier 1 inspection frequency based on compliance history. Those FSE/FPEs that are not compliant following a Tier 2 inspection may be referred to the City Attorney's office for prosecution for legal action and will be subject to a Tier 3 inspection.

10.7.3 Tier 3 Inspections

Tier 3 Inspections include FSE/FPEs that may be inspected more frequently to ensure compliance with an issue identified during a Tier 2 Inspection. These facilities have received an NOV and may be referred for legal action.

FSE/FPEs will remain on a Tier 3 Inspection until there are two consecutive compliance inspections with no violation(s), after which time they will be scheduled at the Tier 2 Inspection frequency.

10.8 Performance Indicators

CD Requirement:

"Establishment of performance indicators to be used by SAWS to measure the effectiveness of the FOG Control Program and establish a periodic review in order to update the FOG Control Program as warranted"

SAWS utilizes several key performance indicators (KPIs) to measures the effectiveness of the FOG Control Program. KPIs to measure FOG program effectiveness include: monitoring FSEs to ensure control devices are being utilized, interceptor effectiveness/servicing and compliance rates. KPIs are used to track tier compliance and automatically reschedule inspections.





10.9 City Program

CD Requirement:

"A description of City of San Antonio programs that complement the SAWS FOG Control Program, including the specification of accepted FOG control devices as written and enforced by the City, standards for the design and construction of FOG control devices developed and enforced by the City, and construction inspection protocols established and implemented by the City."

Appendix S contains the City Plumbing Code that incorporates the International Plumbing Code by reference and that specifies the requirements for the design and construction of FOG control devices.





11.0 INVENTORY

CD Requirement:

"SAWS shall provide a written description of its WCTS component and equipment inventory system, including information obtained during the Condition and Capacity Assessment Programs that is used to update Geographic Information System ("GIS") attributes, and shall continue to implement this system as part of the CMOM Program."

11.1 Background

Since the earliest days of the City of San Antonio's wastewater system, there has been a Maps and Records department dedicated to obtaining as-built drawings and subsequently mapping activities. In the mid-1980s, a grid was developed which allowed for a unique identifier to be given to each gravity sewer asset. This was incorporated into the work order system so that assets could be tracked.

In the 1990s, mapping moved from pen and ink to computer utilizing Bentley MicroStation software. In 2000, the Environmental Systems Research Institute (ESRI) software was adopted so that database intelligence could be added to the mapped assets. The Maps and Records department became the GIS Division.

In 2008, a new CMMS work order system was implemented. Since the unique asset number had always come from GIS Division, it was determined that GIS Division would remain the owners of the asset names for SAWS WCTS assets. As WCTS assets are built or acquired by SAWS, the GIS Division maps the assets, adds attributes, assigns unique IDs, and synchronizes the assets into the CMMS system.

11.2 GIS Department Structure

Due to the size of the WCTS, the GIS Division is currently located in Engineering, under the Infrastructure Planning Department, and is divided into four teams. The Water team currently focuses on water assets; the Wastewater team on sewer and recycled water assets; the Gatekeeper team focuses on analysis, addresses, laterals and web mapping products; and the As-built team obtains and catalogs new design plans and as-built drawings, preparing them for mapping into the GIS database.



11-2

11.3 Type of Wastewater Assets

Asset types in the WCTS include:

- Mains categorized as gravity, force, outfall, siphon, air bypass and sludge mains
- Mains categorized by construction method which includes cured in place, pipe bursting, open cut replacement, slip lined or open cut new installation
- Manholes categorized as drop, monolithic, junction box, siphon inlet or outlet, standard, and trapped. This category also includes data on smart lids and flow meters
- Manholes categorized by construction methods
- Nodes categorized as break, cleanout, stub out and other
- Valves categorized as air release, blow off, plug, and bypass
- Laterals
- Wet wells categorized as either above ground or underground
- Lift stations categorized above ground or underground
- Pumps categorized as centrifugal, submersible and sump

11.4 Inventory System

The SAWS GIS system utilizes a Spatial Data Engine (SDE) which sits astride a Structured Query Language (SQL) relational database. The SDE acts as a gateway for spatial data users to use the power of the relational database management system. This arrangement allows for multi-user editing, versioning and archival storage. In the GIS Division, each team has a geodatabase specific to their asset type. The base map is called the default version. This is the most current active version of SAWS data. To protect the default version, another version or snapshot is created called the QA. The Default and QA versions operate in a parent/child relationship. The QA version is managed by a senior member of the GIS team. See **Figure 11-1** below illustrating this relationship. From there, individual versions (children) are created for each editor. Once an editor maps a design or as-built, the child version is compared to the QA version for completeness, accuracy and compatibility for the Default version. At this time, if the child version does not meet certain standards, it can be edited or deleted. If it does meet standards, it is posted, meaning the edits of the child version are placed into the QA version.





Figure 11-1 Map Relationship



Company-wide, SAWS employees are able to access the most current, accurate geographic data three ways. The GIS department employs a routine which automatically updates online "Block Maps" every two weeks. These maps follow the 2,000 ft by 2,000 ft grid used in the earliest mapping. The maps are available online in pdf format in tandem with the old CAD block maps for a historical overview.

The second and easiest way to access the geographic data is through a web mapping application called GeoCortex. The application reads the current GIS data and therefore is real time. All the field crews have access to this data via company issued laptops. The GIS Gatekeeper team manages GeoCortex and custom builds web maps for various departments to expedite and improve their work processes.

The third way users can access the geographic data is through the use of an ESRI Arc license on their desktop. This is primarily used for geographic analysis. Since the sole source of all of these methods of accessing data is the SDE, there is never any need for concern with incorrect versions of the data.

11.5 Adding Assets to Inventory

WCTS assets are entered into the SAWS system as projects classified as replacements, rehabilitation or installation of new assets. New assets may be added through agency driven projects SAWS based on capacity requirements due to growth or they may be acquired through developer-driven projects. Job numbers are assigned to the projects based on the year and type of construction project.

The GIS As-built team normally receives job plans at the 90% design phase or later. The plans are scanned and mapped into a proposed GIS layer. This proposed layer uses the same schema as the active and archived layers, thus each asset is attributed at this point except the asset is not given a unit ID nor synced into the CMMS system. Attributes collected regarding the asset





typically include material, diameter, length, address, installation date, installation method, job number, elevations, depths, if the asset is over sensitive features, and coordinate location.

After the GIS As-built team has received the Plan of Record for a project, the Wastewater GIS team revisits the proposed layer. Using the Plan of Record, the GIS technician makes any required changes to the attributes, and then moves the project into the individual active asset layers. Once in the active layer, the asset is given a unique ID (UNITID) and is synced into the CMMS system. The CMMS system syncs back a unique ID to the GIS layer called the COMPKEY. The COMPKEY is the enterprise unique number that ties each asset to all work orders completed on each asset.

11.6 Updating Inventory Attribute Data for Existing Assets

As SAWS conducts sewer maintenance, condition assessment and capacity assessment activities, crews and contractors may find inconsistencies between SAWS GIS system attributes and actual field conditions.

When incorrect attributes have been identified, verified and referred to SAWS GIS As-built team, the GIS technician makes any required changes to the asset attributes.

11.7 Expiring Assets from Inventory

During the life of the asset, GIS maintains data on work performed on the asset through rehab and replacement projects it receives from the As-built team. Once the asset is replaced or abandoned, it is retired by the GIS Mapping team by being moved off the active layer and into the archive layer. Since the asset retains its COMPKEY, the life history of the asset is always available in the work management system even after it has been expired.

The GIS is a living system. SAWS crews are continually providing field observations to the GIS Wastewater team, who makes the changes and syncs to both the SDE and to the CMMS system.



12.0 CONDITION WORK TO BE PERFORMED UNDER THE CMOM PROGRAM

CD Requirement:

"All WCTS asset condition inspection and assessment Work performed by SAWS after the Date of Lodging pursuant to Paragraphs 23 through 27 within 48 months from the Date of Lodging shall be addressed in the Condition Assessment Report, if applicable, and to the extent applicable, such work is subject to the requirements of the Remedial Measures Alternatives Analyses and Remedial Measures Plan requirements that are described in Paragraphs 29 and 30. All such asset condition inspection and assessment Work performed after 48 months from the Date of Lodging and the Remedial Measures resulting from that inspection and assessment Work shall be addressed under the CMOM Program and a summary of such Work and Remedial Measures shall be included in the Annual Report for the Calendar Year in which these tasks were completed. Work that will be performed after submittal of the Condition Assessment Reports shall include Condition Assessment, Condition Remedial Measures Alternatives Analyses, and Condition Remedial Measures Plan development, in accordance with Subsection V(C), as applicable, for the following WCTS assets:

- a. Pipe Segments of Small Diameter Gravity Sewer Mains where visual inspection are completed after 48 months from Date of Lodging; and
- b. Manholes where inspections are completed after 48 months from Date of Lodging."

12.1 Introduction

The Condition Assurance, Section 7 of SAWS CMOM Plan describes how WCTS inspection and condition assessment activities will be performed through July 22, 2023.

For all condition assets inspected through July 22, 2017 and selected for remedial measures during a Remedial Measures Alternatives Analysis, SAWS will develop a Condition Remedial Measures Plan as required by Paragraphs 29 and 30 and Appendix C of the CD. This Section of SAWS CMOM Plan addresses remedial measures work for the portions of SAWS WCTS inspected after July 22, 2017.

As SAWS Condition Assessment and Remedial Measures activities progress after the initial development of this CMOM Plan, SAWS may update this section of the CMOM Plan to align future activities with SAWS future standards and business practices.





12.2 Future Remedial Measures Alternatives Analyses

When the Remedial Measures Alternatives Analysis process determines that remediation is necessary to eliminate structural defects, SAWS will utilize the guidelines previously presented in Section 7.1 to select an appropriate remedial measure. Such solutions and techniques may include, but are not limited to the following:

Gravity Sewer Mains:

- Point Repairs
 - Grouting sleeve system, cured in place pipe sleeve and lining, robotic sewer pipe repair, open trench
- Pipe Rehabilitation
 - Slip lining, cured in place pipe
- Pipe Replacement
 - Open trench, pipe bursting, jack & bore, directional drilling, micro-tunneling

Manholes:

- Manhole Repairs or Rehabilitation
 - Poured in place liners, cured in place liners, cementitious coating, polymer coating, mechanical seals and insert replacement, manhole frame adjustment and resealing
- Manhole Replacement

12.3 Tracking Future Remedial Measures Activities

SAWS is currently in the process of designing and implementing a CPMS to track capital improvement projects. SAWS also utilizes a CMMS to track remedial measures related to point repairs performed by SAWS crews or by SAWS point repair contractors.

In the Condition Remedial Measures Plan that will be completed by SAWS as required by the CD, SAWS will describe the guidelines and systems that will be utilized to track Remedial Measures activities that will be implemented under this CMOM Plan.





12.4 Reporting Condition Remedial Measures Work Performed Under CMOM

Remedial Measures activities performed under this section will be documented in the Annual Report for the calendar year in which these activities are completed.



12-7



13.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

J. Haby, P.E

Senior Director - Sewer System Improvements

7-17-2014

(Date)



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Appendix A

SAWS Service Area

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Appendix B

Lift Station Locations

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Appendix C EARZ

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Appendix D

San Antonio, TX, Code of Ordinances

Chapter 34, Article V

Sewage Transportation, Treatment

and Disposal and Chapter 26, Texas Water Code

СМОМ



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Chapter 26 POLLUTION CONTROL

Chapter 26 POLLUTION CONTROL ¹¹

ARTICLE I. - IN GENERAL

ARTICLE II. - AIR POLLUTION

ARTICLE III. - GREEN EVENTS CERTIFICATION

FOOTNOTE(S):

--- (1) ----

Cross reference— Health generally, § 15-1 et seq.; sewers and sewage disposal, § 34-146 et seq. (Back)

PART II - CODE Chapter 26 - POLLUTION CONTROL

ARTICLE I. IN GENERAL

ARTICLE I. IN GENERAL

Secs. 26-1-26-15. Reserved.

Secs. 26-1—26-15. Reserved.

PART II - CODE Chapter 26 - POLLUTION CONTROL

ARTICLE II. AIR POLLUTION

ARTICLE II. AIR POLLUTION [2]

Sec. 26-16. Definitions.

Sec. 26-17. Rules and regulations of Texas Air Control Board adopted by reference.

Sec. 26-18. City clerk to furnish copy of article to Executive Secretary, Texas Air Control Board.

Sec. 26-19. Legal staff authorized to seek injunctive relief, etc.

Sec. 26-20. Penalty for violations.

Sec. 26-21. Air pollution inspection fee.

Secs. 26-22-26-29. Reserved.

Sec. 26-16. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Incinerator shall mean devices for combustion of commercial waste, pathological waste or industrial process waste.

Industrial process shall mean any furnace boiler, kiln, dryer, mill, mixer, crusher, silo or still used in the manufacture of metal products including iron, steel, lead, copper, brass, bronze or aluminum; mineral products including aggregate, rock, sand, cement, clinker, lime, perlite or vermiculite; petroleum products including gasoline, diesel fuel, solvents, liquefied natural gas, propane, butane or volatile organic compounds; wood products including sawdust, charcoal, pressed wood, fiber board or plywood; paper products including paperboard, cardboard or packaging; building materials including concrete, asphaltic concrete, tar roofing material, brick, tiles or blocks; chemical products including plastics, paint, fiberglass, fertilizers, pesticides of cleaning agents; feed for other than human consumption to include meat byproducts, grains or seeds; food products for human consumption including flour, nuts, or beverages including beer, wine, or liquor; recycled scrap metal including that from automobiles, appliances or beverage cans.

Petroleum storage and loading facility shall include each storage tank and each loading rack at any terminal for commercial dispensing of petroleum products.

Sandblasting shall include use of any gun or other means at any fixed location to blast with sand, grit, or other abrasive.

Spray painting shall include any room, booth, enclosure or yard at any fixed location used for spray painting of vehicles, appliances or building materials.

(Code 1959, § 3A-1; Ord. No. 55812, § 4, 9-16-82)

Sec. 26-17. Rules and regulations of Texas Air Control Board adopted by reference.

The rules and regulations of the Texas Air Control Board, as promulgated by Board Order No. 68-1, and presently in effect, pursuant to the Clean Air Act of Texas, Vernon's Ann. Civ. St. art. 4477-5, are incorporated herein by reference and are hereby adopted as rules and regulations for the control of air pollution within the city. Three (3) copies of said rules and regulations, identified by the signature of the

Chapter 26 - POLLUTION CONTROL

ARTICLE II. AIR POLLUTION

city clerk, are on file in the office of the city clerk pursuant to section 17 of the city charter, for permanent record and inspection.

(Code 1959, § 3A-2; Ord. No. 55812, § 4, 9-16-82)

Sec. 26-18. City clerk to furnish copy of article to Executive Secretary, Texas Air Control Board.

The city clerk is hereby directed to furnish a copy of this article without the necessity of having a copy of the rules and regulations adopted by this article attached thereto, to the executive secretary of the Texas Air Control Board.

(Code 1959, § 3A-4; Ord. No. 55812, § 4, 9-16-82)

Sec. 26-19. Legal staff authorized to seek injunctive relief, etc.

The legal staff of the city, upon resolution by the city council, without regard to prosecutions in municipal court, be, and is hereby, authorized to seek injunctive relief to prevent any further violation or seek court order for the assessment of a penalty of not less than fifty dollars (\$50.00) nor more than one thousand dollars (\$1,000.00) per day for each day such violation continues, as the court may deem proper, or for both injunctive relief and penalty. The legal staff of the city shall seek to prosecute and enjoin violations in a court of appropriate jurisdiction by working with and through the state attorney general or such other legal staff of the state air control board as may request such action.

(Code 1959, § 3A-5; Ord. No. 55812, § 4, 9-16-82)

Sec. 26-20. Penalty for violations.

The violation of any of the rules and regulations set forth in this article is hereby declared to be unlawful and punishable in accordance with section 1-5.

(Code 1959, § 3A-3; Ord. No. 55812, § 4, 9-16-82)

Sec. 26-21. Air pollution inspection fee.

In order to defray a part of the expense necessary to provide inspection, surveillance and monitoring of air pollution sources in the city there is hereby levied an air pollution inspection fee of four hundred forty eight dollars (\$448.00) per annum for each permanent and moveable source in the city that has aggregate total emission of less than fifty (50) tons per year. This fee shall be collected by the public health department of the city and be deposited into the city general fund. The fee shall be payable in advance on an annual basis, not later than the last day of October of any year, and shall cover the city fiscal year. The public health department shall issue a receipt therefor on a form to be prepared for that purpose.

(Ord. No. 63231, § 2, 7-16-86; Ord. No. 67911, § 16, 9-15-88; Ord. No. 94584, § 24, 9-20-01; Ord. No. 98187, § 19, 9-18-03; Ord. No. 2008-09-11-0777C, § 4, 9-11-08)

Secs. 26-22-26-29. Reserved.

PART II - CODE Chapter 26 - POLLUTION CONTROL

ARTICLE II. AIR POLLUTION

FOOTNOTE(S):

---- (2) ----

State Law reference— Texas Clean Air Act, Vernon's Ann. Civ. St. art. 4477-5. (Back)

PART II - CODE Chapter 26 - POLLUTION CONTROL

ARTICLE III. GREEN EVENTS CERTIFICATION

ARTICLE III. GREEN EVENTS CERTIFICATION

Sec. 26-30. Definitions.

Sec. 26-31. Green event certification required.

Sec. 26-32. Exceptions.

Sec. 26-33. Standards for issuance of certification.

Sec. 26-34. Application for certification.

Sec. 26-35. Notice of rejection; appeal.

Sec. 26-36. Duties and costs to be paid by certification holder.

Sec. 26-37. Revocation of certification.

Sec. 26-38. Penalty for violation.

Sec. 26-30. Definitions.

For this article, the following definitions shall apply, unless the context clearly indicates otherwise:

Certification holder shall mean a person issued a green event certification pursuant to this article.

City manager shall mean the city manager of the City of San Antonio or designated representative.

City-owned property shall mean all facilities, parks, and other real property owned or controlled by the city.

Director shall mean the director of the Office of Environmental Policy or designated representative.

Event shall mean any organized gathering of individuals.

Green event certification shall mean an event that has received certification as green because of the resource conservation measures that will be employed during the event and the subsequent reduction of waste, energy and materials consumption.

Green event facility shall mean a building or facility that has been previously certified by design and best management practices as a green event compliant venue. If the building or facility capacity is under two thousand (2,000) occupants a certification level of "silver" or higher is required. If the building or facility capacity is two thousand (2,000) or more occupants, a certification level of "gold" or higher is required.

Green event scorecard shall mean the listing of measures that an event can utilize to obtain the various levels of compliance with this article, as developed and maintained by the OEP. Each measure is assigned a number of points that can be combined toward achieving a certification level of silver, gold, platinum, and verde.

Large scale event shall mean an event with a total of two thousand (2,000) or more participants and support personnel.

Medium scale event shall mean an event with a total of one thousand (1,000) or more, but less than two thousand (2,000), participants and support personnel.

Mission Verde shall mean the sustainability resolution adopted and endorsed by the city.

OEP shall mean the Office of Environmental Policy of the city.

Chapter 26 - POLLUTION CONTROL

ARTICLE III. GREEN EVENTS CERTIFICATION

Organize shall mean to arrange systematically as an individual or with a committee or group for harmonious or united action.

Person shall mean an individual, corporation (including a government corporation) organization, governmental subdivision or agency, federal agency, state, political subdivision of a state, interstate agency or body, business or business trust, partnership, association, firm, company, joint stock company, commission, or any other legal entity.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-31. Green event certification required.

- (a) No person shall organize any medium or large scale event on city-owned property or requiring a right-of-way permit without having first obtained a green event certification. No person shall organize any medium or large scale event receiving city funding or sponsorship which is valued at half or greater of the total event costs without having first obtained a green event certification.
- (b) All medium scale events at city-owned property or requiring a right of way permit must obtain a certification of "silver" or higher. All large scale events at city-owned property or requiring a right of way permit must obtain a certification of "gold" or higher. Events receiving city sponsorship which is valued at half or greater of the total event costs must obtain a certification of "platinum" or higher.
- (c) Event venues can apply to the director for listing as certified green event facilities. Event organizers that are using the green event certified facilities would not need to complete the scorecard unless they wish to be recognized for higher levels of certification than the event facility includes.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-32. Exceptions.

This article shall not apply to:

- (1) Events with less than a total of one thousand (1,000) participants and support personnel;
- (2) Events and parades not providing or including food or beverages as a part of the event;
- (3) Events held on city-owned property that is managed or operated for the city under a third party lease;
- (4) Any event held at a green certified facility; or
- (5) Any event that is held on private property and the event is not receiving city funding or sponsorship which is valued at half or greater of the total event costs.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-33. Standards for issuance of certification.

- (a) The city shall uniformly treat each application in a just, fair, and nondiscriminatory manner bearing in mind that the objective of the green events policy is to target the reduction of waste, energy and materials consumption at events.
- (b) A "green events planning guide" shall be developed by the OEP and outline how to organize and coordinate a certifiable green event. The guide shall describe how to minimize and offset the impact of an event.

Chapter 26 - POLLUTION CONTROL

ARTICLE III. GREEN EVENTS CERTIFICATION

- (c) The event organizers will complete a "green events scorecard" which shall be made available by the relevant city department controlling the facility, issuing the permit, or providing funding or sponsorship which is valued at half or greater of the total event costs. The "green events scorecard" will be submitted along with each city contract, permit application, or as otherwise required for events covered by the ordinance. The "green events scorecard" shall contain the various measures and practices available to qualify for the required point standards needed for certification for the applicable event.
- (d) Event organizers will have the opportunity to purchase necessary certification points from OEP by contributing to the "Mission Verde Offset Fund." Proceeds from the fund will go towards local environmental activities. The "Mission Verde Offset Fund" fees are fifty-five dollars (\$55.00) per point for medium scale events and seventy-five (\$75.00) per point for large scale events. These amounts may be changed to fit future needs to reinforce effectiveness of this article. For example, an event with fifteen thousand (15,000) participants that requires a gold rating and chooses to do none of the scorecard items can pay an offset cost of four thousand five hundred dollars (\$4,500.00) to the "Mission Verde Offset Fund" to pay for local environmental activities such as tree plantings or energy conservation programs.
- (e) Non-mandated events can voluntarily complete and submit a "green events scorecard" to the OEP and contribute to the "Mission Verde Offset Fund" to purchase points needed for certification or to voluntarily provide support for local environmental programs. All events completing a scorecard will receive a "green event" rating to use in event advertising and publications.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-34. Application for certification.

- (a) A person seeking issuance of a green event certification shall complete the "green events scorecard" and file an application with the city on forms provided by the relevant department in charge of the facility, responsible for issuing the permit, or providing funding or sponsorship which is valued at half or greater of the total event costs.
- (b) An application for a green event certification shall be filed with the relevant department with the applicable contract or permit application.
 - (1) The application shall contain the following information:
 - a. The name and contact information of the person seeking to conduct the event;
 - b. Where the event is to be held for or by an entity, rather than an individual, the name, address, and telephone number of the entity and the name, address, and telephone number of the head of the entity;
 - c. Where the event is to be held by or for any person other than the applicant, documentation evidencing authority to make the application;
 - d. The name and contact information of the person who will be the event chairperson and who will be responsible for conducting the event;
 - e. The date the event will be conducted;
 - f. The location of the event;
 - g. The approximate number of persons who will participate in the event;
 - h. The time when the event will begin and end;
 - i. The purpose of the event; and

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(2) Any other information which the director finds necessary to an evaluation of the request under the standards for issuance set forth in section 26-33. If any of the above required information is included on the standard application form for the permit or contract required by the relevant city department or otherwise filed and available to the city for enforcement of this article, the information does not have to be duplicated for the "green event scorecard."

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-35. Notice of rejection; appeal.

- (a) The relevant city department shall act upon the application for a certification within five (5) calendar days after it has been filed with the required permit application or contract. If the relevant city department does not approve the application, they shall mail, by e-mail if an address is provided, or by certified mail/return receipt requested, to the applicant, within ten (10) calendar days after the date upon which the application was filed, a notice of their action, stating the reason for the denial of a permit.
- (b) The applicant shall have the right to appeal a denial of a certification to the director by filing notice of appeal with the city clerk within seven (7) calendar days after receipt of the notice provided above. The appeal shall be heard within ten (10) calendar days of the filing of the appeal. The director or the director's designee shall hear the appeal as soon as practicable. The decision of the director or the designee is final.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-36. Duties and costs to be paid by certification holder.

- (a) Each certification holder shall comply with all requirements of this article, the "green event scorecard", the certification directions and conditions, the requirements of the contract or permit issued by the relevant department and with all applicable laws and ordinances. The certification holder shall attest no later than thirty (30) days after the event is completed that they have complied with all the measures on the "green events scorecard" which they proposed to implement to obtain the certification.
- (b) The director shall create written standard procedures to be used by relevant city departments for issuance of certifications, enforcement, and the evaluation and assessment of facilities and events in conformity with this section. City staff will conduct periodic random checks of events that have received certification to verify compliance with this article.
- (c) If an applicant owes fees not timely paid in connection with an event previously approved and conducted, the applicant shall, prior to approval of the application for a certification pay these fees.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

Sec. 26-37. Revocation of certification.

The director shall have the authority to revoke a certification issued pursuant to this article when the conditions supporting the findings made by the relevant city department pursuant to section 26-33 change in such a way, prior to the date on which the event is to be held, that a certification would not otherwise be issued.

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(Ord. No. 2010-04-08-0303, § 1, 4-8-10)
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Sec. 26-38. Penalty for violation.

The violation of any of the rules and regulations set forth in this article is hereby declared to be unlawful and punishable in accordance with section 1-5.

(Ord. No. 2010-04-08-0303, § 1, 4-8-10)

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Sec. 34-471. General provisions.

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Sec. 34-483. Supplemental enforcement action.

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Secs. 34-485-34-510. Reserved.

Sec. 34-471. General provisions.

- (1) Purpose. This division sets forth uniform requirements to be met by all industrial waste dischargers utilizing the San Antonio Regional Wastewater Transportation and Treatment System (hereinafter termed "regional system"). This division is written to enable the regional system to comply with and enforce all applicable local, state, and federal laws pertaining to water quality control, including the Clean Water Act (33 U.S.C. 1251 et. seq.), and the general pretreatment regulations (40 CFR 403). Any word, phrase, clause, paragraph, section, part or provision of this division which, upon the promulgation of more stringent local, state or federal law or duly implemented regulatory requirement, is in conflict with or less stringent than such local, state and federal law or regulation promulgated after enactment of this division, shall be invalidated and repealed to the extent of such conflict or super cession upon the effective date of such local, state and federal law or regulation, and the language and provisions of such local, state and federal law or regulation shall be incorporated herein by reference and shall become a part of those sections, parts, paragraphs, clauses, or phrases affected to the extent that the existing division language is invalidated and repealed.
- (2) Administration.
 - (a) Pursuant to the grant of authority to the San Antonio Water System in City Ordinance No. 75686, dated April 30, 1992 and in the Ordinance No. 80574 dated August 4, 1994, the SAWS board of trustees shall have full responsibility for the administration and implementation of the pretreatment program established by this division.

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- (b) Except as otherwise provided herein, the director shall administer, implement and enforce the provisions of this division. The pretreatment program shall be modified as needed to meet local, state and federal requirements. Any powers granted to or duties imposed upon the director may be delegated by the director to other SAWS personnel.
- (3) *Objectives.* The objectives of this division are:
 - (a) To prevent the introduction of pollutants into the regional system in such quantities or qualities that would interfere with the operation of the regional system;
 - (b) To prevent the introduction of pollutants or substances into the regional system that may typically pass through either unaffected by the treatment process or may be inadequately compatible with such treatment, that could result in potential violations of POTW effluent standards, air quality standards, NPDES permit conditions, sludge use and disposal requirements and any other federal or state laws, or otherwise considered incompatible with the POTW;
 - (c) To preserve and improve the opportunity for reusing, reclaiming and recycling wastewater and sludge generated by the regional system, and to ensure quality of sludge to allow its use and disposal in compliance with statutes and regulations;
 - (d) To ensure that there is an equitable distribution of the operation, maintenance and capitalrelated costs of the regional system across user classes;
 - (e) To create a permit system to regulate industrial users of the regional system;
 - (f) To enforce the provisions of this division by requiring self-monitoring and self-reporting from industrial users to supplement periodic investigations made by regional system inspection personnel;
 - (g) To provide penalties for violations of the regulations established herein;
 - (h) To protect the health and welfare of the public and of employees who maintain and operate the regional system;
 - (i) To establish a regulatory environment that encourages identification and utilization of pretreatment opportunities to reduce or eliminate the volume and toxicity of any industrial waste discharged to the regional system, in fulfillment of the intent of objectives (a), (b), (c), and (h) above.
- (4) Service area. This division shall be given full force and effect inside the corporate limits of San Antonio and within those unincorporated areas located outside the corporate limits of San Antonio, but within the regional system's sewer service area. Additionally, this division shall apply to those entities (as defined hereinafter) served by the regional system that have entered into sewer service contracts with the city or the San Antonio Water System. By operation of law, permit conditions, contract, or intermunicipal agreement, industrial users within the sewer service area are obligated to abide by the provisions of this division and/or similarly stringent regulations adopted by an entity other than SAWS, which govern the discharge of industrial wastewater into any sewage collection system which ultimately connects to the regional system. Industrial users within the sewer service area are obligated to financially support the regional system by paying all applicable sewer user charges and fees to the appropriate collection agent for costs associated with the transportation, treatment, operation, maintenance, monitoring, administration, and enforcement services provided to the user of the regional system.
- (5) Abbreviations. The following abbreviations shall have the designated meanings:

BOD — Biochemical Oxygen Demand (five day).

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C — Centigrade.

- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act.
- CFR Code of Federal Regulations.
- CAA Clean Air Act.
- CWA Clean Water Act, 33 U.S.C. 1251 et seq.
- COD Chemical Oxygen Demand.
- EPA Environmental Protection Agency.
- F Fahrenheit.
- FOG Fats, Oils and Grease.
- GPD Gallons per day.
- L Liter.
- LEL Lower Explosive Limit.
- mg Milligrams.
- MGD Million gallons per day.
- mg/L Milligrams per Liter (weight to volume).
- NPDES National Pollutant Discharge Elimination System.
- POTW Publicly Owned Treatment Works.
- RCRA Resource Conservation and Recovery Act.

PL — Public Law.

- SARA Superfund Amendments and Reauthorization Act.
- SAWS San Antonio Water System.
- SDWA Safe Drinking Water Act.
- SIC Standard Industrial Classification.
- SWDA Solid Waste Disposal Act, 42 U.S.C. 6901, et seq.
- TBLL Technically Based Local Limits.
- TCEQ Texas Commission on Environmental Quality
- TOMP Toxic Organic Management Plan.
- TSCA Toxic Substances Control Act.

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TSS — Total Suspended Solids.

TTO — Total Toxic Organics.

USC — United States Code.

(6) *Definitions.* Unless a provision explicitly states otherwise, the following terms and phrases, as used in this division, shall have the meanings hereinafter designated.

Act or the Act: The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

Administrator: The Administrator of the U.S. Environmental Protection Agency.

Approval authority: The administrator of the EPA or the director in a National Pollutant Discharge Elimination System (NPDES) delegated state with an approved state pretreatment program or his designated representative.

Authorized representative of industrial user: An authorized representative of an industrial user may be:

- (1) An executive officer of at least the level of vice president if the industrial user is a corporation;
- (2) A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively;
- (3) A duly authorized representative of a user that is a political subdivision or other entity as defined at section 34-471(6) of this division;
- (4) The individuals described in paragraphs (1) through (3) above, may designate an alternate authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the control authority.

Biochemical oxygen demand (BOD): The quantity of oxygen utilized in five (5) days at twenty (20) degrees centigrade for biochemical oxidation of the organic matter present in wastewater, expressed in mg/l and measured by the method set forth in the most recent edition of Standard Methods for the Examination of Water and Wastewater, or such other method as approved by EPA and published in 40 CFR 136.

Categorical standards: National categorical pretreatment standards or pretreatment standards as set forth in any regulation containing pollutant discharge limits promulgated by the EPA in accordance with the Section 307 (b) and (c) of the Act (33 U.S.C. 1347) which applies to a specific category of industrial users, and which appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.

Chemical oxygen demand (COD): A measure of the oxygen required in mg/l for the oxidation of organic matter to CO² and water while under acidic conditions using a strong chemical oxidizing agent. See Standard Methods for the Examination of Water and Wastewater, current edition.

City: The City of San Antonio in Bexar County, Texas, being a home rule municipality duly authorized and existing, pursuant to its charter, the Texas Constitution, and the laws of the State of Texas. Texas as represented by the official acts of the city council and council-designated representative public officials.

Compatible pollutant: A pollutant such as biochemical oxygen demand, total suspended solids, or any additional pollutants identified in the publicly-owned treatment works NPDES permit, where the POTW is designed to treat such pollutants to the degree required by the POTW's NPDES or state wastewater discharge permit.

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Composite sample: A representative sample (flow or time proportional) resulting from the combination of individual wastewater samples taken at selected intervals based on an increment of either flow or time. Normally these samples are based on a twenty-four-hour period and should be representative of daily operations, as is further defined in Appendix E of 40 CFR 403.

Control authority: The term "control authority" shall refer to SAWS or the POTW defined hereinafter, the resource compliance division, or the designated representative or agent, in accordance with the provisions of 40 CFR 403.12 insofar as the pretreatment program was originally approved and effective as of February 15, 1985.

Department: The San Antonio Water System Resource Protection and Compliance Department.

Direct discharge: The discharge of treated or untreated wastewater directly to the waters of the United States or the state.

Division: The San Antonio Water System Resource Compliance Division.

Entity: Shall refer to those cities, towns, political or commercial subdivisions, municipal utility districts, industrial districts, public utility districts, water improvement districts, military installations or state government facilities that establish, operate, and maintain a sanitary sewer collection system within their jurisdictional boundary and contract with the control authority to provide for the transportation and treatment of sewage generated by the entity.

Environmental Protection Agency, or *EPA:* The U.S. Environmental Protection Agency, or where appropriate the term may also be used as a designation for the administrator or other duly authorized official of said agency.

Existing source: Any source of discharge, the construction or operation of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

Explosion hazard meter: An explosion-proof electromechanical device designed to collect and analyze ambient air samples to determine the presence and measure the concentration of volatile, flammable, organic vapors capable of causing a fire or explosion in the presence of a source of ignition.

Flow-proportional composite sample: Shall mean the composite of two (2) or more discharge samples taken on a flow-proportional basis, to be representative of daily operations.

Fats, oils and grease (FOG): Shall mean any animal, vegetable or mineral fats, oils and/or greases, including but not limited to the following types: floatable grease of any origin; and free or emulsified grease of petroleum or mineral origin, or both, such as, cooling or quenching oil, lubricating oil, nonbiodegradable cutting oil and non-saponifiable oil.

Grab sample: A sample taken over a short period of time, not usually exceeding fifteen (15) minutes, and representative of a wastewater flow on a one-time basis. This sample is taken without regard to the flow volume or consideration of the time at which the sample is taken, as is further defined in Appendix E of 40 CFR 403.

Grease trap: Any structure or mechanical device intended to cause or facilitate the interception and separation of free and emulsified oils and grease from wastewater prior to its discharge to the regional system. All structure or devices installed for the purpose of pretreatment shall conform to the design requirements contained in the city plumbing code. Plans for such structures or devices shall be submitted to the director for review prior to construction or installation.

Grit trap: A receptacle utilized by commercial or industrial generators of liquid waste to intercept, collect and restrict the passage of petroleum-based oil and grease wastes and inorganic or other solids into both private and public sanitary sewers to which the receptacle is directly or indirectly connected.

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Ground water: The supply of fresh water found beneath the earth's surface, usually in aquifers, which supply wells and springs.

Holding tank waste: Any wastes from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum pump tank trucks, or any other waste hold/hauling mechanisms.

Incompatible pollutant: All pollutants other than compatible pollutants as defined in section 34-471(6), such as, but not limited to, metals, volatile organics, and hazardous substances, etc.

Indirect discharge: The discharge or the introduction into the POTW of any pollutant from any nondomestic source, including but not limited to those sources regulated under Section 307 (b) and (c) or (d) of the Act (33 U.S.C. 1317) (including holding tank waste discharged into the regional system).

Industrial user or user: Any user who contributes, causes, or allows an indirect discharge (as defined in subparagraph 34-471(6) of this section) of non-domestic pollutants or other wastewater which does not constitute a "direct discharge" to a receiving stream under regulations issued pursuant to Section 402, of the Act, (33 U.S.C. 1342).

Industrial wastewater: The liquid and waterborne pollutants resulting from processes or operations employed in business, commerce or industry as defined in the "Standard Industrial Classification Manual, 1987" office of management and budget of the federal government, as amended and supplemented from time to time, inclusive of the mixtures of any industrial wastewater pollutants with water or domestic sewage as distinct from normal domestic sewage.

Industrial wastewater advisory board: An advisory board consisting of eleven (11) members whose function is to provide information and recommendations to the control authority board of trustees, president/CEO, and the director regarding Industrial Wastewater. The general provisions of the Federal Register, Volume 44, No. 34, Friday, February 16, 1979, Sec. 25.7 "Advisory Groups," shall serve as a guideline for the activities and structure of the board.

Industrial wastewater discharge permit: A control mechanism providing for the regulation of discharge by certain users pursuant to 40 CFR 403.8 (f)(1)(iii), the Act, the control authority pretreatment program, and this division.

Inhibition: A discharge which has a negative impact upon the biological activity of the POTW either alone or in conjunction with other discharges.

Instantaneous maximum allowable discharge limit: The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composite sample collected, independent of the industrial flow rate and the duration of the sampling event.

Interference: A discharge which alone or in conjunction with a discharge from other sources tends to:

- (1) Inhibit or disrupt the treatment processes, operations, sludge processes, sludge use or disposal of the POTW, and
- (2) Therefore is a cause of violation of POTW's NPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued hereunder (or any more stringent state or local regulations): Section 405 of the Clean Water Act; the Solid Waste Disposal Act (SWDA), including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA; the Clean Air Act; the Toxic Substances Control Act; and Marine Protection, Research, and Sanctuaries Act.

National pollution discharge elimination system (NPDES) permit: A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

New source:

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- (1) Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that action, provided that:
 - (a) The building, structure, facility, or installation is constructed at a site at which no other source is located; or
 - (b) The building, structure, facility, or installation totally replaces the process or product equipment that causes the discharge of pollutants at an existing source; or
 - (c) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing sources at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.
- (2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of section (1)(b) or (c) above but otherwise alters, replaces or adds to existing process or production equipment.
- (3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:
 - (a) Begun, or caused to begin, as part of a continuous onsite construction program:
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - Significant site preparation work including clearing, excavation, or removal or existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - (b) Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Noncontact cooling water: Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Normal domestic wastewater: The water-borne wastes normally discharged from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories and institutions, free from storm water, ground water and industrial waste, with a BOD normally less than two hundred fifty (250) mg/L and total suspended solids normally less than two hundred fifty (250) mg/L.

Pass through: A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the control authority's NPDES permit, including an increase in the magnitude or duration of a violation.

Person: Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

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pH: A measure of the acidity or alkalinity of an aqueous solution, defined as the logarithm (base 10) of the reciprocal of the hydrogen ion concentration of a solution, expressed in standard units.

Pollutant: A substance that alters the physical, thermal, chemical, radiological, or biological quality or properties of water; or that contaminates water to the extent that the water is rendered harmful to humans, animal life, vegetation, property, or to public health, safety, or welfare; or that impairs the usefulness of public enjoyment of the water for any lawful purpose. Pollutants include, but are not limited to, dredged soil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

Pretreatment or *treatment:* The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration can be obtained by physical, chemical, or biological processes, or process changes by other means, except by diluting the concentration of the pollutants, and as prohibited by 40 CFR 403.6(d).

Pretreatment requirements: Any substantive or procedural requirement of the control authority related to industrial wastewater pretreatment that may supplement national pretreatment standard requirements imposed upon an industrial user.

Pretreatment standards: Any regulation containing prohibitive discharge standards and/or categorical pretreatment standards promulgated by the EPA in accordance with Section 307 (b) and (c) of the Act (33 U.S.C. 1347). This term also includes local limits.

Prohibitive discharge standards: Absolute prohibitions against the discharge of certain substances; these prohibitions appear in section 34-472(1) of this division.

Publicly owned treatment works (POTW): A "treatment works," as defined by Section 212 of the Act (33 U.S.C. 1292) which is owned by the control authority. This definition includes any devices or systems used in the collection and treatment of sewage or industrial wastes of a liquid nature and any conveyances, which convey wastewater to a water recycling center.

San Antonio water system (the control authority): Regional water, wastewater and reuse utility system created by Ordinance No. 75686 of the City of San Antonio, passed on April 30, 1992.

Septic tank waste: Any sewage or wastewater from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.

Sewage: Wastewater containing human excrement and gray water (household showers, dishwashing operations, etc.).

Shall: "Shall" is mandatory; "May" is permissive.

Significant industrial user (SIU): Any user meeting the following criteria:

- (1) Industrial users subject to categorical pretreatment standards; and/or
- (2) Any other industrial user that:
 - (a) Discharges an average of 25,000 gpd or more of process wastewater;
 - (b) Contributes a process wastestream which makes up five (5) percent or more the average dry weather hydraulic or organic capacity of the treatment plant or;
 - (c) Is designated as significant by the director on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

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Significant noncompliance: For the purpose of this provision, an industrial user is significantly noncompliant (SNC), if its violation meets one or more of the following criteria:

- (a) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six
 (66) percent or more of all measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter; or
- (b) Technical review criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, FOG, and 1.2 for all other pollutants except pH.); or
- (c) Any other violation of a pretreatment effluent limit (daily maximum or longer term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public); or
- (d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the control authority's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge; or
- (e) Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance; or
- (f) Failure to provide, within thirty (30) days after the due date, required reports such as baseline monitoring reports, ninety-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules; or,
- (g) Failure to accurately report noncompliance; or
- (h) Any other violation or group or violations which the control authority determines will adversely affect the operation or implementation of the local pretreatment program.

Slug discharge/slug load: Any single discharge episode at a flow rate or strength which could cause a violation of the prohibited discharge standards in section 34-472(1) of this division, and any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. The discharge episode is not required to cause or have the potential to cause pass-through or interference with the POTW processes to be considered a slug load.

Standard industrial classification (SIC): A classification pursuant to the Standard Industrial Classification Manual issued by the executive office of the president, office of management and budget, 1987 as amended or as may be amended.

Standard methods: The examination and analytical procedures set forth in the latest edition of "Standard Methods for the Examination of Water and Wastewater" as prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Environment Federation. "Standard Methods" shall also mean any approved analytical procedures published by the U.S. EPA in 40 CFR Part 136.

State: State of Texas.

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State waters: Water of the ordinary flow, underflow, and tides of every flowing river, natural stream or lake, and of every bay of the Gulf of Mexico, of every river, natural stream, canyon, ravine, depression, and other watershed in the state which are the property of the state.

Storm water: Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

Technically based local limits (TBLL): Those enforceable technically based local pollutant discharge standards developed by POTWs to address federal standards as well as state and local regulations.

Texas commission on environmental quality (TCEQ): The TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, or an agent thereof.

Texas pollutant discharge elimination system (TPDES): A discharge permit issued pursuant to the authority of the Texas Commission on Environmental Quality.

Time-proportional composite sample: The composite of two (2) or more wastewater samples of equal volume taken at regular time intervals during any period of operational discharge.

Total suspended solids (TSS): The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquids, and which is removable by laboratory filtration.

Total toxic organic (TTO): The summation of all quantifiable values greater than 0.01 milligrams per liter for the toxic pollutants located in 40 CFR 122, Appendix D, Table II.

Toxic organic management plan (TOMP): A plan which specifies the toxic organic compounds used, the method of disposal used, and procedures for assuring that toxic organics do not routinely spill or leak into wastewater discharged to the POTW.

Toxic pollutant: Any pollutant or combination of pollutants listed as toxic in regulations promulgated by the administrator of the environmental protection agency under the provisions of Section 307(a) of the Act.

Upset: An exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

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; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

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

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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 less than or equal to 2.0 or greater than or equal to 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;

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- (h) Any trucked or hauled pollutants, except at discharge points designated by 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;
- 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;
- (I) 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;

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- (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 nonpermitted 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

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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
- (b) 0.7 Cadmium
- (c) 5.0 Chromium
- (d) 1.50 Copper
- (e) 0.17 Total Cyanide
- (f) 0.7 Lead
- (g) 0.05 Mercury
- (h) 5.5 Nickel
- (i) 0.02 Selenium
- (j) 0.50 Silver
- (k) 2.50 Zinc
- (I) 200 Fats Oil & Grease
- (m) 5.5—10.5 pH
- (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.

(c) Best Management Practices/Pollution Prevention. Users not regulated under local limits shall be regulated under the following guidelines relating to Best Management Practices and pollution prevention.

The methodology involved in the application of Best Management Practices/Pollution Prevention may include but not be limited to the following:

(i) Source reduction

Operating practices

Inventory control

Employee training

Spill control

Input Material Substitutions

Product Changes

Technology Changes

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Process changes

Equipment changes

(ii) Recycling

Reuse

Closed loop recycling

Other recycling

Reclaimation

There are existing non-permitted and/or unregistered industrial dischargers who typically have reasonable potential for violating a pretreatment standard or requirement. Therefore, the implementation of Best Management Practices, as stipulated by the city water system, is required to control and reduce specific pollutants. The reduction of these specific pollutants at many facilities may have a significant impact on the total contribution based on the number of facilities involved. Upon determination by the control authority that it is necessary to regulate an individual user or group of industrial users based on potential for pollutants of concern, the following minimum requirements will be established to accomplish this goal:

Industrial users within the identified grouping must either be regulated by the BMP guidelines or pretreatment standards (local limits).

Users may be required to submit letters of authorization indicating the facility's intent to comply with the BMP guidelines

The control authority may require periodic reporting by these users demonstrating compliance with the BMP guidelines such as copies of equipment maintenance records or manifest records for waste disposal

The control authority may conduct random inspections to determine compliance independent of the information supplied by an industrial user.

- (5) State requirements. Specific pollutant requirements and limitations which have or may be enacted by the state on indirect discharges shall immediately supersede and replace the requirements and limitations imposed by this division when the state requirements are more stringent than either the federal or the control authority's standards or requirements.
- (6) Control authority's right of revision. The control authority reserves the right to amend this division at any time to establish more stringent specific pollutant limitations or requirements on indirect discharges to the regional system if deemed necessary to protect the POTW processes or to correct or prevent an effluent quality problem in treated wastewater and/or resulting sludges. The control authority also reserves the right to amend this division to comply with the general objectives and purposes presented in section 34-471 of this division.
- (7) Prohibition of dilution. No user shall ever increase the use of process water, unpolluted water, surface water or storm water or in any other way attempt to dilute either a direct or indirect discharge as a partial or complete substitute for adequate treatment to achieve compliance with the specific pollutant limitations contained in the national categorical pretreatment standards, or in any other specific pollutant limitations promulgated by the control authority and/or state and incorporated in this division. The control authority may impose mass limitations on users who are using dilution to meet

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applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.

- (9) Bypass.
 - (a) A user may allow a bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (b) and (c) of this section.
 - (b) A user may allow a bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (b) and (c) of this section.
 - (c) (1) If a user knows in advance of the need for a bypass it shall submit prior notice to the control authority, at least ten (10) calendar days before the date of the bypass, if possible.
 - (2) A user shall submit oral notice to the control authority of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) calendar days of the time the user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The control authority may waive the written report on a case by case basis if the oral report has been received within twenty-four (24) hours.
 - (d) (1) Bypass is prohibited, and the control authority may take an enforcement action against a user for a bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) The user submitted notices as required in this section.
 - (2) The control authority may approve an anticipated bypass, after considering its adverse effects, if the control authority determines that it will meet the conditions listed in this section.

(10) Act of God.

If a person can establish that an event that would otherwise be a violation of a statute within the commission's jurisdiction or a rule adopted or an order or a permit issued under such a statute was caused solely by an act of God, war, strike, riot, or other catastrophe, the event is not a violation of that statute, rule, order, or permit.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04; Ord. No. 100030, § 1(Att. 1), 11-18-04; Ord. No. 101725, § 1, 11-17-05)

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Sec. 34-473. Wastewater pretreatment.

- (1) Pretreatment facilities. Users shall provide wastewater treatment as necessary to comply with this division and shall achieve compliance with all categorical pretreatment standards, local limits, and the prohibitions set out in section 34-472(1) of this division within the time limitations specified by EPA, the state, or control authority, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the department for review, and shall be acceptable to the division before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the control authority under the provisions of this division.
- (2) Additional pretreatment measures.
 - (a) Whenever deemed necessary, the control authority may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage wastestreams from industrial wastestreams, and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this division.
 - (b) The control authority may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
 - (c) Types of traps, sumps, interceptors and/or filters such as, but not limited to, grease, oil, grit and sand shall be provided by the user when, in the opinion of the control authority, they are necessary for the proper handling of wastewater containing grease and oil, or grit; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by the control authority and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be installed, inspected, cleaned, and repaired regularly, as needed, by the user at their expense. Refer to the liquid waste transportation regulations, section 34-518(1)(c) for specific guidelines pertaining to the maintenance of such interceptors and/or sumps.
 - (d) Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

As specified in the user's permit or this division, the industrial user shall effectively monitor the operation and efficiency of all pretreatment facilities, and the quantity and quality of the treated discharge emanating from the user's facility. Samples and measurements taken shall be representative of the monitored activity. Monitoring for the parameters indicated in an industrial user's permit or in this division must be conducted according to test procedures approved under 40 CFR 136 and 40 CFR 403.

- (3) *Slug control plan.* At least once every two (2) years, the control authority shall evaluate whether each significant industrial user needs a plan to control slug discharges. The control authority may require any user to develop, submit for review, and implement such a plan. A plan shall address, at a minimum, the following:
 - (a) Description of discharge practices, including nonroutine batch discharges;
 - (b) Description of stored chemicals;
 - (c) Procedures for immediately notifying the control authority of any accidental or slug discharge, as required by sections 34-473(4) and 34-473(5) of this division, including any discharge that

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would result in a violation under 40 CFR 403.5(b) with procedures for followup written notification within five (5) calendar days, and

- (d) Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.
- (4) *Reporting of slug/accidental discharges.* In the case of a slug discharge, including any accidental spill or noncustomary batch discharges, the user shall notify the department and the appropriate water recycling center immediately by telephone and provide the following information:
 - (a) Time of discharge.
 - (b) Location of the discharge.
 - (c) Type of waste.
 - (d) Concentration and volume discharged.
 - (e) Corrective actions taken.
 - (f) Water recycling center receiving the waste.

Within five (5) calendar days following an accidental or slug discharge, the user shall submit to the director, or to the designated representative, a written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any responsibility for, expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, the environment or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed by this division or other applicable law. Failure to notify the director of a slug or accidental discharge may result in legal action or discontinuation of service; and may be deemed a separate violation of this division.

- (5) Toxic organic management plan. All industrial users in the electroplating, metal finishing, and electrical and electronic components categories may submit a toxic organic management plan (TOMP) in lieu of monitoring for total toxic organics (TTO) as referenced in 40 CFR 413.03(b), 40 CFR 433.12(b) and 40 CFR 469.13(b) respectively. The plan must specify at a minimum the following:
 - (a) A complete inventory of all toxic organic chemicals, defined in this division as TTO, with corresponding MSDS sheets in use or identified through sampling and analysis of the wastewater from regulated process operations detected above 0.01 mg/l (Organic constituents of trade-name products should be obtained from the appropriate suppliers as necessary). All analyses must conform with 40 CFR Part 136 Methods.
 - (b) Descriptions of the methods of disposal other than dumping used for the inventoried compounds, such as reclamation, contract hauling, or incineration;
 - (c) The procedures for ensuring that the regulated toxic organic pollutants do not spill or routinely leak into process wastewaters, floor drains, non-contact cooling water, groundwater, surface waters; i.e., spill prevention, control and countermeasures (SPCC) plan; or any other location which allows discharge of the compounds; and
 - (d) Determinations or best estimates of the identities and approximate quantities of toxic organic pollutants used in as well as discharged from the regulated manufacturing processes. Compounds present in wastestreams that are discharged to sanitary sewers may be a result of

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regulated processes or disposal, spills, leaks, rinse water carryover, air pollution control, and other sources. The Control Authority reserves the right to verify compliance with the TTO requirement through its own sampling program.

(6) *Notice to employees.* All industrial users shall take necessary and reasonable measures to insure that all appropriate employees are advised of the notification procedure to be used in the event of an accidental or slug discharge.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-474. Wastewater discharge permit application.

- (1) Wastewater discharges.
 - (a) No significant industrial user shall discharge wastewater into the POTW without first obtaining a wastewater discharge permit from the control authority. Those potential SIUs already discharging may continue to do so provided a permit application is submitted to the division in a timely manner for review and final determination.
 - (b) The control authority may require other users to obtain wastewater discharge permits as necessary to carry out the purposes of this division.
 - (c) Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this division and subjects the wastewater discharge permittee to the sanctions set out in sections 34-481, 34-482, and 34-483 of this division. Obtaining a wastewater discharge permit does not relieve a permittee of its obligation to comply with all federal and state pretreatment standards or requirements or with any other requirements of federal, state and local law.
- (2) Wastewater discharge permit application.
 - (a) Significant industrial users shall, pursuant to the control authority's approved pretreatment program, obtain an industrial wastewater discharge permit, and shall complete and file an application on a form prepared by the control authority. (Refer to section 34-480 concerning confidential or proprietary information). The information requested shall at a minimum include the following items:
 - (1) Name(s), address(es) including the legal description, location(s);
 - (2) Name(s), official title(s), and address(es) of the owners and/or operators;
 - (3) The identity of the authorized representative including his or her name, official title, address, and date of birth;
 - (4) SIC number(s) according to the current edition of the Standard Industrial Classification Manual, 1987, bureau of the budget, as amended;
 - (5) A list of all environmental control permits held by or for the facility;
 - (6) The nature and concentration of any pollutants in the discharge which are limited by a city, state or federal pretreatment standard (sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR 136, as amended);
 - (7) Time and duration of contribution;

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- (8) Average daily and peak wastewater flow rates, including daily, monthly and seasonal variations, if any;
- (9) Site plans, floor plans, mechanical and plumbing plans, and details showing all sewers, sewer connections, and appurtenances by size, location and elevation;
- (10) Number of employees, hours of operation of plant and, if required in accordance with other provisions herein, the proposed or actual hours of operation of pretreatment system;
- (11) Description of activities, facilities and plant processes on the premises, including all materials which are, or could be, discharged;
- (12) Each product by type, amount, process(es), and rate of production, if applicable;
- (13) Type and amount of raw materials processed (average and maximum per day), if applicable;
- (14) Current slug/spill plan as identified in 40 CFR 403.8(f)(2)(v);
- (15) Description of on-site storage and off/on-site disposal of waste not disposed of to the sanitary sewer.
- (16) A list and description of the waste transporters and disposal facilities (with their EPA/TCEQ/the control authority identification numbers).
- (17) A list and description of the pollution prevention activities in the past 5 to 10 years.
- (18) Any other relevant information as may be deemed by the director to be necessary to evaluate the permit application, or as required under section 34-476(5) of this division.
- (b) It shall be the permittee's continued duty to provide, when requested by the control authority, information necessary to ensure current information and data required as part of the permit application. Such requests by the control authority may be presented to the permittee in writing, or by a representative of the control authority at the time of an inspection. Failure to provide such information will be considered a violation of this division.
- (c) Incomplete or inaccurate permit applications will not be processed and will be returned to the user for revision.
- (3) Wastewater discharge registration
 - (a) (Non-significant industrial users)

The control authority may require other users to obtain a wastewater discharge registration application as necessary to carry out the purposes of this division.

When the control authority requires a user to register its wastewater discharge that user shall obtain a wastewater discharge registration application, and shall complete and file an application on a form prepared by the control authority. (Refer to section 34-480 concerning confidential or proprietary information). The information requested may include the following items:

- (1) Name(s), address(es) including the legal description, location(s);
- (2) Name(s), official title(s), and address(es) of the owners and/or operators;
- (3) The identity of the authorized representative including his or her name, official title, address, and date of birth;

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- (4) NAICS number(s) according to the current edition of the North American industrial classification system, 1997 office of management & budget, as amended;
- (5) A list of all environmental control permits held by or for the facility;
- (6) The nature and concentration of any pollutants in the discharge which are limited by a city, state or federal pretreatment standard (sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR 136, as amended);
- (7) Site plans, floor plans, mechanical and plumbing plans, and details showing all sewers, sewer connections, and appurtenances by size, location and elevation;
- (8) Number of employees, hours of operation of facility
- (9) Description of activities, facilities and plant processes on the premises, including all materials (material safety data sheets) which are, or could be, discharged;
- (10) Pretreatment device details;
- (11) Daily discharge / flow information
- (12) Any other relevant information as may be deemed by the control authority to be necessary to evaluate the registration application, or as required under sections 34-474(2b) and 34-475 of this division.

The control authority will evaluate the data furnished by the user and may require additional information. A wastewater discharge registration shall include such conditions as are deemed reasonably necessary by the control authority to prevent pass through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW. The control authority may require periodic self-monitoring analysis of the user's wastestream for compliance and / or surcharge assessment. The Control Authority may require periodic cleaning and maintenance of any pretreatment device in accordance with section 34-518 of this article.

(4) *Certification: data accuracy, truthfulness and completeness.* All wastewater discharge permit applications, required documents, and other specified documents submitted to the control authority must contain the following certification statement, and must be signed by an authorized representative of the industrial user:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(5) Wastewater discharge permit decisions. The control authority will evaluate the data furnished by the user and may require additional information. Within sixty (60) calendar days of receipt of a complete wastewater discharge permit application, the control authority will determine whether or not to issue a wastewater discharge permit. The control authority may deny any application for a wastewater discharge permit.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

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Sec. 34-475. Wastewater discharge permit issuance process.

Within sixty (60) calendar days from the date the permit application is approved (section 34-474(4)), the control authority shall issue the wastewater discharge permit to the user.

- (1) Permit duration. Permits issued to significant industrial users shall be issued for a period of five (5) years or for a period of less than (5) years if established by the control authority. The terms and conditions of the permit are subject to modification by the department during the term of the permit as limitations or requirements as identified in this division are modified, or other just cause exists that warrants modification.
- (2) *Permit contents.* A wastewater discharge permit shall include such conditions as are deemed reasonably necessary by the control authority to prevent pass through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW. Permits shall, at a minimum, address the following:
 - (a) A statement that indicates wastewater discharge permit duration, which in no event shall exceed five (5) years;
 - (b) A statement that the wastewater discharge permit is non-transferrable without prior notification to and authorization from the department in accordance with section 34-475(4) of this division;
 - (c) The unit charge or schedule of user charges and fees for the wastewater to be discharged to a regional system sewer, and/or for the monitoring, sampling, testing, and analysis thereof;
 - (d) Limits on the average and maximum wastewater constituents and characteristics;
 - (e) Limits on the average and maximum rate and time of discharge or requirements for flow regulation and equalization;
 - (f) Requirements for installation and maintenance of inspection and sampling facilities, including technical data relative to location, slope, and capacity of piping used in the sampling facility or discharge point;
 - (g) Specifications for monitoring programs which may include the number of sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule;
 - (h) Compliance schedules for the installation of technology needed to meet applicable pretreatment standards and requirements, including specific dates and increments of progress. Compliance schedules shall be filed according to sections 34-478(1)(c)(7) and 34-478(2) of this division;
 - (i) Requirements for submission of technical reports or discharge reports;
 - Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the Control Authority and affording the control authority access thereto as specified in 40 CFR 403.12(o);
 - (k) Requirements for reporting the introduction of any new wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the regional system;
 - (I) Requirements for reporting accidental and/or slug discharges as per the provisions of this division;
 - (m) Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;

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- (n) A statement that compliance with the wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable federal and state pretreatment standards, including those which become effective during the term of the wastewater discharge permit;
- (o) A statement of applicable civil and criminal penalties for violation of the permit and/or this division;
- (p) Other conditions as deemed appropriate by the department to ensure compliance with this division, including but not limited to, self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type.
- (3) *Wastewater discharge permit modification.* The control authority may modify a wastewater discharge permit for good cause, including, but not limited to, the following reasons:
 - (a) To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
 - (b) To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of wastewater discharge permit issuance;
 - (c) A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
 - (d) Information indicating that the permitted discharge poses a threat to the POTW, the control authority personnel, the receiving waters, its sludge quality, and/or upset to the wastewater treatment plant;
 - (e) Violation of any terms or conditions of the wastewater discharge permit;
 - (f) Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
 - (g) Revision of a categorical pretreatment standard pursuant to 40 CFR 403.13;
 - (h) To correct typographical or other errors in the wastewater discharge permit; or
 - (i) To reflect a transfer of the facility ownership or operation to a new owner or operator, or to reflect a change in the authorized representative including date of birth;
 - (j) The director reserves the right and shall have the authority to deny any increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by industrial users where such contributions do not meet applicable pretreatment standards and requirements or where such contributions would cause the POTW to violate its NPDES permit.
 - (k) To change from a discharge to zero discharge permittee, or vice versa, the control authority may require all unsettled violations be resolved through the control authority legal department.
- (4) Wastewater discharge permit transfer. Wastewater discharge permits may be transferred to a new owner or operator only if the permittee gives at least thirty (30) days advance notice to the control authority and the control authority approves the wastewater discharge permit transfer. The notice to the control authority must include a written certification by the new owner or operator which:
 - (a) States that the new owner and/or operator has no immediate intent to change the facility's operations and processes;
 - (b) Identifies the specific date on which the transfer is to occur;

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- (c) Acknowledges full responsibility for complying with the existing wastewater discharge permit; and
- (d) States whether liabilities for past or present permit violations will become the responsibility of the new owner/operator.

Failure to provide advance notice of a transfer renders the wastewater discharge permit void as of the date of facility transfer, and shall constitute a violation of this division.

- (5) *Wastewater discharge permit revocation.* The control authority may revoke a wastewater discharge permit for good cause, including, but not limited to, the following reasons:
 - (a) Failure to notify the control authority of significant changes to the wastewater prior to the changed discharge;
 - (b) Failure to provide prior notification to the control authority of changed conditions pursuant to section 34-478(5) of this division;
 - (c) Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
 - (d) Falsifying self-monitoring reports;
 - (e) Tampering with monitoring or surveillance equipment;
 - (f) Refusing to allow the control authority timely access to the facility premises and records;
 - (g) Failure to meet effluent limitations;
 - (h) Failure to pay fines;
 - (i) Failure to pay sewer charges;
 - (j) Failure to meet compliance schedules;
 - (k) Failure to complete a wastewater survey or the wastewater discharge permit application;
 - (I) Failure to provide advance notice of the transfer of business ownership of a permitted facility;
 - (m) Violation of any pretreatment standard or requirement, or any terms of the wastewater discharge permit or this division; or
 - (n) Failure to provide, operate and maintain, at all times, wastewater pretreatment equipment as is necessary to comply with this division.

Wastewater discharge permits shall be voidable upon cessation of operations. All wastewater discharge permits issued to a particular user are void upon the issuance of a new wastewater discharge permit to that user, however, liability for violations of previous permits will not be extinguished by the issuance of a new permit.

(6) Wastewater discharge permit renewal. A user with an expiring wastewater discharge permit shall apply for wastewater discharge permit renewal by submitting a complete permit application, in accordance with section 34-474(2) of this division, a minimum of ninety (90) days prior to the expiration of the user's existing wastewater discharge permit. Failure to reapply for a permit may result in an enforcement action.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)
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Sec. 34-476. Liquid waste transportation regulations.

Liquid waste transporter permits will be issued in accordance with the provisions of Article V, Division 4 of this chapter, the liquid waste transportation and disposal regulations, as amended.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-477. Compliance monitoring.

- (1) Monitoring facilities.
 - (a) Industrial users shall install and maintain monitoring facilities that allow inspection, surveillance and sampling at the discharge point and/or internal drainage systems located on private property. Permanent flow measurement, metering and/or totalizing devices for surcharge calculations and/or determination of the mass of pollutants discharged shall be required when deemed appropriate by the director. These facilities shall be provided by the industrial user and operated at the user's expense. All devices installed by an industrial user used to measure water and/or wastewater flow and quality shall be calibrated at a minimum of one time per calendar year to ensure accuracy. The monitoring facility should normally be situated on the user's premises, but the control authority may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed on the sidewalk area and located so that it will not create a public safety hazard nor be obstructed by structures, landscaping, or parked vehicles. To establish water consumption of users on water wells, metering devices shall be installed, operated and maintained by the user.
 - (b) Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.
 - (c) For multiple use buildings (i.e. shopping centers, medical service buildings, office buildings, etc.) having only one master water meter, or multiple meters paid by one person or company, and/or where the building is served by a common sewer lateral, one permit may be issued to the water bill addressee. In this case, the addressee shall be responsible for:
 - (1) The installation, operation, and maintenance of any required pretreatment device or monitoring station;
 - (2) Compliance with all provisions of this division and/or applicable pretreatment standards or requirements; and
 - (3) The payment of all sampling and analysis fees, surcharges, and any fines or penalties imposed. If in the judgment of the director, the quality of wastewaters from the separate users is such that separate pretreatment or monitoring facilities is appropriate, the director may require separate facilities. In this case, all of the aforementioned requirements shall apply to the individual users.
 - (d) There shall be adequate lighting of and ample room in or near such sampling manhole or facility to safely allow inspection personnel to position sampling, monitoring or surveillance equipment and prepare field samples for analysis. Whether construction on public or private property, the sampling and monitoring facilities shall be provided in accordance with the regional system requirements and all applicable local construction standards and specifications, including

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applicable requirements contained in the plumbing code, chapter 24 of the City Code, as amended or as may be amended.

- (2) Inspection and sampling.
 - (a) The Control Authority and EPA and/or TCEQ representatives shall have the right to inspect the facilities of any industrial user to ascertain whether the purposes of this division are being met and all applicable requirements are being fulfilled. Industrial users and their employees shall allow authorized regulatory representatives displaying proper identification ready access to the premises at all reasonable times for the purpose of: inspecting wastewater generating operations and processes; wastewater flow monitoring and sampling; examination and reproduction of business records pertinent to water and wastewater volume and quality; including hazardous and non-hazardous waste manifests; and where applicable, making photographic documentation and obtaining other information necessary to ascertain and ensure currentness of data and information submitted in the facility's permit application, and assure and assess compliance by users with pretreatment standards and requirements. Inspection frequency is at a minimum conducted once per year, and the frequency will depend on the nature and type of industrial processes as is specified in the control authority's pretreatment program. Failure to allow access will be considered a direct violation of this division.
 - (b) The control authority shall have the right to install, or require the installation of monitoring, testing, and surveillance equipment (including adequate lighting) and to take samples (including independent samples) of any indirect discharge at any reasonable time in accordance with the applicable provisions of this division. Where an industrial user has safety and/or security measures in force which require user issuance of special safety equipment and/or proper identification and clearance before allowing entry into their premises, the user shall make the necessary arrangements with their security guards or similar personnel, so that upon presentation of suitable identification, personnel from the control authority, the state, or EPA will be permitted to enter any or all areas of the user's facility, without delay, for the purpose of performing responsibilities reasonably associated with those stated above and reasonably required to accomplish the purposes and objectives of this division.
 - (c) Results of concentration and constituent analysis of wastewater from samples collected from any industrial user may be determined by the control authority or its authorized agent, the approval authority, a professional engineer contracted by the discharger, or by any other qualified party approved by the control authority.
 - (d) If the industrial user elects to contract with a professional engineer or other qualified party for sampling and analysis of wastewater, all results of such sampling and analysis shall be submitted to the director, and all reports submitted shall contain a statement certifying that the samples collected and values reported are developed in accordance with the collection and analytical procedures contained in section 34-474 of this division, 40 CFR 403.12, and the appropriate federal categorical pretreatment standards, as applicable. Each significant industrial user will be sampled at least twice each year, or more frequently if required by the local pretreatment program.
 - (e) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the control authority and shall not be replaced. The costs of clearing such access shall be borne by the user.
- (3) Search warrants. Failure to allow access to a building, structure, or property, or any part thereof, when the control authority personnel is able to demonstrate probable cause to believe that there may be a violation of this division, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the control authority designed to verify compliance with this

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division or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the control authority may seek issuance of a search warrant from the municipal magistrate of the city or the County Judge of Bexar, or any judge of appropriate jurisdiction.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04; Ord. No. 100030, § 1(Att. 1), 11-18-04)

Sec. 34-478. Reporting requirements.

- (1) Baseline monitoring reports.
 - (a) Within either six (6) months after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the POTW shall submit to the control authority a report which contains the information listed in paragraph (c) below.
 - (b) At least ninety (90) days prior to the commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall submit to the control authority a report which contains the information listed in paragraph (c) below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.
 - (c) Users described above shall submit the information set forth below:
 - (1) *Identifying information.* The name and address of the facility, including the name of the operator and owner.
 - (2) Environmental permits. A list of any environmental control permits held by or for the facility.
 - (3) Description of operations. A brief description of the nature, average rate of production, and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.
 - (4) *Flow measurement.* Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined wastestream formula set out in 40 CFR 403.6(e).
 - (5) *Measurement of pollutants.* Information regarding pretreatment standards sampling include the following:
 - (i) The categorical pretreatment standards applicable to each regulated process.
 - (ii) The results of sampling and analysis identifying the nature and concentration or mass, where required by the standard or by the control authority of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and average concentrations, (or mass where required), shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in section 34-478(9) of this division.
 - (iii) Sampling must be performed in accordance with procedures set out in section 34-478(10) of this division.

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- (6) *Certification.* A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and if not, whether additional operation and maintenance and/or additional pretreatment is required to meet the pretreatment standards and requirements.
- (7) Compliance schedule. If additional pretreatment and/or additional operation and maintenance is necessary to meet the pretreatment standards, then the shortest schedule by which the user will provide such additional pretreatment and/or operation and maintenance will be utilized. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 34-478(2) of this division.
- (8) Signature and certification. All baseline monitoring reports must be signed and certified in accordance with section 34-474(3) of this division.
- (2) Initial database monitoring. The permittee shall initially document six (6) consecutive months of discharge monitoring to determine compliance with effluent standards established in the permit. If any discharge is found to be in violation of the permit limits, the permittee shall develop corrective measures to achieve and maintain consistent compliance. Techniques specified in 40 CFR 403 and 40 CFR 136 shall be used to collect and analyze any wastewater samples in connection with this database monitoring requirement.
- (3) *Compliance schedules and progress reports.* The following conditions shall apply to the compliance schedule required by section 34-478(1)(c)(7) of this division.
 - (a) The compliance schedule shall allow the user to voluntarily establish goals and time frames for meeting those goals for installing, modifying, and/or maintaining pretreatment equipment and/or practices to identify and resolve conditions in their operation which have resulted in noncompliance. The user shall notify the control authority within five (5) working days from the initial compliance schedule meeting, stating whether or not they will enter into a compliance schedule. Within fifteen (15) working days of the initial compliance schedule meeting, the user shall submit a proposed compliance schedule to the control authority for review. No enforcement action will be taken against the user for instances of noncompliance which occur during an approved compliance schedule. Such instances of noncompliance may be the subject of enforcement at a later date should the user commit violations after the expiration of the applicable compliance schedule. Users must remain compliant for a minimum of one calendar year from the expiration date of the schedule. The director may issue one extension to the user, if the user can document progress toward meeting the compliance schedule and the request for additional time is valid and reasonable;
 - (b) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);
 - (c) No increment referred to above shall exceed nine (9) months; however, the duration of the compliance schedule and any individual increment shall be determined at the discretion of the control authority;
 - (d) The user shall submit a progress report to the control authority no later than fourteen (14) days following each date in the schedule and the final date of compliance including, at a minimum,

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whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and

- (e) In no event shall more than nine (9) months elapse between such progress reports to the control authority.
- (4) Reports on compliance with categorical pretreatment standard deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the control authority a report containing the information described in this division. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with this division.
- (5) Periodic compliance reports.
 - (a) All significant industrial users shall, at a frequency determined by the control authority, but in no case less than twice per year (in June and December), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with section 34-474(3) of this division.
 - (b) All wastewater samples must be representative of the user's discharge.
 - (c) If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the control authority, using the procedures prescribed in section 34-478(10) of this division, the results of this monitoring shall be included in the report.
- (6) *Notification of changed conditions.* Each user must notify the control authority promptly, in writing, of any planned substantial or significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater, including a change in the listed or characteristic hazardous wastes for which the user has submitted initial notification under 40 CFR 403.12 (p).
 - (a) The control authority may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under section 34-474(2) of this division.
 - (b) The control authority may issue a wastewater discharge permit under section 34-475 of this division or modify an existing wastewater discharge permit under section 34-475(3) of this division in response to changed conditions or anticipated changed conditions.
 - (c) For purposes of this requirement, significant changes include, but are not limited to, flow increases of twenty (20) percent or greater, and the discharge of any previously unreported pollutants.
- (7) Notification of potential problems. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a slug load, the user shall immediately telephone and notify the department and the appropriate wastewater treatment plant of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the

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user. Within five (5) days following such discharge, the user shall submit a detailed written report describing the items as referenced in sections 34-473(4) and 34-473(5) of this division.

- (8) Notice of violation/repeat sampling and reporting. If sampling performed by a user indicates a violation, the user must notify the Control Authority within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis, and submit the results of the repeat analysis to the Control Authority within thirty (30) days after becoming aware of the violation. The user is not required to resample if the Control Authority monitors at the user's facility at least once a month, or if the Control Authority samples between the user's initial sampling and when the user receives the results of this sampling. All sampling and notification performed by the user under this section shall comply with the requirements of 40 CFR 403.12 (g).
- (9) Notification of the discharge of hazardous waste. Unless otherwise permitted by this division, the discharge of hazardous waste into the POTW is strictly prohibited and constitutes a violation of this division. Should a user discharge hazardous waste, said user must comply with the following provisions:
 - (a) Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA regional waste management division director, and the TCEQ, in writing, of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). All SIU's who commence discharging after the effective date of this rule shall provide notification no later than one hundred and eighty (180) days after the discharge of the listed or characteristic hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported by users subject to categorical pretreatment standards under the self-monitoring requirements of sections 34-478(1), 34-478(3) and 34-478(4) of this division.
 - (b) In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the control authority, the EPA regional waste management division director, and the TCEQ of the discharge of such substance within ninety (90) days of the effective date of such regulations.
 - (c) In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.
 - (d) This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this division, a permit issued thereunder, or any applicable federal or state law.
- (10) Analytical requirements. All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by EPA. All analytical results submitted to the division shall include supporting quality assurance/quality control documentation.
- (11) Sample collection. All sample collection should be performed pursuant to the applicable requirements of 40 CFR 403.12.
 - (a) Except as indicated in subparagraph (b), the user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is not

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infeasible, the control authority may authorize the use of time proportional sampling or a minimum of four (4) grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

- (b) Samples for compliance monitoring for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.
- (12) *Timing.* Written reports will be deemed to have been submitted on the date postmarked. For reports which are not transmitted through or by a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.
- (13) Record keeping. Users subject to the reporting requirements of this division shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this division and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method, and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the user or the control authority, or where the user has been specifically notified of a longer retention period by the control authority.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-479. Confidential information.

Information and data on a user obtained from reports, surveys, wastewater discharge permit applications, wastewater discharge permits, and monitoring programs, and from the control authority's inspection and sampling activities, shall be available to the public without restriction, unless the user specifically requests in writing, and is able to demonstrate to the satisfaction of the Control Authority, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable state law or federal law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall be stamped "confidential business information" on each page containing such information and shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES / TPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-480. Publication of users in significant noncompliance.

The control authority shall publish annually, in the largest daily newspaper published in the municipality where the POTW is located, a list of the users which, during the previous twelve (12) months,

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were in significant noncompliance with applicable pretreatment standards and requirements as defined in section 34-471.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-481. Enforcement.

Users who violate any term or condition of this division or of their permit shall be subject to enforcement action by the control authority. Such enforcement action will be applied in accordance with the enforcement response plan and may include legal action or other appropriate enforcement remedies as provided for below:

- (1) Enforcement response plan. In accordance with 40 CFR 403.8(f)(5)(ii), the control authority has in use an enforcement response plan (ERP), including an enforcement response guide (ERG) which shall be used by the control authority in initiating and, if necessary, in escalating, enforcement responses with regard to any instance of user noncompliance. The ERP is subject to change as required, and is consistent with approval authority procedures and guidelines.
- (2) Legal action. In addition to any other remedies provided by this division, the control authority may, at any time, seek legal and/or equitable remedies, or prosecute criminal charges against any person, corporation or other entity believed to be in violation of this division, the provisions of an industrial wastewater discharge permit and/or any federal or state law or regulations governing water quality or industrial wastewater pretreatment over which the control authority has been given enforcement powers. The control authority legal staff is hereby authorized and instructed to commence such actions for appropriate legal and/or equitable relief in courts having proper jurisdiction and may seek civil penalties and any other legal or equitable relief available under common law, Chapter 54 of the Texas Local Government Code, or any other applicable local, state, or federal code or statute. The control authority may require that an enforcement meeting be held prior to implementing legal action; however, such a meeting shall not be a bar against or prerequisite for taking any enforcement action against the user.
- (3) Notice of violation (NOV). When the control authority determines that a user has violated, or continues to violate, any provision of this division, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the control authority may serve (either personally or by registered or certified mail, return receipt requested) upon that user a written notice of violation. Within fifteen (15) working days of the mailing date or personal delivery date of such notice, an explanation for the violation and measures taken and/or to be taken for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the control authority. Submission of this response in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the control authority to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation. The first notice issued shall be called an advisory notice.
- (4) *Response by the industrial user to the notice of violation.* The industrial user responding to receipt of a notice of violation shall file a written response in the following form:
 - (a) The industrial user shall submit a written report within the fifteen (15) working days designated in section 34-481(3) to the director. If the violation involves a discharge that is prohibited, or exceeds quantity, quality, or concentration limitations, the report shall contain information regarding the time, date, location, cause, source, quantity, quality and concentration of the discharge and the corrective measures actually taken, or to be taken,

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by the industrial user to correct and prevent any similar recurring discharges. If the violation is an administrative or procedural violation, the report shall contain information regarding corrective measures and time schedules the industrial user has adopted to assure expeditious compliance.

- (b) Should the recipient of a notice of violation fail to respond in writing to the director within the initial fifteen (15) working day response period as required in section 34-481(3), above, the user shall be considered in violation of this division with each day resulting in a separate violation. Such failure to respond may be cited by the director in any legal proceeding in the appropriate municipal, county, district, or federal court.
- (5) Injunctive relief. When the control authority finds that a user has violated, or continues to violate, any provision of this division, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, the control authority may petition the court through the control authority legal staff for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit, order, or other requirement imposed by this division on activities of the user. The control authority may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a user.
- (6) Consent orders. The director or his designated representative is hereby empowered to enter into consent orders, assurances of voluntary compliance, establishing an agreement with any user responsible for noncompliance. Such orders will include specific action to be taken by the user to correct the noncompliance within a time period also specified by the order. Consent orders shall have legal force and effect and shall be judicially enforceable. The director may require that a compliance schedule pursuant to sections 34-478(1)(c)(7) and 34-478(3) of this division be included and followed as a condition of the order. No order shall in any way waive a national categorical pretreatment standard.
- (7) *Compliance schedule.* The compliance schedule is discussed in sections 34-478(1)(c)(7) and 34-478(3) of this division.
- (8) Compliance orders. When the director or his designated representative finds that a user has violated or continues to violate the division, wastewater discharge permits or orders issued hereunder, or any other pretreatment standard or requirement, he may issue an order to the user responsible for the discharge directing that the user come into compliance within fifteen (15) calendar days. If the user does not come into compliance within fifteen (15) calendar days, sewer service shall be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated. Compliance orders may also contain other requirements to address the noncompliance, including additional self-monitoring and/or management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a federal pretreatment standard or requirement, nor does a compliance order release the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a prerequisite to taking any other action against the user.
- (9) Emergency suspension. The director may unilaterally order the suspension of water and/or wastewater service(s) to any user in order to prevent or eliminate an indirect discharge which may cause imminent, serious endangerment to the health or safety of any person, significant damage to the environment, significant interference with the POTW, or violations of the Control Authority, TCEQ or NPDES permit conditions. Concurrent with ordering such a suspension, the director shall issue a written report containing information and investigative data and the notice

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of violation and suspension order upon which the director relies in ordering the suspension of service(s). A copy of this report will be expeditiously forwarded to the affected industrial user.

- (a) The director shall order reinstatement of any discontinued water and/or wastewater service(s) upon presentation to him by the industrial user of a registered professional engineer's report or other written proof acceptable to the control authority that the dangerous discharge has been eliminated and that recurrence is not likely.
- (b) Costs incurred by the control authority or its agents in detecting, investigating, monitoring, measuring and eliminating the dangerous discharge, along with any disconnect and reconnect fees, shall be reimbursed to the control authority by the user(s) responsible for the dangerous discharge within sixty (60) days of billing. Any property damage to the POTW or its appurtenant structures resulting from the dangerous discharge shall also be borne by the user(s) responsible for the discharge.
- (c) A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the control authority prior to the date of any show cause or termination hearing under sections 34-481(10) and 34-481(11) of this division.
- (10) Cease and desist orders. When the control authority finds that a user has violated, or continues to violate, any provision of this division, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, or that the user's past violations are likely to recur, the director may issue an order to the user directing it to cease and desist all such violations and directing the user to:
 - (a) Immediately comply with all requirements; and
 - (b) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user.

- (11) *Termination of discharge*. In addition to other provisions of this division, any user who violates the following conditions of this division, wastewater discharge permits, or orders issued hereunder, is subject to discharge termination:
 - (a) Violation of wastewater discharge permit conditions;
 - (b) Failure to accurately report the wastewater constituents and characteristics of its discharge;
 - (c) Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge;
 - (d) Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling;
 - (e) Violation of the pretreatment standards in section 34-472 of this division.
 - (f) Failure to provide, operate and maintain, at all times, wastewater pretreatment equipment, as is necessary to comply with this division.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

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Sec. 34-482. Penalties.

- (1) Penalties for violations.
 - (a) Criminal. A conviction for violation of this division shall constitute a class C misdemeanor. A person convicted of a violation of this division shall be fined a minimum amount of not less than two hundred dollars (\$200.00) per violation and a maximum amount of not more than two thousand dollars (\$2,000.00) per violation. Each violation of a particular section of this division shall constitute a separate offense, and each day an offense continues shall be considered a new violation for purposes of enforcing this division. A culpable mental state is not required to prove an offense under this division.
 - (b) *Civil.* A civil penalty in an amount not to exceed five thousand dollars (\$5,000.00) per violation of this division may be imposed. Each violation of a particular section of this division shall constitute a separate offense, and each day such offense continues shall be considered a new violation for purposes of enforcing this division, and calculating the amount of civil penalties.
- (2) Falsifying information. Any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this division or pursuant to any condition or provision of an industrial wastewater discharge permit, or who falsifies, tampers with, or knowingly renders inoperable monitoring, sampling or surveillance devices or improperly impedes an inspection procedure required or authorized under this division and/or any industrial wastewater discharge permit, shall upon conviction, be punished by a criminal fine of not less than two hundred dollars (\$200.00) or more than two thousand dollars (\$2,000.00) or a civil penalty not to exceed five thousand dollars (\$5,000.00) per violation per day. A person found guilty of damaging equipment used or necessary for monitoring compliance with an industrial wastewater discharge permit and/or this division, shall also be liable for the cost associated with replacing or repairing such equipment. Reports and other documents required to be submitted or maintained in accordance with 40 CFR 403.12 shall further be subject to Provisions Governing Fraud and False Statements as provided for at 40 CFR 403.12(n).
- (3) Damage, Theft and Vandalism. A person found responsible of damaging, stealing, or vandalizing Control Authority equipment, used or necessary for monitoring compliance with an industrial wastewater discharge permit and/or this division, shall also be liable for the cost associated with replacement or repair of such equipment.
- (4) Remedies nonexclusive. The remedies provided for in this division are not exclusive. The control authority may take any, all, or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will generally be in accordance with the control authority enforcement response plan. However, the control authority may take other action against any user when the circumstances warrant. Further, the control authority is empowered to take more than one enforcement action against any noncompliant user.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-483. Supplemental enforcement action.

(1) *Performance bonds.* The control authority may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this division, a previous wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, unless such user first files a satisfactory bond, payable to the control authority, in a sum not to

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exceed a value determined by the control authority to be necessary to achieve consistent compliance.

- (2) Liability insurance. The control authority may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this division, a previous wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, unless the user first submits proof that it has obtained financial assurances sufficient to restore or repair damage to the POTW caused by its discharge.
- (3) *Water supply severance.* Whenever a user has violated or continues to violate any provision of this division, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, water service to the user may be terminated. Service will only recommence, at the user's expense, after it has satisfactorily demonstrated its ability to comply.
- (4) Public nuisances. A violation of any provision of this division, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement is hereby declared a public nuisance and shall be corrected or abated as directed by the control authority. Any person(s) creating a public nuisance shall be subject to the provisions of the City Code governing such nuisances, including reimbursing the control authority for any costs incurred in removing, abating, or remedying said nuisance, which shall include, but is not limited to, industrial waste solids accumulation wastewater odors, vapors, and/or objectionable color(s) of the sanitary and/or storm sewer.

(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-484. Fees.

It is the purpose of this section to provide for the recovery of costs from users of the control authority wastewater disposal system for the implementation and continued operation of the pretreatment program established herein. All industrial users shall pay the following fees, as appropriate, and in accordance with the current fee schedule, within thirty (30) days of billing:

- (a) A permit application fee;
- (b) A permit fee;
- (c) Sampling fee;
- (d) Analysis fee;
- (e) Environmental assessment;
- (f) Other fees as the control authority may deem necessary to carry out the requirements contained herein, such as, but not limited to emergency response fees, special sampling fees, monitoring equipment reset fees, etc. These fees relate solely to the matters covered by this division and are separate from all other fees, fines, and penalties chargeable by the control authority or any other agency.

The special service charges outlined in schedule E, industrial waste fee schedule, relating to industrial waste permits and services shall be lawful rates charged by the system effective January 1, 2008. The city water system board of trustees is hereby authorized to amend the fee schedule, from time to time, by resolution, when a change in the amount of fees is required to adequately recover the costs reasonably related to the performance of the functions for which the fee is charged.

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(Ord. No. 81771, § 2(App. I), 3-2-95; Ord. No. 85765, § 1, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04; Ord. No. 2007-12-13-1345, § 2(Att. B), 12-13-07)

Secs. 34-485—34-510. Reserved.

FOOTNOTE(S):

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Editor's note— Ord. No. 81771, § 1, adopted March 2, 1995, repealed former Div. 3, §§ 34-471—34-481, relative to industrial waste, and § 2 of said ordinance enacted a new Div. 3 to read as herein set out in §§ 34-471—34-485. The provisions of former Div. 3 derived from Ord. No. 77784, adopted April 15, 1993; Ord. No. 78153, adopted June 17, 1993; Ord. No. 80574, adopted Aug. 4, 1994. (Back)

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Sec. 34-511. Definitions.

For the purpose of this division, the following words and phrases shall have the meanings respectively described to them by this section unless the context requires otherwise.

CEO. The chief executive officer of the San Antonio Water System.

City. The City of San Antonio, Texas as represented by the official acts of the city council and council designated representatives.

Commercial vehicle wash. A business enterprise in a fixed location at which vehicle washing (conveyorized, self service, or roll-over/automatic) is offered to the public for a fee, and which utilizes wastewater pretreatment (i.e. grit trap(s)) to process wastewater prior to discharge into the public sanitary sewer collection system.

Department. The San Antonio water system, resource protection and compliance department.

Director. The director of the resource protection and compliance department or his or her designated representative or agent.

Discharge. The unpermitted disposal, deposit, injection, dumping, spilling, leaking or placing of any liquid waste including but not limited to solid or semi-solid grease trap waste, grit trap waste, and/or septic tank waste into or on any land, water, sanitary or storm sewer facilities so as to cause such waste or any constituent thereof to adversely enter the environment, or be adversely emitted into the air or into any water including ground waters.

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Disposal site. A permitted facility or part of a permitted facility, including collection sewers and sludge handling facilities at which liquid wastes is approved to be collected, transported, treated, and intentionally disposed of by conveyance to receiving waters and/or lands. These types of facilities must be classified as either a publicly owned treatment work (POTW), or as a type I (landfill) or type V (other, i.e. liquid processing), type VI (experimental facilities) or type VII (land application for beneficial use) Municipal Solid Waste Facility as defined under 40 CFR part 257 and TAC, Part IX, Chapter 330, Subchapter D, Section 330.41.

Disposal site operator. A person, firm, corporation, municipal corporation, or utility permitted or registered by the appropriate state and/or federal regulatory agencies to engage in receiving, storing, transferring, processing and/or ultimately disposing of liquid waste, including but not limited to, grease trap waste, grit trap waste, and septage.

Division. The San Antonio Water System Resource Compliance Division.

Generator. A person who causes, creates, generates, stores or otherwise produces liquid waste, including but not limited to grease trap waste, grit trap waste and septage as a byproduct of some domestic or non-domestic activity.

Grease trap. A receptacle utilized by commercial or industrial generators of liquid waste to intercept, collect and restrict the passage of organic, inorganic, greasy or fatty liquid, semiliquid, and/or solid wastes into both public and private sanitary sewers to which the receptacle is directly or indirectly connected.

Grease trap waste. Any organic, inorganic, greasy or fatty liquid, semi-liquid, and/or solid wastes collected by and ultimately removed from a grease trap for proper disposal.

Grit trap. A receptacle utilized by commercial or industrial generators of liquid waste to intercept, collect and restrict the passage of petroleum-based oil and grease wastes and inorganic or other solids into both private and public sanitary sewers to which the receptacle is directly or indirectly connected. This definition shall include waste oil recovery traps and sumps that are designed to recover waste oils and intercept the passage of oils and solids generated from a commercial operation into the sanitary sewer system.

Grit trap waste. Oil and grease wastes, and inorganic solids generated by commercial, industrial, automotive or heavy machinery repair and/or washing facilities that are collected by and ultimately removed from a grit trap for disposal. This definition shall include wastes removed from a waste oil recovery trap, excluding oils recovered for recycling.

Hazardous waste. A solid waste, or combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristic may: (a) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed or (c) is identified, classified or listed as a hazardous waste as defined by 40 CFR Part 261.3.

Liquid waste. Water-borne solids and liquids containing dissolved or suspended waste materials, including but not limited to, septage and wastes from grease traps and grit traps.

Manager. The person responsible for conducting, supervising, managing or representing the business activities of a generator or transporter.

Manifest. The written, multi-part documentation required to be in the possession of the transporter enabling disposal of hauled grit trap waste, grease trap waste, and septage at a permitted or registered disposal site as provided for in section 34-516 of this division.

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Manifest system. A record keeping and accounting system consisting of a multi-paged manifest booklet and other forms used to document specific data regarding the point of generation, transportation, volume and disposal of grit trap waste, grease trap waste, and septage.

Mobile processing vehicle. A liquid waste transportation vehicle which is designed to separate water from the liquid waste while the vehicle is in transit.

Mobile waste generator. The owner or operator of a vehicle on which liquid waste is generated and stored in a holding tank. Examples include recreational vehicles and tour buses.

Permit. The formal written control document issued by the San Antonio Water System to a transporter which entitles such transporter to collect, transport and dispose of grease trap waste, grit trap waste and septage at a permitted or registered treatment storage, or disposal site or facility, and regulates said activities.

Permittee. A person issued a permit under this division.

Person. An individual, corporation (including a government corporation), organization, state or federal governmental subdivision or agency, political subdivision of a state, interstate agency or body, business, trust, partnership, association, firm, company, joint stock company, commission, or any other legal entity.

Regional agent boundary. The geographic area within which the San Antonio Water System is the designated responsible governmental agency to construct, operate, and maintain regional sanitary sewerage systems pursuant to the authority of Texas Water Quality Board Order No. 72-0120-11 passed and approved on January 20, 1972, as may be amended.

Sanitary sewer. A system of pipes, conduit, and treatment facilities owned and/or operated by the San Antonio Water System which collect, transport, and treat sanitary sewage, and to which storm, surface, and ground waters are not intentionally or normally admitted.

SAWS. The City of San Antonio, acting by and through the San Antonio Water System permit, Ordinance No. 77784 as amended.

Septage. Liquid wastes and sludges containing sufficient liquid content, normally more than eightyfive (85) percent, to permit flow by gravity or minimal pumping, which is removed from a portable toilet, chemical toilet, septic tank (as used herein), or cesspool. Septage does not include non-domestic wastes from commercial or industrial establishments.

Shall. The word "shall" whenever used in this article, will be interpreted in its mandatory sense; "may" is permissive.

Tank. A receptacle device or structure designed to contain an accumulation of liquid waste including but not limited to grease trap waste, grit trap waste, and septage which is constructed of materials (e.g., concrete, steel, alloy, fiberglass, plastic, etc.) manufactured to provide appropriate structural support for the containment.

TCEQ. Texas commission on environmental quality.

Transporter. A person who utilizes a vehicle to transport liquid waste which is:

- (a) Disposed of within the regional agent boundary; or
- (b) Transferred within the regional agent boundary for the purpose of disposal; or
- (c) Collected from a generator or wastehauler within the regional agent boundary.

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Transfer station. A fixed facility used for transferring liquid waste from collection vehicles to long haul vehicles (one transportation unit to another transportation unit), which must be registered or permitted through TCEQ.

Trip ticket. A coupon purchased from the control authority for the disposal of septic or portable/chemical toilet waste at the authorized the control authority disposal facility.

Vehicle. A mobile receptacle or device in which or by which liquid waste may be transported upon a public street or highway.

Vehicle wash grit drying facility. A facility constructed and maintained at a commercial vehicle wash that is designed to dry grit trap wastes from commercial vehicle wash facilities and which has registered with the city's water system's resource compliance division to perform such activity.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-512. Liquid waste transportation.

- (1) General. Any person using the streets and/or rights-of-way of the city to transport liquid waste must exercise reasonable, prudent and sufficient care when undertaking such activity in order to preserve the health, safety and general welfare of the community. In order to engage in such activity the transporter must obtain all necessary documents, and comply with all procedures required by local, state and federal regulations.
- (2) *Spills.* In the event of a spill during collection or transport, the transporter shall immediately telephone the San Antonio Water System, Resource Compliance Division, at the telephone number listed in their permit. Notifications made pursuant to this section shall, at a minimum, provide the following:
 - (a) The time the discharge occurred;
 - (b) The location of the discharge;
 - (c) The type of waste discharged (including its concentration, volume, known dangerous characteristics, etc.);
 - (d) Any corrective actions including diking, if any, taken by the transporter;
 - (e) Any other conditions, factors or circumstances that would indicate any need for expeditious, specialized or unique response to the discharge.

The transporter shall take any and all action as may be required by local, state, or federal officials having jurisdiction so that the discharge will not present a public health or environmental hazard. Such action may include diking, vacuuming, flushing, applying chemical agents or otherwise neutralizing the discharge.

(3) *Responsibilities.* Failure to promptly and properly notify the appropriate jurisdictional authorities of a spill and take such action as required by said authorities shall constitute a violation of this division.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-513. Permit requirements.

(1) General. A person shall be in violation of this division if he operates or causes the operation of a vehicle on the city streets or public rights-of-way for the purpose of collecting, transporting, or disposing of grease trap waste, grit trap waste, septage, or other liquid wastes without first obtaining

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a liquid waste transportation permit from the director or his or her designated representative. For the purposes of this section, each instance of transporting, collecting, or disposal of such wastes without a permit shall be considered a separate violation.

- (2) Permit application. In addition to complying with the proper registration procedures established by the state, a person intending to engage in the activity of transporting grit trap waste, grease trap waste or septage must first submit a permit application to the city water system, resource compliance division and therein supply the department with the following information and documentation:
 - (a) Name, business and mailing address(es), and telephone number of the applicant transporter.
 - (b) The trade name under which the applicant transports or intends to transport liquid waste.
 - (c) The number and type of vehicles and their tank volumes the applicant shall operate together with a general physical description or manufacturer's trade description of each vehicle; the registration number assigned to the company by the state; and a photocopy of the driver's license of all vehicle operators under the employ of the applicant.
 - (d) The period of time the applicant has been engaged in the activity of transporting grit trap waste, grease trap waste, and septage, and the daily hours of operation of his intended transportation activity.
 - (e) A statement setting out any record of criminal convictions against the applicant, or anyone under his employ, resulting from the unlawful operation of a vehicle used to transport liquid waste, including grease trap waste, grit trap waste, and septage.
 - (f) Documentation evidencing that the applicant has obtained the necessary insurance required under this division.
 - (g) Any other requested relevant information which bears a reasonable relationship to the regulation of permittees under this division and is necessary to evaluate the permit application.
- (3) Investigation of information set out in application. The staff of the control authority may conduct an investigation to determine the accuracy of information supplied by the applicant prior to the issuance of a permit. Supplying false information to the department shall be grounds for refusal to grant a permit or revocation of a permit if already issued. The transporter shall update information contained in the application, in writing, to reflect any changes in the information required by the initial application prior to making these operational changes.
- (4) Insurance requirements.
 - (a) Prior to the issuance of a permit, the applicant must file with the city water system, evidence (certificate of insurance) of a policy of automobile liability insurance and thereafter keep same in full force and effect with an insurance company authorized to do business in the state. The policy shall insure the public against any loss or damage that may result to any person or property from the operation of a defective vehicle or negligence of the owner or any person driving or otherwise operating such vehicle, and the vehicle insurance provisions of such policy shall provide a minimum amount of coverage in the policy as to each and every transporter vehicle to be not less than one million dollars (\$1,000,000.00) for bodily injury or death of any one person, for bodily injury or death in any one accident, for the damage to, or destruction of, property in any one accident. Coverage is to include the pollution liability endorsement with limits not less than one million dollars (\$1,000,000.00). Such coverage shall be endorsed to cover the upset, overturn, and remediation of the load in transport.
 - (b) The certificate of insurance required by this subsection shall contain a provision requiring that the city water system be provided with thirty (30) days advance notice, in writing, of cancellation or material change in the policy. In the event of cancellation or material change in the

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transporter's policy, the permit shall be suspended until such time as the transporter can again secure appropriate coverage.

- (5) Vehicle inspection. Prior to the issuance of a permit, the department shall require the applicant to submit, for inspection by the department, each vehicle which will be utilized to transport grit trap waste, grease trap waste, and/or septage. The department or its agents shall determine if the transport vehicle is constructed and equipped in accordance with section 34-514 of this division and the tanks, valves, and hoses on the vehicle are in good repair, prior to permit issuance. In addition to the initial department inspection prior to the issuance of a permit, designated employees of the department are hereby authorized to re-inspect the vehicles periodically in order to observe that the vehicles are generally maintained in good repair so as not to constitute a public health hazard under the provisions of this division. These inspections may take place at any reasonable and safe location during normal business operation hours and are in no way meant to satisfy the otherwise legally mandated inspection of motor vehicle requirements of any department or agency of the state. All transport vehicles shall have a valid DPS inspection sticker properly displayed, as well as the transportation registration stickers issued by TCEQ and the control authority.
- (6) Issuance of permit. Upon satisfying the requirements set out in section 34-513 herein, the department shall issue a permit to the applicant. The permit shall be valid for a one year period with such period terminating on December 31st of the year of issuance or reissuance. The requirements set out in sections 34-513 herein must be satisfied prior to the reissuance of a permit. Any violations of this division by a permit holder during a permit period shall constitute sufficient grounds for refusal, by the director, to reissue a permit. All permits issued hereunder shall be subject to the following terms and conditions:
 - (a) The city water system specifically excludes and prohibits the transporting, discharge, or disposal of hazardous wastes in vehicles permitted hereunder to carry liquid waste. Transporters carrying hazardous waste from, within or through, the regional agent boundary must first obtain the special applicable TCEQ or EPA permit(s) and use the appropriate hazardous waste transportation and disposal manifest system.
 - (b) Prior to the operation of any vehicle regulated by this division, each permitted transporter shall permanently mark such vehicle with specific information. All marking shall be in a color clearly contrasting with the background, in two-inch letters or larger, so as to be clearly visible at a distance of fifty (50) feet. The following information shall be place on both sides of each permitted vehicle, unless otherwise noted:
 - 1. Company name;
 - 2. Telephone number;
 - 3. TCEQ authorization sticker (motorized units only);
 - 4. TCEQ assigned registration number;
 - 5. The Control Authority assigned permit number on both sides and on the rear of the vehicle.

SAWS#_____

The blank space shall contain the city water system's assigned permit number, unique to a particular vehicle;

6. SAWS authorization sticker.

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The permitted transporter shall keep the TCEQ registration (including any amendments) and the SAWS permit in the vehicle at all times. Failure to do so will constitute a violation of this division.

(c) A permit issued under this division is non-transferable, and may be revoked by the control authority for violations by the permittee of the term(s) of the permit or of this division.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-514. Liquid waste vehicle specifications and maintenance requirements.

All liquid waste transportation vehicles utilizing the city streets and public rights-of-way to transport grit trap waste, grease trap waste and septage must at all operational times conform to the following vehicle specifications and maintenance requirements. Each instance of failure to do so shall constitute a separate violation of this division.

- (1) Vehicle specifications.
 - (a) The vehicle must be equipped with tank(s) that is (are) firmly, securely and permanently attached to the primary structure of the vehicle in such a manner as to assure that the tank(s) will not loosen or dislodge during the transport of liquid wastes. Vehicles with portable or removable tank(s) or other containers temporarily attached or affixed to vehicles are prohibited, unless otherwise approved by the director.
 - (b) All piping, valves, and connectors shall be permanently attached to the tank(s) and/or vehicle.
 - (c) The tank(s) must be liquid tight.
 - (d) The tank(s) must be constructed so that every interior and exterior portion can be thoroughly cleaned.
 - (e) All piping, valves, and connections shall be accessible and easy to clean.
 - (f) The inlet, or the opening of the tank(s) shall be constructed and located so that collected waste shall not spill during filling, transfer or transport.
 - (g) Outlet connections shall be constructed so that no liquid waste shall discharge, leak, run or spill out from the tank(s).
 - (h) Outlets are to be of a design and type suitable for the liquid waste to be safely removed and be capable of controlling outflow without discharge, spillage, spray, or flooding of immediate surroundings while in use.
 - (i) Pumps, valves, cylinders, diaphragms and other appurtenances shall be of a design and type suitable for the liquid waste to be safely loaded, transported and removed, be capable of operation without discharge, spillage, spray or leakage, and be easily disassembled for cleaning.
 - (j) All vehicles used to transport liquid waste shall have sight gauges maintained in a manner which can be used to determine whether or not a vehicle is loaded and the approximate capacity. Gauges are not required to read in gallons or liters, but shall show what percentage of the tank capacity is filled.
 - (k) All vehicles used to transport liquid wastes shall prominently mark all discharge valves and ports. All discharge ports shall be visible and readily accessible. The position of the vacuum pump, i.e. pulling a vacuum into the tank or pumping air into the tank, must also be clearly labeled.

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- (2) *Maintenance requirements.* A liquid waste transporter shall:
 - (a) Maintain hoses, tanks, valves, pumps, cylinders, diaphragms, pipes, connections, and other appurtenances on a vehicle in good operation and repair and free from leaks.
 - (b) Provide a safety plug or cap for each inlet and outlet tank valve.
 - (c) Cause the vehicle exterior to be clean, vector free and relatively odor free at the beginning of each working day and provide for intermittent wash downs of vehicle exterior and wash outs of tank interiors as necessary to maintain the above conditions at all times.
 - (d) The permittee shall remove the control authority authorization sticker, and the control authority permit number from the vehicle when it is no longer permitted to collect, transport or dispose of liquid waste or when the vehicle ownership changes.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-515. Responsibilities of liquid waste transporters.

All liquid waste transporters shall conform to the following terms and conditions in collecting, transporting, and disposing of liquid waste. Any liquid waste transporter failing to comply with the responsibilities and requirements set forth below shall be in violation of this division. Each instance of non-compliance shall constitute a separate violation.

- (1) Determine nature of material. Prior to accepting a load of liquid waste for transportation, a liquid waste transporter shall, to the best of his ability, determine the volume, nature and classification of the material to be transported and that his/her permit, vehicle and equipment are sufficient to legally and properly accept, transport, and dispose of the load without discharge, spillage, leakage of the material, or release of malodorous fumes. Upon delivery of the waste to the disposal site, the transporter shall inform the disposal site operator of the content of the waste. At the discretion of the department or the disposal site operator, the liquid waste presented for disposal may be sampled and tested prior to disposal to verify the classification, quality, concentration, character or volume of the liquid waste. The control authority cost for conducting any positive, confirming test resulting in verification of unpermitted transport or prohibited discharge shall be paid by the permittee.
- (2) Interceptor evacuation. A liquid waste hauler shall completely evacuate all grease or grit traps and other interceptors during servicing. Further, the discharge of liquid, semi-solids, or solids back into an interceptor after servicing is strictly prohibited. Mobile processing vehicles shall not discharge separated water back into the interceptor or into the wastewater collection system.
- (3) Mixing of different types of waste. A liquid waste transporter shall not mix incompatible wastes in the same tank load. Incompatible wastes are wastes which have different processing, storage or disposal requirements. Transporters may mix wastes with different characteristics provided the facility to which the waste is being transported is authorized to store, process or dispose of such mixed wastes.
- (4) Storage of liquid wastes. The storage of liquid wastes in unpermitted temporary storage tanks by liquid waste transporters is prohibited. Transporters may store liquid waste in a permitted vehicle for up to four (4) days.
- (5) Utilize appropriate disposal sites. All liquid waste transporters shall deposit wastes at a facility designated by or acceptable to the generator where the owner or operator of the disposal facility agrees to receive the wastes and the facility has written authorization by permit or registration issued by TCEQ to receive the wastes.

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- (6) Utilization of manifest system by transporters of grease trap waste, grit trap waste, and septage. all liquid waste transporters holding a the control authority permit for transporting grease trap waste, grit trap waste, or septage shall utilize the manifest system set out in section 34-516 herein. It is the responsibility of the permittee to assure that all manifests are completely and accurately filled out in a timely manner, except that liquid waste transporters will not be held accountable for the waste generator signature portion of the manifest. Generators who fail to sign a liquid waste manifest will be considered in violation of this division.
- (7) Person who engage in the secondary transportation of waste (meaning receiving waste from other vehicles and transporting the waste to a disposal site) or any person choosing to transfer waste from one transport vehicle into another transport vehicle shall transfer the waste only at a registered or permitted type V transfer station. Emergency transfers may occur with prior approval from the director or his designee.
- (8) Liquid waste transporters may accept commercial vehicle grit trap waste for transportation to a registered vehicle wash grit drying facility. This facility may either be located onsite or it may be located within fifty (50) miles of the interceptor if the offsite facility is owned by the same generator. The transporter shall follow the manifest procedures found in section 34-516 anytime the liquid waste is shipped from a commercial vehicle wash interceptor location to an offsite vehicle wash drying facility. The registered vehicle wash grit drying facility should be indicated on the manifest as the disposal site. A liquid waste transporter shall verify that the vehicle wash grit drying facility is registered prior to accepting or discharging commercial vehicle wash grit trap waste. Verification shall be accomplished by reviewing a copy of the registration issued by the control authority. Disposal of commercial vehicle wash grit trap wastes within the regional agent boundary at a drying facility that is not registered by the control authority will be a violation of this division.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-516. Manifest system.

A manifest system consisting of manifest booklets shall be used by all transporters holding the control authority permits to transport grease trap waste, grit trap waste, and septage. Each manifest shall thoroughly document the following information:

- (a) The interceptor capacity, time and date of service, the quantity and type of liquid waste being transported;
- (b) The generator's name, address, telephone number and signature at the time of receipt of liquid wastes by the transporter;
- (c) The transporter's corporate, business or trade name, address and telephone number;
- (d) The transport vehicle operator's name with signature;
- (e) The transporter's permit number issued by the city water system;
- (f) The registration number assigned to the transporter's vehicle by the state;
- (g) The disposal site name, address, permit or registration number assigned by the state, the time and date of disposal; and
- (h) The signature of the disposal site operator.
 - (1) Manifest booklets.

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- (a) Manifest booklets shall be purchased from the city water system in accordance with the fee schedules currently in effect. Manifest booklets shall be marked as appropriate for use with a specific liquid waste transportation vehicle. A transporter must complete one manifest for each generator interceptor serviced, with the exception of chemical/portable toilet companies servicing their own units. Chemical/portable toilet companies servicing their own units which may be located at various locations shall be required to complete one manifest for each vehicle load transported. Each individual carbonless, print-trace manifest shall consist of five parts:
 - 1. The white original of the manifest shall be signed by the transporter and generator at the time of the liquid waste collection.
 - 2. The yellow copy shall be given to the generator once signed by both the transporter and generator.
 - 3. The white original of the manifest shall be signed by the disposal site operator at the time of disposal and the pink copy maintained by the disposal site operator.
 - 4. The green copy of the manifest shall be maintained by the transporter.
 - 5. The goldenrod copy shall be returned to the generator within fifteen (15) days upon completion of the above steps.

It shall be the responsibility of the liquid waste transporter to return the goldenrod copy to the generator within fifteen (15) days of disposal.

Any transfer, processing or other disposal facility which ships liquid waste from their site to another disposal facility, must also follow this manifesting procedure. The waste to be shipped must be remanifested onto a new manifest, with the transfer, processing or disposal facility's location listed as the generator in the waste producer section of the manifest.

- (b) The director may make administrative modifications to the manifest form used. Each manifest booklet shall contain twenty-five (25) manifests serially numbered. The department shall keep a record of the manifest serial numbers purchased by the liquid waste transporter. The department may issue more than one manifest booklet to any transporter, at the department's discretion, based on volume of business, number of trucks, etc. Additional manifest booklets may be purchased only after previously issued and completed manifest booklets have been properly returned to the department.
- (c) In the event that a manifest booklet is lost or stolen, the permittee shall submit a sworn and notarized affidavit stating the circumstances surrounding the loss of the booklet, the probable contents of the wastes transported and disposed of, and efforts made to locate the booklet. After reasonable investigation by the department indicates no fraudulent or wrongful acts by the permittee, the department shall not unreasonably deny continued purchase of manifest booklets. Excessive instances of lost manifest books will be a violation of this division. More than three (3) lost books in one (1) permit year will be considered excessive.
- (2) Unlawful use of manifests. Falsification of any information required in a manifest shall be grounds for immediate suspension or revocation of the control authority liquid waste transportation permit and each instance of falsification shall be considered a separate violation of this division. The physical transfer of manifests by a permit holder to anyone other than the permittee's transportation vehicle operators or the department is prohibited.

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Purchase and/or resale of manifests from any source other than the department is prohibited. Each instance of purchase, transfer, or resale of manifests shall constitute a separate violation of this division.

- (3) Maintenance of manifest records. All permittees shall maintain all transporter manifest copies for a period of five (5) years. All generators shall maintain generator manifest copies for a period of five (5) years. All disposal site operators shall maintain all disposal site manifest copies for a period of five (5) years. The department shall maintain all department manifest copies for a period of five (5) years. Should any pending administrative law proceeding or litigation mandate that such records be preserved for more than five (5) years, affected persons shall adhere to the dictates of those proceedings.
- (4) Manifest discrepancies. A facility which receives waste must note any significant discrepancies on each copy of the manifest ticket. Manifest discrepancies are differences between the quantity or type of waste designated on the manifest, and the quantity or type of waste a facility actually received. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis. Significant discrepancies in quantity are:
 - (a) For bulk weight, variations greater than ten (10) percent in weight; and
 - (b) For liquids, any variation greater than fifteen (15) percent in gallons.

Upon discovering a significant discrepancy, the transporter must attempt to reconcile the discrepancy with the waste generator or owner or operator of the receiving facility (e.g., with telephone conversations). If the discrepancy is not resolved within fifteen (15) days after discovery, the transporter must immediately submit to the control authority a letter describing the discrepancy and attempts to reconcile it, and a copy of the trip ticket(s).

(5) *Notification of unpermitted transporter.* A disposal facility located within the regional agent boundary which receives liquid waste from a transporter who cannot produce a the control authority issued liquid waste transportation permit and a control authority authorization sticker shall notify the control authority within three (3) days of receiving the waste.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-517. Disposal site procedures.

All liquid waste transporters permitted hereunder shall follow the procedures required by the appropriate city, state, or federal authority when disposing of liquid waste in a registered or permitted disposal site under the jurisdiction of such authority. Additionally, the following procedures must be followed by liquid waste haulers holding control authority permits when disposing of septage at one of the control authority approved liquid waste disposal sites. The control authority's disposal facilities do not accept grease trap or grit trap wastes.

- (1) *Disposal site entry/exit.* Control authority permit holders shall exercise caution when entering and exiting disposal sites and shall obey all traffic control regulations and especially speed limit signs and direction signs.
- (2) *Disposal procedures.* A control authority permit holder shall not dispose of waste at the disposal site until authorized disposal personnel have done the following:
 - Inspected the permit holder's permit and the control authority authorization sticker to see if they are still valid;

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- (b) Verified that the manifest being presented by the permittee's employee is appropriate for both the classification of waste being transported and the vehicle tank capacity being used;
- (c) Signed the manifest and received the disposal site operator's copy of same; and
- (d) Verified and collected the appropriate volume of trip tickets required for disposal.

A liquid waste transporter who fails to follow these procedures shall be in violation of this division.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-518. Responsibilities of generator and disposal site operator.

The liquid waste generators and disposal site operators shall have the following responsibilities, and failure to perform such responsibilities shall constitute a violation of this division:

- (1) Generators.
 - (a) It shall be the responsibility of every generator of liquid waste to:
 - 1. Know or ascertain the contents, characteristics and classifications of wastes generated.
 - 2. Have liquid waste removed from his premises by a transporter holding the proper control authority, city, state, and/or federal permits or registrations required to collect and transport such waste.
 - 3. Make a determination that the waste to be hauled under this division is nonhazardous, as required.
 - (b) A generator of hazardous waste, or liquid waste in combination with hazardous waste, shall only have such waste removed from his premises by a transporter holding the applicable state or federal permit or registration to transport said wastes.
 - (c) A generator of grease trap waste or grit trap waste shall have traps serviced as frequently as necessary to prevent bypass or overflow, and to insure proper operation of the trap. Such generators shall, at a minimum, have grease traps and grit traps serviced quarterly or as approved by the director in accordance with all other provisions of this division.
 - (d) A generator of grit trap waste, grease trap waste or septage shall sign the manifest presented by the liquid waste transporter holding a control authority permit at the time of service and shall keep the generator manifest copies for a period of five (5) years. The records, both the generator copy (yellow) and the generator - final copy (goldenrod) shall be maintained at the location where the interceptor is located, unless a written request to store the records at a different location is submitted to the control authority for approval and the control authority approval is granted. Appropriate department personnel may inspect such receipts during normal business hours.
 - (e) A generator shall, in addition to the requirements above, be responsible for performing the following:
 - 1. Install or provide a collection point for grit trap waste, grease trap waste, or septage of a size and type specified by the appropriate city, state, or federal authority, if any such specification exists. This facility may be the same (with possible modifications or adaptations) required by the control authority pursuant to the San Antonio City Code, chapter 34, article V, division 3, as may be amended.

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- 2. Continuously maintain the collection point in an accessible, clean, safe and proper operational condition.
- 3. Monitor the transporter's evacuation and cleaning of the waste interceptors.
- 4. Report discharges, spills or accidents involving the collection point which pose a threat to the public health or potential damage to the environment involving the collection point to the department immediately.
- 5. Recover all accidental spills and discharges immediately and have such waste disposed of by a transporter holding a valid permit, license or registration from the appropriate city, state, or federal authority.
- (f) Generators are prohibited from placing any agent, including but not limited to emulsifiers, surface active agents, enzymes, degreasers or any type of product that will liquefy grease trap wastes, directly into a grease trap or into any drain that leads to the grease trap.
- (2) Mobile waste generators. Liquid waste generated by bus companies, recreational vehicles or other mobile sources must be disposed into the sanitary sewer system via a cleanout designed for this purpose or at an appropriate disposal facility. It shall be considered a violation of chapter 34, article VI, division 5, section 34-702(a)(6) to allow liquid waste to discharge into a street, storm drainage system, water course or stream or other unapproved location.
- (3) Disposal site operators. Liquid waste disposal site operators which accept liquid waste from a transporter permitted by the control authority shall comply with the terms of this division and receive waste from a transporter holding a control authority permit issued hereunder according to the requirements of the permit and this division. Every disposal site operator shall maintain the operator's copy of a manifest from a control authority liquid waste transporter permit for a period of five (5) years. The disposal site operator shall submit copies of all liquid waste manifests to the control authority on a monthly basis, by the 15th day of each month.
- (4) *Commercial vehicle wash facilities.* A commercial vehicle wash facility which uses a registered vehicle wash grit drying facility shall comply with the following requirements:
 - (a) The commercial vehicle wash owner/operator must use a permitted liquid waste transporter to collect and dispose of commercial vehicle wash grit trap waste if public rightof-way will be used for the transportation and/or disposal of such waste while in liquid form (prior to drying).
 - (b) The commercial vehicle wash owner/operator must clean out each grit trap quarterly, at a minimum, or more often as needed to prevent illegal discharge of pollutants into the sanitary sewer collection system and to ensure proper operation of the grit trap(s) as a pretreatment device. Owners of facilities performing onsite self-servicing of grit traps must document the date the trap was cleaned, the approximate quantity of waste removed for drying, the date the dried grit was sent offsite for final disposal, and the final disposal location. A control authority liquid waste transportation manifest is not required for onsite transfers, as long as the self-serving record are maintained. The commercial vehicle wash owner shall submit this information to the control authority annually by December 31 of each year.
 - (c) If the vehicle wash grit drying facility is located onsite and public right-of-way is not used for transferring the waste from the interceptor to the drying facility, the waste must be transferred in a manner that prevents spillage. In the event grit is spilled during the transfer, the spill must be cleaned up immediately. Grit may not be placed into a stormwater collection system.

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- (5) *Vehicle wash grit drying facilities.* Vehicle wash grit drying facilities shall comply with the following requirements:
 - (a) The submittal of a letter requesting a registration number and describing the vehicle wash grit drying facility, signed by the owner of the facility, shall be submitted to the control authority. This letter should individually list the addresses of each commercial vehicle facility that will dry its wastes at the drying facility. The control authority will issue a registration number to each drying facility.
 - (b) The vehicle wash grit drying facility, at a minimum, shall be constructed in a manner that is liquid tight and which ensures that all drainage from the facility, if any, is returned to the onsite sanitary sewer collection system at a point upstream from the grit trap. The drying facility must be enclosed or protected in a manner to prevent intrusion or infiltration of stormwater. Public access to the drying facility must be restricted.
 - (c) When commercial vehicle wash grit trap wastes are received from an offsite commercial vehicle wash facility, the drying facility must complete the disposal plant operator section of the manifest. The drying facility shall maintain the pink copy of the manifest in accordance with sections 34-516.3 and 34-518.3 and shall submit copies of all liquid waste manifests to the control authority on a monthly basis, by the 15th of each month. The drying facility may only accept wastes from commercial vehicle wash facilities owned by the same company.
 - (d) Commercial vehicle wash grit trap waste is considered appropriately dried when it passes TCEQ's paint filter test. Once the waste is appropriately dried, it is no longer considered liquid waste for the purpose of this division.
 - (e) The control authority may revoke a drying facility's registration for failure to comply with the applicable provisions of this division. In the event that the control authority revokes a facility's drying registration, the facility must maintain any onsite grit traps in accordance with this division.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-519. Suspension of permit.

The director may suspend or revoke permit upon a finding by the department that a permittee, or an agent or employee of the permittee has violated any of the terms or conditions of the permit or of this division and that the number or severity of the violations justify the suspension of the permit.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-520. Enforcement.

(1) Notice of alleged violations. Whenever the director believes that any person or permittee has violated or is violating this division and/or the liquid waste transportation permit, the director or his designated representative may serve (either personally or by registered or certified mail) upon such person or permittee a written notice stating the nature of the alleged violation. The recipient of an alleged violation notice must respond in writing to the director or his designated representative within fifteen (15) working days from the receipt of such notice.

Should the recipient of an alleged violation notice fail to respond in writing to the director within the initial fifteen (15) working day response period, as outlined in section 34-520, the recipient person or permittee shall be deemed to have admitted to responsibility for the violation.

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- (2) Response by person or permittee to notice of alleged violation. The person or permittee responding to receipt of an alleged violation notice shall file written response, as required by section 34-520, in the most applicable of the following forms:
 - (a) Should the person or permittee admit his or her responsibility for the alleged violation, the person or permittee must submit a letter report to the director which:
 - 1. If the nature of the violation of either the permit or this division involves a discharge or disposal of liquid waste that is prohibited herein, contain information regarding the time, date, location, cause, source, quantity, quality and concentration of the discharge or disposal and the corrective measures actually taken by the person or permittee to recover or neutralize the discharge, self-reporting notices submitted to any state, federal or other agencies having jurisdiction, and actions to be taken by the person or permittee to prevent any similar recurrent discharges or disposal.
 - 2. If the nature of the violation of either the permit or this division involves an administrative or procedural non-compliance, the letter report shall contain information regarding corrective measures and time schedules the person or permittee has adopted to assure expeditious and continued compliance.
 - (b) Should the person or permittee deny his or her responsibility for the alleged violation, the person or permittee must submit a letter report to the director explaining why responsibility is being contested.
- (3) Legal action. Despite any other provisions contained in this division, the environmental counsel for the control authority is hereby authorized to seek legal and/or equitable remedies against any person or corporation believed by the department to be violating or have violated this division, the provisions of a liquid waste transportation permit, and/or federal or state laws governing water quality, industrial wastewater pretreatment, and hazardous or non-hazardous liquid waste transportation over which the control authority has enforcement authority. A legal proceeding prosecuted under this division does not constitute a waiver by the city water system of any right the city may have to join in a legal action originating from an alternative source of law.

The city water system may commence such actions for appropriate legal and/or equitable relief in courts having proper jurisdiction and may seek civil penalties and any other legal or equitable relief available under common law, Chapter 54 of the Texas Local Government Code, or any other applicable local, state, or federal code or statute.

- (4) Penalties.
 - (a) Criminal. A conviction for violation of this division shall constitute a class C misdemeanor. A person convicted of a violation of this division shall be fined a minimum amount of not less than two hundred dollars (\$200.00) per violation and a maximum amount of not more than two thousand dollars (\$2,000.00) per violation. Each violation of a particular section of this division shall constitute a separate offense, and each day an offense continues shall be considered a new violation for purposes of enforcing this division. A culpable mental state is not required to prove an offense under this division. The president/CEO of the city water system is hereby authorized to designate qualified city water system personnel to serve notices of violations of this section and take all necessary action to file a complaint with the municipal prosecutor's office.
 - (b) Civil. A civil penalty in an amount not to exceed five thousand dollars (\$5,000.00) per violation of this division may be imposed. Each violation of a particular section of this division shall constitute a separate offense, and each day such an offense continues shall be considered a new violation for purposes of enforcing this division. A culpable mental state is not required to prove an offense under this ordinance.

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(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-521. Fees.

All liquid waste transporters shall pay the following fees, as appropriate, and in accordance with the current fee schedule:

- (1) A permit fee for each vehicle to be permitted;
- (2) A sampling fee;
- (3) An analysis fee;
- (4) A disposal site fee for disposing of septic or chemical toilet wastes at a control authority disposal facility;
- (5) A manifest booklet fee;
- (6) Other fees as the control authority may deem necessary to carry out the requirements contained herein, such as, but not limited to emergency response fees or special sampling fees. These fees relate solely to the matters covered by this division and are separate from all other fees, fines and penalties chargeable by the control authority or any other agency.

The special service charges outlined in schedule F, liquid waste hauler fee schedule, relating to liquid waste hauler permits shall be lawful rates charged by the system effective January 1, 2008. The city water system board of trustees is hereby authorized to periodically amend the fee schedule, by resolution, when a fee increase (or decrease) is required to adequately and appropriately recover the costs reasonably related to the implementation and operation of the liquid waste transportation program.

(Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04; Ord. No. 2007-12-13-1345, § 2(Att. B), 12-13-07)

Sec. 34-522. Severability.

If any word, phrase, clause, paragraph, part or provision of this division or its subsections or the application thereof to any person or circumstance shall be held to be invalid or unconstitutional, the remainder of that subsection and of this division shall nevertheless be valid, and the city council hereby declares that the subsection would have been enacted without such invalid, or unconstitutional word, phrase, clause, paragraph, part or provision.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Sec. 34-523. Right of revision.

The city reserves the right to amend this division at any time to establish more stringent specific limitations or requirements on disposal to the regional wastewater transportation and treatment system if deemed necessary by the city to protect the collection, treatment operations and processes or to cure or prevent an effluent quality problem in potential landfill leachates, treated wastewater and/or resulting sludges. The city reserves the right to amend this division to comply with the general objectives and purposes presented in Article V, Division 3, Industrial Waste and Pretreatment.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

Chapter 34 - WATER AND SEWERS

ARTICLE V. - SEWAGE TRANSPORTATION, TREATMENT AND DISPOSAL

DIVISION 4. LIQUID WASTE TRANSPORTATION AND DISPOSAL REGULATIONS

Sec. 34-524. Conflict.

All other divisions and parts of other divisions directly conflicting with any part of this division are hereby repealed only to the extent of such direct conflict.

(Ord. No. 80574, § 14, 8-4-94; Ord. No. 85765, § 2, 3-20-97; Ord. No. 99480, § 1(Exh. 1), 7-22-04)

PART II - CODE Chapter 34 - WATER AND SEWERS

SCHEDULE 3 CUSTOMER SERVICE APPEALS COMMITTEE

DIVISION 5. FATS, OILS AND GREASE

Sec. 34-525. General provisions.

Sec. 34-526. Interceptors.

Sec. 34-527. Maintenance.

Sec. 34-528. Record keeping.

Sec. 34-529. Prohibitions.

Sec. 34-530. Reserved.

Sec. 34-531. Enforcement.

Secs. 34-532—34-550. Reserved.

Sec. 34-525. General provisions.

- (a) *Purpose.* The purpose of this division is to aid in the prevention of sanitary sewer blockages and obstructions caused by the accumulation of fats, oils and grease that are discharged into the sanitary sewer system.
- (b) Application. This division shall apply to all food service establishments (FSEs) and food processing establishments (FPEs) that are located within the corporate limits of the city, or that are within the extraterritorial jurisdiction of the city and to all FSEs and FPEs that receive sanitary sewer service from the San Antonio Water System (SAWS) or that discharge any liquids or solids into the publicly owned treatment works (POTW).
- (c) *Definitions.* As used anywhere in this division, the following terms are defined to mean:

City: The City of San Antonio, a Texas home rule municipality.

Commercial establishment: Any location where a person manufactures, packages, prepares, provides, serves, or makes available any meals, or food for sale, for monetary compensation, or for non-monetary consideration.

Fats, oils, or *grease:* Any animal, vegetable, or mineral fats, oils, or greases and any organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules.

FPE or *FPEs:* A food processing establishment or establishments, which are any commercial establishments in which food for human consumption is manufactured or packaged.

FSE or *FSEs:* A food service establishment or establishments, which are any commercial establishments that prepare, provide, serve, or make available for human consumption meals, or any food.

Interceptor: A device for collecting, containing, or removing food wastes or fats, oils, or grease from a waste stream before entering the POTW.

Person: An individual, partnership, joint venture, firm, company, corporation, association, joint stock company, governmental entity, trust, estate, sole proprietorship, or legal entity of any kind or character.

POTW: The publicly owned treatment works that is comprised of the sanitary sewer system, including treatment plant and collection infrastructure, operated by SAWS.

Chapter 34 - WATER AND SEWERS

SCHEDULE 3 CUSTOMER SERVICE APPEALS COMMITTEE

SAWS: The San Antonio Water System, an agency of the city, created by City Ordinance No. 75686, passed April 30, 1992.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Sec. 34-526. Interceptors.

- (a) *Pretreatment required.* Waste pretreatment that complies with this section is required before an FSE or FPE may discharge fats, oils, or grease into the POTW.
- (b) Interceptor required. Each FSE and FPE shall discharge all waste from sinks, dishwashers, drains, and any other fixtures or sources through which fats, oils, or grease may be discharged into the POTW into a properly maintained and functioning interceptor that complies with the requirements of chapter 24 of the City Code and the International Plumbing Code and appendices as amended that are adopted by the city in that chapter.
- (c) Existing facilities. Existing FSEs and FPEs that are not equipped with an interceptor that complies with the requirements of chapter 24 of the City Code and the International Plumbing Code and appendices as amended that are adopted by the city in that chapter shall install such an interceptor not later than one hundred eighty (180) days after the effective date of the ordinance from which this division derives.
- (d) *New facilities.* New FSEs and FPEs shall be equipped with an interceptor that complies with the requirements of chapter 24 of the City Code and the International Plumbing Code and appendices as amended that are adopted by the city in that chapter prior to commencement of any discharge into the POTW.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Sec. 34-527. Maintenance.

- (a) *General requirements.* Each interceptor shall be continuously maintained in effective operational condition by and at the expense of the FSE or FPE that is required by this division to utilize or install the interceptor.
- (b) Frequency. Each FSE and FPE that is required by this division to utilize or install an interceptor shall evacuate accumulated solids, fats, oils, grease and all other material(s) from each interceptor at a frequency not less often than every ninety (90) days and within two (2) working days whenever twenty-five (25) percent or more of the wetted height of the interceptor, measured from the bottom of the device to the invert of the outlet pipe, contains floating materials, sediment, fats, oils, or grease.
 - (1) FSEs or FPEs that conduct operations for less than one hundred twenty (120) days in a calendar year may submit a written request to SAWS to be permitted to evacuate interceptors as required by subsection 34-527(b) at a frequency less often than every ninety (90) days. The FSE or FPE submitting the request shall comply with subsection 34-527(b) unless SAWS provides written approval of a different frequency for the evacuation of the interceptors that are the subject of the request. Any revised frequency approved by SAWS for the evacuation of an interceptor shall not affect the requirement that an FSE or FPE shall evacuate an interceptor within two (2) working days whenever twenty-five (25) percent or more of an interceptor contains materials as required by subsection 34-527(b).
 - (2) Reserved.
- (c) Interceptor pumping and evacuation.

Chapter 34 - WATER AND SEWERS

SCHEDULE 3 CUSTOMER SERVICE APPEALS COMMITTEE

- (1) For each interceptor that has a capacity greater than one hundred (100) gallons, FSEs and FPEs shall use a liquid waste hauler that is permitted by SAWS to collect, transport and dispose of liquid waste pursuant to chapter 34, article V, division 4 of the City Code, to evacuate an interceptor. FSEs and FPEs shall cause the wastes in an interceptor to be completely evacuated by a waste hauler at the time of each interceptor evacuation that is required by this division. Interceptor waste shall be disposed of only at a facility that is authorized and permitted by applicable law to receive such waste for disposal.
- (2) For each interceptor that has a capacity less than or equal to one hundred (100) gallons, FSEs and FPEs may use a liquid waste hauler that is permitted by SAWS to collect, transport and dispose of liquid waste pursuant to chapter 34, article V, division 4 of the City Code, to evacuate an interceptor. FSEs and FPEs shall cause the wastes in an interceptor to be completely evacuated at the time of each interceptor evacuation that is required by this division. Interceptor waste shall be disposed of only at a facility that is authorized and permitted by applicable law to receive such waste for disposal.
- (d) Interceptor inspection. Not less frequently than once per calendar year, each FSE and FPE shall cause a licensed plumber or other qualified professional approved by SAWS to inspect each interceptor. After evacuation of the interceptor, the licensed plumber or other qualified professional approved by SAWS shall make a visual observation of and shall photograph all inlet and outlet fittings, internal baffles, walls, floor and all other internal structures. Each FSE and FPE shall cause the licensed plumber or other qualified professional approved by SAWS conducting the inspection to provide a written report of the inspection to the FSE or FPE that includes the photographs that are required by this section and that provides the name, address and telephone number of the licensed plumber or other qualified professional approved by SAWS conducting the inspection, the date of the inspection, and a description of any defects observed during the inspection. All defects shall be corrected by each FSE or FPE within ninety (90) days of each inspection.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Sec. 34-528. Record keeping.

- (a) For each interceptor that has a capacity greater than one hundred (100) gallons, each FSE and FPE shall maintain all records that document each inspection, repair, cleaning, evacuation, service, or pumping of each interceptor as required in section 34-516
- (b) For each interceptor that has a capacity less than or equal to one hundred (100) gallons, each FSE and FPE shall maintain all records that document each inspection, repair, cleaning, evacuation, service, or pumping of each interceptor as required by section 34-516, if a liquid waste hauler that is permitted by SAWS to collect, transport and dispose of liquid waste is used to evacuate an interceptor. If a permitted liquid waste hauler is not used to evacuate an interceptor, then each FSE and FPE shall maintain a cleaning log that lists the location and type of each interceptor, the date and time of each interceptor evacuation, the quantity of material removed from the interceptor, the location where the material removed from the interceptor was disposed of, and the signature of the employee performing the evacuation of the interceptor.
- (c) All records required by this division shall be maintained by each FSE and FPE for a period of five (5) years after the date of the event that is the subject of the record. All such records shall be available for inspection on the premises of the FSE or FPE where the interceptor that is the subject of the record is located, unless a written request to store the records at a different location is submitted to SAWS and SAWS approves the request.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Chapter 34 - WATER AND SEWERS

SCHEDULE 3 CUSTOMER SERVICE APPEALS COMMITTEE

Sec. 34-529. Prohibitions.

- (a) *Prohibited discharge to an interceptor.* Discharge into an interceptor of sanitary waste, solvents, emulsifiers, enzymes, chemicals, products, or bacteria that digest, liquefy, dissolve, or emulsify fats, oils, or grease is prohibited.
- (b) *Removed interceptor waste.* Grease, solids, liquids, or any other matter removed from an interceptor shall not be returned to any interceptor, or disposed of in any private sanitary sewer line, any portion of the POTW, or any location other than a facility that is authorized by law to receive such wastes.
- (c) No bypass. No liquid or solid waste that contains fats, oils, or grease may be discharged directly into the POTW. All liquids and solids that contain fats, oils, or grease that may be discharged by a FSE or a FPE into the POTW must be discharged into an interceptor before any such discharges enter the POTW. Should an interceptor require repair, upon written request to and the receipt of written approval from SAWS a bypass of the interceptor shall be permitted for the duration of the repair, but in no event for more than eighteen (18) consecutive hours. Each FSE or FPE shall create a written record that describes the repairs made to the interceptor, the date and time of the commencement of any interceptor repairs and of any bypass during the repairs, and the date and time of the termination of the repairs and of the bypass.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Sec. 34-530. Reserved.

Sec. 34-531. Enforcement.

- (a) The failure to perform any action that is required by this division or the performance of any action that is prohibited by this division shall constitute a violation of this division.
- (b) System-wide enforcement. The following enforcement provisions apply throughout the SAWS service area and to all FSEs and FPEs that receive sanitary sewer service from SAWS or that discharge into the POTW.
 - (1) Access to premises. Employees of SAWS, or its authorized agents shall have the authority to enter the property of a FSE or FPE to conduct inspections of all or any part of the premises, to inspect and copy documents that a FSE or FPE is required by this division to generate or maintain, to make photographic documentation and to perform any other action, or to obtain any other information related to compliance with this division. Each FSE and FPE shall allow access to its property and facilities for any of such purposes.
 - (2) Notice of violation. Should SAWS give written notice of a violation of this division to a FSE or FPE and the violation is not completely remedied within ninety (90) days after the date of the notice, then in that event SAWS may terminate water and/or sewer service to the location where the violation occurred upon the approval of a resolution by the SAWS board of trustees authorizing such termination.
 - (3) Additional enforcement remedies. In addition to any other remedies provided in this division, SAWS may, at any time, pursue any other legal and/or equitable remedy to require compliance with this division.
- (c) Enforcement within the city. The following enforcement provisions apply within the corporate limits of the city and within the extraterritorial jurisdiction of the city.
 - (1) Access to premises. Employees of the city, SAWS, or their authorized agents shall have the authority to enter the property of a FSE or FPE to conduct inspections of all or any part of the

Chapter 34 - WATER AND SEWERS

SCHEDULE 3 CUSTOMER SERVICE APPEALS COMMITTEE

premises, to inspect and copy documents that a FSE or FPE is required by this division to generate or maintain, to make photographic documentation and to perform any other action, or to obtain any other information related to compliance with this division. Each FSE and FPE shall allow access to its property and facilities for any of such purposes.

- (2) Notice of violation. Should SAWS give written notice of a violation of this division to a FSE or FPE and the violation is not completely remedied within ninety (90) days after the date of the notice, then in that event SAWS may terminate water and/or sewer service to the location where the violation occurred upon the approval of a resolution by the SAWS board of trustees authorizing such termination.
- (3) Criminal penalty. A conviction for a violation of any provision of this division shall constitute a class C misdemeanor. A person convicted of a violation of any provision of this division shall be fined an amount of not less than two hundred dollars (\$200.00) per violation and a maximum of not more than two thousand dollars (\$2,000.00) per violation. Each violation of this division shall constitute a separate offense, and each day a violation continues shall be considered a new offense. A culpable mental state is not required to prove an offense under this division.
- (4) *Civil penalty.* A civil penalty may be imposed upon a person for each violation of any provision of this division in an amount not to exceed five thousand dollars (\$5,000.00) per violation. Each violation of any provision of this division shall constitute a separate violation, and each day a violation continues shall be considered a new violation.
- (5) Additional enforcement remedies. In addition to any other remedies provided in this division, the city or SAWS may, at any time, pursue any other legal and/or equitable remedy to require compliance with this division.
- (d) Authorization to enforce. SAWS is authorized to take any action authorized by this division and to pursue enforcement against any person violating this division. The grant of authority set out in this section does not in any way diminish the authority of the office of the city attorney to take any action necessary to enforce the terms of this division, to prosecute violations of this division, and to defend the legality of this division, if challenged.

(Ord. No. 2011-05-12-0378, § 1(Exh. A), 5-12-11)

Secs. 34-532—34-550. Reserved.

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Appendix E

Categories of Employees & Training Topics and Training Program Requirements in CMOM (Appendix A in CD)

CMOM





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Teachnical & Skills Training	Sewer Cleaning	Mechanical proofing	Collection of manhole inspection data	Collection of sewer visual inspection data		Sewer cleaning for blockage removal	SSO containment	SSO cleanup	Sewer repair methods	Sewer pipe patching	NASSCO PACP defect code training (or other sewer defect coding system training) for sewer	Collection of manhole inspection data	Collection of visual sewer inspection data		Grease removal equipment inspection procedures	Inspection data collection		Mechanical	Electrical	Instrumentation	Lift station alarm response procedures	SSO containment	SSO cleanup		Attend training attended by crews they supervise		Data collection for SSO events	SSO volume estimation
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* POSITION DEPENDENT



Excerpted: APPENDIX A from SAWS CD

TRAINING PROGRAM IN CMOM

SAWS Employee Training Categories

Following is a summary of the different types of employees and wastewater collection system crews that SAWS utilizes to perform operation and maintenance activities related to SSO reduction and mitigation in the SAWS wastewater collection system. Following each employee or crew type is a summary of the typical technical and skills training topics that SAWS may typically offer to each employee or crew type. The specific training received by each employee or crew will depend on the actual types of work assigned to each employee or crew.

- 1. Typical training topics that may be offered to specific types of wastewater collection system operations and maintenance employees or crews:
 - a. Sewer Cleaning Crews:
 - i. sewer cleaning
 - ii. mechanical proofing
 - iii. collection of manhole inspection data
 - iv. collection of sewer visual inspection datappendi
 - b. Sanitary sewer overflow (SSO) response Crews:
 - i. sewer cleaning (for blockage removal)
 - ii. SSO containment
 - iii. SSO clean-up
 - c. Sewer construction and/or repair crews:
 - i. sewer repair methods
 - ii. sewer pipe patching
 - d. Sewer and manhole inspection crews:
 - i. NASSCO PACP defect code training (or other sewer defect coding system training) for sewer CCTV camera operators
 - ii. collection of manhole inspection data
 - iii. collection of visual sewer inspection data
 - e. FOG Inspectors
 - i. grease removal equipment inspection procedures
 - ii. inspection data collection
 - f. Lift station operations and maintenance crews
 - i. lift station equipment maintenance
 - g. Lift station emergency response crews
 - i. lift station alarm response procedures
 - ii. SSO containment
 - iii. SSO clean-up
 - h. Crew supervisors
 - i. when appropriate, attend training attended by crews they supervise
 - i. Crews or employees responsible for SSO documentation and reporting:
 - i. data collection for SSO events
 - **ii.** SSO volume estimation





Appendix F

Texas Administrative Code §30.331

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Texas Administrative Code

Next Rule>>

RULE §30.331	Purpose and Applicability
<u>SUBCHAI TEK J</u>	COMPANIES
SURCHAPTER I	
CHAPTER 30	OCCUPATIONAL LICENSES AND REGISTRATIONS
<u> </u>	QUALITY
<u>TITLE 30</u>	ENVIRONMENTAL QUALITY

(a) The purpose of this subchapter is to establish qualifications for issuing and renewing licenses and registrations to:

(1) domestic wastewater treatment facility operators;

(2) wastewater collection system operators; and

(3) companies that operate these facilities on a contract basis.

(b) Persons that operate, assist in the operation, or contract to operate domestic wastewater treatment facilities or supervise wastewater collection activities, other than an operator-intraining, must be licensed or registered and meet the qualifications of this subchapter and Subchapter A of this chapter (relating to Administration of Occupational Licenses and Registrations); and must comply with the requirements in Chapter 317 of this title (relating to Design Criteria for Sewerage Systems), and all other applicable rules under the jurisdiction of this commission.

(c) Operators are responsible for performing adequate process control of wastewater treatment and collection facilities.

(d) All Class D and Class I licenses previously issued to operators who do not possess a high school diploma or equivalent, may still be renewed according to §30.342 of this title (relating to Qualifications for License Renewal).

(e) An individual who has an honorary license shall not operate a domestic wastewater treatment facility or supervise a wastewater collection system.

(f) Certificates of competency or registration issued before January 1, 2002, remain in effect until they expire, or are replaced or revoked by the commission.

(g) The holder of a license or registration is not subject to revocation or suspension of a license or registration if the licensed operator or registered company is unable to properly operate the wastewater treatment or collection facility due to:

(1) the refusal of the permittee to authorize the necessary funds to operate the wastewater treatment or collection facility properly; or

(2) the failure of the wastewater treatment or collection facility to comply with its wastewater disposal permit resulting from faulty design or construction of the facility.

Source Note: The provisions of this §30.331 adopted to be effective December 17, 2001, 26 TexReg 10330





Appendix G

SAWS Capacity Assessment and Remediation Program Process and Guidelines (Appendix D in CD)

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SAWS Capacity Assessment and Remediation Program Process and Guidelines Page 1 of 4



SAWS Capacity Assessment and Remediation Program Process and Guidelines Page 2 of 4

Wet Weather-Related SSO Verification (CD Subsection V.D)

- Develop list of historical SSOs that occurred during wet weather events. *Notes

- Wet weather events are rain events that exceed 1-inch over a 24-hour period

- This process would also be followed for future wet weather related SSOs

Review Existing Data (CD Subsection V.D)

- Review historical Cleaning, CCTV, SSO, flow monitoring, modeling, and other data if applicable for each SSO identified above

- Categorize SSO as follows:

A) Most likely a capacity-related SSO. Existing data indicates that there does not appear to be a history of maintenance or structural issues that may have led to the SSO.

B) Most likely maintenance-related. Existing data indicates that the cause is most likely a maintenance related cause such as FOG, Roots, or Debris, but there may also be a Capacity Constraint at the SSO location.

C) Clearly not a capacity related SSO. Existing data indicates the SSO was not capacity related. Examples include isolated events such as pools, or cooling towers being drained into the sewer system or cleaning maintenance related issues such as significant FOG, roots, or debris.

System-Wide Hydraulic Modeling (CD Subsection V.D)

- Apply "assessment storm" at existing population scenario

- Identify potential Capacity Constraints.
- *Notes

- Capacity Constraints are discrete areas of the WCTS that are determined by SAWS, consistent with this appendix, to have a verified capacity issue that is determined to be likely to cause or materially contribute to SSOs due to wet weather events that are within design parameters. See Consolidate and Prioritize Potential Capacity Constraints for potential Capacity Constraint criteria.

- SAWS uses a 5-year, 6-hour storm in the model as the "assessment storm".

- The model is system-wide and generally includes all pipes for flow allocation purposes. Pipes that are 12 inches in diameter and larger are generally modeled, although the model may on occasion include smaller diameter pipes for unique circumstances.

V Consolidate and Prioritize Potential Capacity Constraints (CD Subsection V.D) **Evaluation** Priority 1 - Category A SSO per Review of Existing Data and where model also predicts a SSO (CMOM) Priority 2 - Where model predicts SSO, but with no observed SSO. Category A SSO per Review of Existing Data, - Maintenance but model does not predict a SSO. frequency Priority 3 - Where model predicts Hydraulic Grade Line (HGL) near ground elevation - Structural Priority 4 - Category B SSO per Review of Existing Data Repair Priority 5 - Where pipe design capacity is exceeded for sustained 60 minutes or more but the HGL is not near the - Monitor ground elevation. *Notes *Notes - Evaluation will - The list above represents criteria for SAWS prioritizing the potential Capacity Constraints that may warrant be performed as Field Investigation. This list will be used to prioritize field investigations, in general starting at the top of the list, part of CMOM and working towards lower priorities as higher priority field investigations are concluded. SAWS may reprioritize potential Capacity Constraints as new information becomes available or adjustments to the model are made. - Typically, Priorities 1-4 are more likely than 5's to warrant Field Investigation work, though this will always be determined based upon a case-by-case engineering assessment (For example, some pipes may be designed for the HGL to be above the crown of the pipe) - Priority 5's shall be kept on a monitoring list or go to Field Investigation as warranted based upon a case-by case engineering assessment. Priority 5's that do not go to Field Investigation are kept on the potential Capacity Constraint list and monitored as updates are made to the model. V Model Calibration Process (CMOM) **Assess Maintenance Frequency** - Collect additional flow metering data over time Data (CD Subsection V.D) - Collect additional rain gauge data over time See Page 3, - Evaluate, and modify as needed, - Apply appropriate observed storm events to model Capacity the maintenance frequency for each - Calibrate the model to match measured flows (for both dry and Assessment pipe under investigation to prevent wet weather flows) Program blockages that would significantly - Assess calibration anomalies and adjust model reduce design capacity during the *Notes investigation - This process currently occurs on each of the 5 basins approximately once every 4 to 6 years (in general, one basin per year). The See Page 3, Determine Field frequency may increase or decrease depending on growth in basins. **Investigation Technique** - Model calibration will be performed as part of CMOM

SAWS Capacity Assessment and Remediation Program Process and Guidelines Page 3 of 4



SAWS Capacity Assessment and Remediation Program Process and Guidelines Page 4 of 4



Appendix H

Example Monthly Compliance Transmittal Letter & Report

СМОМ







June 17, 2014

U.S. Environmental Protection Agency, Region VI Chief, Water Enforcement Branch (6EN-W) Compliance Assurance and Enforcement Division 1445 Ross Avenue Dallas, TX 75202-2733

U.S. Environmental Protection Agency, Region VI Attn: Ms. Judy Edelbrock (6EN-W) Environmental Protection Specialist Enforcement Branch 1445 Ross Avenue Dallas, TX 75202-2733 Via U.S. Certified Mail RRR# 7013 2250 0001 9126 3987

Via U.S. Certified Mail RRR# 7013 2250 0001 9126 3987

Re: DOJ Case No. [90-5-1-1-09215]
Consent Decree
Date of Lodging: July 23, 2013
Date of Entry: October 15, 2013
CA No. 5:13-cv-00666-DAE, United States of America and State of Texas v. San Antonio Water
System, in the United States District Court for the Western District of Texas, San Antonio Division

Dear Sir/Madam:

Section 12 a. of the above-referenced Consent Decree requires that within 90 days after Lodging the San Antonio Water System shall provide a copy of the monthly compliance report required by its TPDES permits to the United States Environmental Protection Agency at the same time the report is submitted to the Texas Commission on Environmental Quality. A copy of the monthly compliance report for May 2014 is attached and is provided in compliance with Consent Decree requirements.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Jeff Haby, P.E. Director – Sewer System Improvements

Enc. As stated

June 17, 2014



U.S. Department of Justice Environmental Enforcement Section Environment and Natural Resources Division P.O. Box 7611 Washington, D.C. 20044-7611

Via U.S. Certified Mail RRR# 7013 2250 0001 9126 3970

Re: DOJ Case No. [90-5-1-1-09215]

Consent Decree Date of Lodging: July 23, 2013

Date of Entry: October 15, 2013

CA No. 5:13-cv-00666-DAE, United States of America and State of Texas v. San Antonio Water System, in the United States District Court for the Western District of Texas, San Antonio Division

Dear Sir/Madam:

Section 12 a. of the above-referenced Consent Decree requires that within 90 days after Lodging the San Antonio Water System shall provide a copy of the monthly compliance report required by its TPDES permits to the United States Environmental Protection Agency at the same time the report is submitted to the Texas Commission on Environmental Quality. A copy of the monthly compliance report for May 2014 is attached and is provided in compliance with Consent Decree requirements.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely, Jeff Haby, P.E.

Director – Sewer System Improvements

Enc. As stated

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EXAMPLE FORMAT

PERIOD:

WATERSHED: MEDIO CREEK

TCEQ PERMIT # 10137-040

EPA PERMIT # 0055689

# OM	#LdSNI	SR #	Date	Address	Gallons	Cause	Action	Duration	Response	Discharged To	Comments	
Total Events:				Total Gallons			Total Duration:					

Wednesday, January 14, 2015

Note: Comments reflect status reported on the 5-Day report



Appendix I

Example Five-Day Report

Water Quality Noncompliance Notification

СМОМ







July 3, 2014

U.S. Environmental Protection Agency, Region VI Chief, Water Enforcement Branch (6EN-W) Compliance Assurance and Enforcement Division 1445 Ross Avenue Dallas, TX 75202-2733

U.S. Environmental Protection Agency, Region VI Attn: Ms. Judy Edelbrock (6EN-W) Compliance Assurance and Enforcement Division

Environmental Protection Specialist Enforcement Branch 1445 Ross Avenue Dallas, TX 75202-2733

Re: DOJ Case No. [90-5-1-1-09215]

Consent Decree Date of Entry: October 15, 2013

Date of Entry. October 15, 2013

Via U.S. Certified Mail RRR# 7013 2250 0001 9125 5166

Via U.S. Certified Mail RRR# 7013 2250 0001 9125 5166

CA No. 5:13-cv-00666-DAE, United States of America and State of Texas v. San Antonio Water System, in the United States District Court for the Western District of Texas, San Antonio Division

Dear Sir/Madam:

Section 12 b. of the above-referenced Consent Decree requires that within 90 days after Lodging the San Antonio Water System shall provide a copy of any five-day report submitted under its TPDES permits to the United States Environmental Protection Agency at the same time the report is submitted to the Texas Commission on Environmental Quality. Copies of five-day reports submitted to TCEQ on July 3, 2014 are attached and are provided in compliance with Consent Decree requirements.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely Jeffrey J. Haby, P.E.

Senior Director – Sewer System Improvements Enc. as stated

Page 1 of 1

July 3, 2014



U.S. Department of Justice Environmental Enforcement Section Environment and Natural Resources Division P.O. Box 7611 Washington, D.C. 20044-7611

Via U.S. Certified Mail RRR# 7013 2250 0001 9125 5159

Re: DOJ Case No. [90-5-1-1-09215]

Consent Decree Date of Entry: October 15, 2013

CA No. 5:13-cv-00666-DAE, United States of America and State of Texas v. San Antonio Water System, in the United States District Court for the Western District of Texas, San Antonio Division

Dear Sir/Madam:

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Sincerely.

Jeffrey J. Haby, P.E. Senior Director – Sewer System Improvements Enc. as stated

Page 1 of 1

Water Quality Noncompliance Notification

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X Unautho	orized Disch	narge of Waste	ewater .	Repor	table Efflue	ent Violation	Other
General Inform	ation						
Entity Name:	San Antor	io Water Syst	em	Te	lephone:	210-2	33-3274
X Permitte				Subscriber			
TCEQ Region:	13	County: E	Bexar	Permit Numb	er	10137-033-D	os Rios
Noncompliance	e Summary						
Description of Nunauthorized di 300 gallons spi	Noncomplia ischarge):_ lled into Str	ince (include la <u>The address o</u> eet .	ocation, dis <u>f the spill v</u>	scharge route vas at 500 Gr	e, and estin oos Ave (F	nated volume i ERG 231C8) /	f an Approximately
SR#: 499053 ;	INSPT#: 30)5088; WO#: ;	Sewer Ma	ain 92687 928	579		
Cause of Nonc	ompliance:	Grease					
Duration:	Start	07/02	/2014 10:2 (Tin	25	End _	07/02/20	14 11:15 (Time)
	Or expect	ted to be Corre	ected			(Bull)	(1110)
			-		(Dat	te)	
Potential Dange	ers to Huma	an Health and	Safety or t	the Environm	ent: <u>No Si</u>	gnificant Dang	ers
		·····					
Actions Taken							
Monitoring Data	a: Data sho	uld be attache	d or submi	itted to TCEC) when ava	ilable.	
	yes	3 <u>X</u>	no	Field Meas	urements		
·	yes	x	no	Laboratory	Samples		
	yes	x	no	Fish Kill, If	/es, estimated	d number killed	
Actions Taken t Disinfected, Flu	o Mitigate shed Area	Adverse Effect with H2O	s: <u>Spill Co</u>	ontained, Ret	urned to Sv	ystem, Area Cl	eaned and
Actions Taken t	o Correct t	ne Problem ar	id Prevent	Recurrence:	<u>6 Inch Se</u>	wer Main, Uns	stopped Main,
Verification Info	rmation						
Information Rep	orted By	Ricl	hard Santo	os	/	LC/TV	
	-	(Name)	A	0	(T	itle)
Date Reported	7	/2/2014	Sigr	nature:	mella		perin Judiet 7
TCEQ 0501 (Nover	mber 5, 2002)	If the noncompliation the permit numb	ance is an ur er of the trea	nauthorized discl	harge from a thich the colle	wastewater collec	tion system, use d.
TCEQ Region 1	3 Phone: 4	90-3096			T	CEQ Region 1	3 Fax: 545-4329

Water Quality Noncompliance Notification

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X Unautho	rized Discharge	of Wastewater	Reporta	ble Effluent	Violation	Other
General Inform	ation					
Entity Name:	San Antonio Wa	iter System	Tele	phone:	210-233	8-3274
X Permitte		10(271)	Subscriber			
TCEQ Region:	13 Cou	nty: Bexar	Permit Number	- 1()137-033-Dos	Rios
Noncompliance	e Summary					
Description of N unauthorized di <u>Approximately</u>	Voncompliance (i scharge): <u>The ac</u> 25 gallons spillec	nclude location, Idress of the spi into Street .	discharge route, a Il was at 515 S W	and estimat Military Dr	ed volume if a (FERG 250E2	an ?)
SR#: 496456 ;	INSPT#: 305001	WO#: ; Sewer	Main 13966 1334	4		
Cause of Nonco	ompliance: <u>Gre</u>	ase				
Duration:	Start	06/30/2014 16 (Date) (5:03 Time)	End	06/30/2014 (Date)	16:40 (Time)
	Or expected to	be Corrected		(D-(-)		
				(Date)		
Potential Dange	ers to Human He	alth and Safety c	or the Environmen	nt: <u>No Signi</u>	ficant Danger	S
		· · · · · · · · · · · · · · · · · · ·	·····	i natur teta		· · ·
Actions Taken		and and a second s				
Monitoring Data	a: Data should be	attached or sub	mitted to TCEQ v	vhen availat	ole.	
	yes	<u>X</u> no	Field Measure	ements		
	yes	<u> X no</u>	Laboratory Sa	mples		
	yes	<u>X</u> no	Fish Kill, If yes	s, estimated nu	mber killed	
Actions Taken t with H2O	o Mitigate Adver	se Effects: <u>Spill</u>	Contained, Area	Cleaned and	d Disinfected,	Flushed Area
Actions Taken t	o Correct the Pro	blem and Preve	nt Recurrence: <u>8</u>	Inch Sewe	r Main, Unsto	pped Main,
Verification Info	rmation			······		
Information Rep	orted By	Isaac Sala	zar /		LC/TV III	
		(Name)	/		(Title)
Date Reported	6/30/20	<u>14</u> S	ignature:	fiftur	<u>Jenyelen</u>	7/2/14-
TCEQ 0501 (Nover	nber 5, 2002) If the i the pe	noncompliance is an rmit number of the t	unauthorized dischar reatment plant to whic	rge from a was	tewater collection n system is tied.	n system, use
TOPO Decion 1	2 Dhanay 400 20	06				

TCEQ Region 13 Phone: 490-3096

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TCEQ Region 13 Fax: 545-4329

Appendix J

Sewer Reporting and Documentation Procedures

СМОМ







October 15, 2013

U.S. Department of Justice Environmental Enforcement Section Environment and Natural Resources Division P.O. Box 7611 Washington, D.C. 20044-7611

U.S. Environmental Protection Agency, Region VI Chief, Water Enforcement Branch (6EN-W) Compliance Assurance and Enforcement Division 1445 Ross Avenue Dallas, TX 75202-2733

Mark Walters Office of the Attorney General State of Texas Environmental Protection Division P.O. Box 12548 Austin, TX 78711-2548

Order Compliance Team Enforcement Division, MC 224 Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711-3087

Water Section Manager San Antonio Regional Office Texas Commission on Environmental Quality 14250 Judson Road San Antonio, TX 77233-4480 Via U.S. Certified Mail RRR# 7012 1010 0000 4334 3094

Via U.S. Certified Mail RRR# 7012 1010 0000 4334 3100

Via U.S. Certified Mail RRR# 7012 1010 0000 4334 3117

Reference: AG #082508284

Via U.S. Certified Mail RRR# 7012 1010 0000 4334 3124

Via U.S. Certified Mail RRR# 7012 1010 0000 4334 3131

Re: DOJ Case No. [90-5-1-1-09215] Consent Decree
Date of Lodging: July 23, 2013
CA No. 5:13-cv-00666, United States of America and State of Texas v. San Antonio Water System, in the United States District Court for the Western District of Texas, San Antonio Division

Subject: Sewer Reporting and Documentation Procedures

Dear Sir/Madam:

Subparagraph 12 g. of the above-referenced Consent Decree requires that within 90 days of the Date of Lodging the San Antonio Water System (SAWS) shall implement procedures and requirements set forth in Subparagraphs 12.a to 12.e. Following the 90day deadline, SAWS is required to provide notice in accordance with Section XV (Notices) and certify in accordance with Section XIX (Certification) that the SSO reporting and documentation procedures described in those Subparagraphs are being implemented.

SAWS has implemented the reporting and documentation procedures that are described in Subparagraphs 12.a through 12.e of the Consent Decree.

This letter is submitted to the United States Environmental Protection Agency and other required agencies in compliance with these requirements of the Consent Decree. Enclosed is a compact disc with an electronic copy of this letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Jeff Haby, P.E. Director- Sewer System Improvements

5-2012

Date

Enclosure: (1) as stated

cc: file

Appendix K

Sewer Overflow Response Plan (SORP)

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Sewer Overflow Response Plan (SORP)

Revision 1 January 21, 2015







Submitted 12/16/2013


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Acronym and Abbreviation List:

CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CWA	Clean Water Act
DR	Design Request
EPA	United States Environmental Protection Agency
EOC	Emergency Operations Center
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GIS	Geographic Information System
1&1	Infiltration and Inflow
LC/TV	Line Cleaning/Televising
LS	Lift Station
NASSCO	National Association of Sewer Service Companies
PACP	Pipeline Assessment and Certification Program
PM	Preventative Maintenance
PR	Point Repair
QA/QC	Quality Assurance/Quality Control
RPC	SAWS Resource Protection and Compliance
SAWS	San Antonio Water System
SCADA	Supervisory Control and Data Acquisition
SORP	Sewer Overflow Response Plan
SR	Service Request
SSO	Sanitary Sewer Overflow
STRPT	Situation Report
TWQCA	Texas Water Quality Control Act
WCTS	Wastewater Collection and Transmission System
wo	Work Order





1.0 INTRODUCTION AND REQUIREMENTS

The San Antonio Water System (SAWS) is a water and wastewater service provider, serving the City of San Antonio and other portions of Bexar County. The geographic area served by SAWS includes over 420 square miles and a population of more than 1 million people. SAWS operates and maintains a wastewater collection and transmission system (WCTS) that includes approximately 5,200 miles of sewer main and presently 155 Lift Stations. SAWS Organizational Chart is provided in Appendix A.

The Sewer Overflow Response Plan (SORP) describes SAWS processes and procedures for identifying, responding to, mitigating, reporting, categorizing, and tracking sanitary sewer overflows (SSOs) and Building/Private Property Backup events. It provides structured guidance for SSO response, including a range of appropriate and effective field activities that are available to SAWS to meet the needs of each situation.

SAWS response officials will use their best professional judgment to evaluate each SSO and will utilize appropriate mitigation/remediation approaches and tools. The procedures established in this document are guidance for SAWS to address SSOs and Building/Private Property Backup events. Due to the unique circumstances of each event, additional measures and approaches not included herein may be appropriate.

1.1 SORP Overview

1.1.1 Purpose

This SORP was developed to describe SAWS processes for identifying, responding to, mitigating, reporting, categorizing and tracking SSOs and Building/Private Property Backup events and the locations where they occur.

1.1.2 Goals and Objectives

The goals of the SORP are to provide the guidelines, processes and procedures for SAWS to quickly respond to and relieve SSOs and Building/Private Property Backup events, minimize health and environmental impacts, perform effective clean-up operations, report SSOs to regulators and provide Public Notification, as appropriate and to implement corrective actions to reduce the likelihood of a recurrence.

Implementation of the SORP is intended to achieve and maintain compliance with the Clean Water Act (CWA), the Texas Water Quality Control Act (TWQCA) and the regulations





promulgated thereunder and to comply with the requirements of the Consent Decree that is described in Paragraph 1.3 of the SORP.

1.2 Contacts

SAWS:

San Antonio Water System, San Antonio, Texas 2800 US Hwy 281 North San Antonio, TX 78212 Phone: 210.704.SAWS

Jeff Haby: Senior Director, Sewer System Improvements jeff.haby@saws.org Phone: (210) 233-3747

1.3 EPA Consent Decree SORP Requirements

On October 15, 2013 a Consent Decree (CD) between the San Antonio Water System and the United States of America and the State of Texas was entered in Civil Action No. 5:13-cv-00666-DAE in the United States District Court for the Western District of Texas, San Antonio Division. Pursuant to Section V of the Consent Decree, within one hundred fifty (150) days of the Date of Lodging (July 23, 2013) SAWS is required to develop and submit a SORP to EPA for review and comment. This Plan is submitted in compliance with that requirement. A copy of Paragraph 13 of the EPA Consent Decree describing the SORP requirements and identifying the Section(s) of the SORP that address each of the Consent Decree SORP requirements is included in Appendix B.

1.4 Applicable Definitions

Unless otherwise indicated, terms used in this SORP shall have the same meaning as the terms defined in the Consent Decree. Paragraph 7 of the Consent Decree defines the terms that are used in this SORP (See Appendix C).

Note: definitions of terms defined in the CD, but not used in the SORP are not included therein.





2.0 IDENTIFICATION, DISPATCH, & SITE INVESTIGATION PROCEDURES

This Section describes the methods SAWS utilizes to receive information regarding a potential SSO and/or Building/Private Property Backup, to properly document and track notifications, and to subsequently dispatch crews to perform a Site Investigation. The purpose of these procedures is to identify and rapidly respond to potential SSOs and/or Building/Private Property Backups.

Under most circumstances, SAWS employees can perform all response actions to correct the underlying issue with its own maintenance forces. They have the skills, experience and equipment to respond rapidly and in an appropriate manner. If circumstances require additional resources, such as, but not limited to responding to extensive emergencies (e.g. bypass operations for large diameter mains), SAWS has contracts available with third parties to support in-house resources.

2.1 Receipt of Information Regarding a Potential SSO and/or Building/Private Property Backup

SAWS investigation of a potential SSO typically begins when a customer, SAWS employee, or an outside party reports a possible SSO by calling into the SAWS Emergency Operations Center (EOC). Building/Private Property Backup events may be reported by a homeowner, a tenant in rental properties, or personnel who work in commercial, industrial, or institutional properties.

Calls are received 24 hours per day, 7 days a week, 365 days a year through the SAWS main phone number 210-704-SAWS (210-704-7297), which is listed on SAWS website and that is provided in the monthly water/sewer bills, and 210-233-2045, which is posted on each lift station fence.

In addition to calls to the EOC, Supervisory Control and Data Acquisition System (SCADA), Smart Covers and other SAWS remote telemetry systems provide alerts to the EOC that may warrant an investigation of a potential SSO. The EOC/Control Center monitors the SAWS Lift Station SCADA system, phone dialers (Verbatims) and Smart Covers 24 hours per day, 7 days a week, 365 days a year.





2.2 Service Request

Once notified of a possible SSO and/or Building/Private Property Backup, the EOC typically generates a Service Request (SR)⁽¹⁾ in Hansen, SAWS computerized maintenance management system (CMMS). The SR includes a unique number, address, or intersection and tracks relevant information which typically includes:

- Time and date call was received;
- Caller's name, address and phone number (if the caller will provide this information);
- Specific location/address and description of the potential SSO and/or Building/Private Property Backup;
- Observations/notations of the caller (e.g. odor and duration); and
- Other relevant information that helps to quickly locate and assess the complaint

A copy of SAWS reporting and notification standard operating procedures is attached as Appendix D.

2.3 Dispatch

The EOC dispatches notifications of potential SSOs to appropriate personnel 24 hours a day, 7 days a week, 365 days a year via mobile device to investigate, assess and confirm any potential SSO, Building/Private Property Backup, or facility alarm status as soon as reasonably possible after receiving notification. SAWS managers for Distribution and Collection and Lift Stations maintain a listing of personnel for EOC to dispatch within their respective area of responsibility, to include a maintenance crew, mechanic and/or electrician as warranted.

During normal business hours, the goal for the typical timeframe for initial response to an SSO is, on average, within one hour after notification and, on average, within two hours during nonbusiness hours. The SSO Report included in the monthly National Pollution Discharge Elimination System (NPDES) Discharge Monitoring Report (DMR) has been modified to include the actual response time for each SSO. A template for the modified monthly DMR is located in Appendix H of the CMOM Program.



¹ Note 1: For potential SSO response at a lift station, a work order is generated in lieu of a Service Request. For an SSO related to contractor construction activities, the SSO is tracked in SAWS SSO history database and SSO mitigation and cleanup is coordinated through SAWS Construction Inspection group.



2.4 Site Investigation of Potential SSOs

The SAWS First Responder dispatched to the site of a possible SSO and/or Building/Private Property Backup proceeds to the reported location to assess the situation and confirm that an SSO exists. If no SSO is found, dispatched personnel will contact EOC and request that the customer be contacted to ensure that crews are investigating the correct location.

First Responders will continue to investigate the WCTS within the vicinity of the reported SSO to ensure proper flow in the system until confirmation (if possible) is received that the correct location is being investigated.

SAWS staff will contact EOC and request Resource Protection & Compliance (RPC) support if a suspicious odor or substance not common to sewer systems is noted. In the event that a hazardous material response team is needed based on RPC evaluation, SAWS personnel will await the arrival of the San Antonio Fire Department to take over the location of the event. When the Fire Department arrives, SAWS staff shall take direction from the Fire Department Incident Commander. SAWS has hazardous materials management contracts with third parties to support cleanup activities, when warranted.

SAWS staff completes an SR Investigation Form to capture information obtained from the Site Investigation in real-time to include the following:

- Time and date arrived at location
- Description of information obtained
- Follow-up information, to include Customer Response (CR) Cleaning Inspection
- Resources used
- Time and date departed location

If it is determined that the SSO is caused by SAWS WCTS, then SAWS staff implements the appropriate SSO Response Procedure:

- For Gravity Sewer SSO Response, see Section 3.0
- For Private Property Backups, see Section 4.0
- For Lift Station and Force Main SSOs, see Section 5.0

Staff will also implement SSO Mitigation Measures (Section 6.0).





3.0 GRAVITY SEWER SSO RESPONSE PROCEDURES

Once an SSO is confirmed for a gravity sewer, SAWS will follow the Sanitary Sewer Overflow Response Procedure provided in Appendix E. This Section of the SORP describes available resources and identifies Site Assessment objectives that supplement Appendix E.

3.1 Resources

SAWS service area is divided into two geographic areas with an Emergency Response (ER) Flushing/Vacuum Combo Machine (Combo Unit) primarily responsible for managing emergency calls within each geographic area. If additional resources are needed due to multiple calls during normal business hours, the EOC uses a GPS-based vehicle tracking system to determine the location of the closest Preventative Maintenance (PM) Combo Unit. EOC will confirm availability with a Superintendent and subsequently, dispatch the closest available crew. Additional maintenance personnel are "On Call" in the event additional resources are needed after normal business hours.

3.2 Site Assessment

SAWS staff will perform a Site Assessment to identify the asset experiencing the SSO, determine an initial SSO estimated volume, ascertain the geographic extent of the SSO and request additional resources, if warranted. SAWS staff will then contact the EOC to provide the information obtained during the Site Assessment for them to capture the data in the Hansen CMMS. The EOC subsequently informs the On Call Superintendent and RPC On Call Personnel and provides an updated status of the SSO.

Using the data provided to the EOC, a Situation Report (STRPT) is then generated and sent automatically via email to designated management providing initial information concerning the event. The STRPT Program is a computer application, managed by EOC, to quickly and efficiently inform management of significant situations pertaining to SAWS resources.

If warranted, SAWS staff, generally RPC, will continue the Site Assessment with the following responsibilities:

- Determine the extent and impact from the SSO (e.g. does it pose an immediate risk to public health, was there property damage or a fish kill)
- Take photos of the impacted area
- Determine sampling locations and perform sampling, if warranted
- If sampling is warranted, see Appendix F.





4.0 BUILDING/PRIVATE PROPERTY BACKUP PROCEDURE

When responding to a customer call regarding a building/private property backup, SAWS staff will inspect the water level in both upstream and downstream manholes to determine if a backup may be caused by a blockage in the main. If no wastewater is flowing in the downstream manhole, or if a significant change in the flow is observed SAWS will clean and flush the upstream main (SAWS Lateral Stoppage or Backup Procedure for crews is included in Appendix E).

If SAWS main is flowing, the customer will be advised that SAWS WCTS is functional and that they should seek the services of a licensed plumber to further investigate. A letter, written in both English and Spanish, is left with the customer outlining this process (copy of the Letter is provided as Appendix G).

The licensed plumber employed by the customer will determine if the backup is caused by a private service lateral failure. If it is determined, despite SAWS prior investigation, that the SSO was caused by SAWS WCTS, the customer may submit the plumber's invoice and SAWS reimburses the customer for that cost. Subsequently, a Work Order is generated in Hansen to address the defect in the WCTS causing the Building/Private Property Backup.

4.1 Communication with Customers - Reporting Private Property Backups

Calls are received 24 hours per day, 7 days a week, 365 days a year through the SAWS main phone number 210-704-SAWS (210-704-7297), which is posted on SAWS website and in the monthly water/sewer bills.

4.2 Timeframe for Initial Response and Cleanup Operations

The typical timeframe for response to any SSO or private property backup is discussed in Section 2.3, "Dispatch".

The timeframe for the completion of the cleanup activities is dependent on the extent of the areas adversely affected and private access issues. SAWS goal is to clean up private property backups as soon as practical and the typical timeframe objective for the completion of cleanup activities is within an average of 2 days.

4.3 Cleanup Measures for Conditions Caused by SAWS WCTS

SAWS will provide the property owner, property owner's representative, or tenant with the information/guidelines to follow to submit a claim, which includes information on how to





contact SAWS Claim Department at 210-233-3375. An example of the Claim Letter/Form that is provided to a customer is attached as Appendix H.

If it is determined that a Building/Private Property Backup is caused by SAWS WCTS, SAWS will hire an independent cleaning and restoration contractor who will use cleanup measures consistent with standards in that industry.

The types of cleanup measures may include wet vacuuming or other removal of spillage, wiping floors and walls with cleaning solution and disinfectant, flushing out and disinfecting plumbing fixtures, carpet cleaning and/or replacement or other appropriate measures to disinfect and/or remove items potentially contaminated by Building/Private Property Backups.

4.4 Measures to Correct the Building/Private Property Backup

See Section 11.0 for a description of SAWS procedures to identify and implement corrective measures to minimize the likelihood of recurrence of a Building/Private Property Backup.





5.0 LIFT STATION AND FORCE MAIN SSO RESPONSE

Lift Stations are used to lift or raise wastewater from a lower elevation to a higher elevation. Each station within SAWS system is continuously monitored through a verbatim system (automated phone dialer system) and/or SCADA. Monitoring parameters include, but are not limited to the following:

- Power status (power failure)
- Wet well status (high water)
- Dry well status (where applicable)
- Generator status (where applicable)
- Entry alarm

Signals from the telemetry systems are monitored at the EOC control center and maintained in proper working order by Lift Station Maintenance Department maintenance staff.

5.1 Lift Station and Force Main SSO Response Procedures

Emergency operations will be undertaken in the event of a force main failure, power related failure and/or electrical or mechanical failure for any incident involving an SSO. A copy of the Standard Operating Procedures for both lift station and force main SSOs is provided in Appendix I.

These procedures apply to all personnel involved in the operation and maintenance of sanitary sewer lift stations, as well as personnel in the Distribution and Collection and Construction Inspection Departments who are involved in the response to SSOs occurring at lift stations or force mains.

5.2 Resources

SAWS service area is divided into two geographic areas; both areas are staffed with mechanics and electricians crews responsible for lift station maintenance and operations as well as managing emergency calls dispatched. Crews perform maintenance throughout the majority of the day and night with "On Call" crews available to provide additional support as needed.

5.3 Site Assessment

SAWS staff will perform a Site Assessment to identify the asset experiencing the SSO, determine an initial SSO estimated volume, ascertain the geographic extent of the SSO and request additional resources, if warranted. SAWS staff will then contact the EOC to provide the





information obtained during the Site Assessment for them to capture the data in the Hansen CMMS. The EOC subsequently informs the On Call Superintendent and RPC On Call Personnel and provides an updated status of the SSO.

Using the data provided to the EOC, a Situation Report (STRPT) is then generated and sent automatically via email to designated management providing initial information concerning the event. The STRPT Program is a computer application, managed by EOC, to quickly and efficiently inform management of significant situations pertaining to SAWS resources.

If warranted, SAWS staff, generally RPC, will continue the Site Assessment with the following responsibilities:

- Determine the extent and impact from the SSO (e.g. does it pose an immediate risk to public health, was there property damage, or a fish kill)
- Take photos of the impacted area
- Determine sampling locations and perform sampling, if warranted
- If sampling is warranted, see Appendix F.

5.4 Determining When a Wastewater Pump Around Will Be Utilized

Refer to the flow diagram included in Appendix I, which describes SAWS guidelines for determining when a wastewater pump-around will be utilized.





6.0 SSO MITIGATION MEASURES

After completion of the Site Assessment and appropriate communication with EOC, SAWS staff shall assess and determine appropriate mitigation measures. Mitigation measures include containment, flow diversion, pump and haul, and/or relieving the cause of the SSO.

6.1 Containment

The primary mitigation method SAWS utilizes is containment and subsequently, recovery of sewage that has been discharged. Containment is the establishment of a physical barrier to prevent further spreading of the SSO into the surrounding environment. Effective containment confines the sewage to a well-defined area, allowing cleaning and vacuuming equipment to remove as much of the sewage as possible.

This physical barrier helps to reduce adverse impacts. Containment techniques are most practicable and most effective for dry weather, low volume SSOs versus during wet weather SSOs, or when the volume of an SSO exceeds the ability to contain it successfully. Containment procedures will vary on a case by case basis.

6.2 Flow Diversion

Flow diversion is another method used to mitigate SSOs by redirecting the sewage from the point of the SSO back into the WCTS. Successful diversion can reduce the adverse effect on the immediate area as well as any downstream areas.

In the event of a prolonged sewer line blockage or a sewer line collapse or lift station failure, flow is diverted using a portable bypass pumping operation around the obstruction, or excavating a drainage trench from the SSO point to the nearest gravity sewer manhole. If bypass operations are required, appropriate measures are taken to determine the proper size and number of pumps required to effectively handle the sewage flow. In addition, monitoring of the onsite bypass pumping operation is required.





6.3 Pump and Haul

Pump and haul is another method used to mitigate SSOs by providing additional resources for the collection of discharged wastewater and its conveyance back to the WCTS beyond the location experiencing the service disruption. This equipment typically includes vacuum and tanker trucks and can be used in conjunction with other mitigation measures.

6.4 Relieve the SSO

Another type of mitigation is to correct or eliminate the cause of an SSO.

SAWS staff will begin the task of relieving the cause of the SSO, which may consist of removing a blockage/obstruction such as roots, FOG, or debris from a main using cleaning and vacuum equipment (Combo Unit). A root cutter attachment may be necessary to eliminate heavy roots. Data pertaining to the cleaning is captured on a Cleaning Inspection Form and tracked in Hansen.

For SSOs caused by a collapse, defective pipe, or a break caused by contractor activities, an emergency repair Work Order (WO) is generated and necessary containment and diversion procedures will be put in place, if warranted, until the repairs are completed. Maintenance crews or contractors will make the repair, documenting information on the Hansen WO. If additional repair may be required for the associated asset, a Design Request will be submitted to SAWS Engineering for evaluation of a possible CIP project.

An emergency repair WO in Hansen is generated for SSOs caused by mechanical or electrical problems at a lift station. Containment and other emergency measures will be put in place, if warranted, until the lift station repairs are completed.





7.0 MINIMIZE ENVIRONMENTAL IMPACT

Measures to minimize environmental impact include minimizing the volume of the wastewater released from the WCTS during an SSO and ensuring water quality samples are obtained and sent for laboratory analysis when warranted.

7.1 Minimize SSO Volume

When arriving at an SSO site, SAWS staff will implement the SSO mitigation measures in Section 6.0. In addition to SSO mitigation measures, SAWS staff will also implement measures to minimize the volume of the SSO when warranted. Measures that will be utilized include:

- Pump around the blockage or vacuum flow from a manhole upstream of the blockage and dispose of the flow into the WCTS downstream of the blockage to minimize SSO volume
- Manually controlling pump stations that discharge upstream of the impacted area allowing the system to be used as storage
- If the SSO is from a force main, transfer flows to parallel force main, if available
- If the SSO is from a force main, drain the force main to minimize the quantity of the spill
- Employ pump truck operations to remove wastewater from the wet well and dispose of the wastewater at an appropriate location

When necessary, contractor services may be requested as additional resources to minimize the volume of an SSO.

7.2 Water Quality Sampling

Water quality sampling and testing is required whenever an SSO reaches and enters a water body. RPC has staff on call 24 hours a day, seven days a week to respond to SSOs to provide water quality sampling, when warranted. The Standard Operating Procedures for On Call Response and the Water Quality Sampling Procedures provide guidelines for SAWS staff pertaining to water quality sampling operations, including sampling equipment. Both documents are provided in Appendix F.

Analysis and collection of samples are performed in accordance with the methods specified in 40 CFR Part 136. At a minimum, sample sites will be chosen in an area located upstream from the influence of the SSO and an area immediately downstream. Other sample sites may be selected where fresh water flow enters an impaired stream to evaluate the impact of this





confluence. The sampling strategy for the SSO will depend upon the size of the SSO and the time for repair.





8.0 SSO VOLUME AND NOTICE TO PUBLIC AND APPLICABLE GOVERNING AUTHORITIES

This Section provides information used by SAWS for estimating the SSO volume released from the WCTS and wastewater recovered. In addition, a description is provided of the actions undertaken to ensure notification to the public and to applicable governmental authorities of the SSO from the WCTS when such notice is required by SAWS TPDES permits or applicable law.

8.1 SSO Volume Released and Recovered

The Spill/SSO Volume Calculation Guidance, as well as the Reference Sheet for Estimating Sewer Spills (included in Appendix J) are used by SAWS to ensure consistency and standardization in reporting the volume of an SSO.

There are three methods for estimating SSO volume:

- 1. Method 1: Visual Estimate
- 2. Method 2: Measured Volume
- 3. Method 3: Duration and Flow Rate

Field verification and documentation is required for all SSOs and is obtained and captured by personnel responding to the SSO. In all cases, appropriate effort will be made to make a reasonable estimate of the SSO volume, as well as the volume captured and returned to the WCTS. Some SSOs may occur in locations where wastewater can seep into the ground, or flow away from the SSO location. In such conditions, the time that the SSO was detected and observations from the field will be considered in the calculation.

Volume returned to the WCTS is calculated based on a calculation of the gallons vacuumed and hauled and/or the amount pumped and returned to the WCTS at the nearest feasible manhole.

8.2 **Public Notification**

The Texas Administrative Code (30 TAC Chapter 319, Subchapter C §319.301-319.303) provides requirements for public notification of SSOs, as well as notification to local governmental officials and the local media whenever one of the following types of spills occur:

- 1. A spill, regardless of volume, that the facility owner knows or has reason to know, that will adversely affect a public or private source of drinking water
- 2. A spill with a volume of 50,000 gallons or more where one or more of the





following conditions also exist:

- a. The spill occurs within ½ mile of a public or private source of drinking water;
- b. The spill occurs within ½ mile of a private drinking water well which is located within ½ mile of a public water supply well;
- c. The spill occurs within ½ mile up-gradient of a surface water intake of a public or private source of drinking water;
- d. The spill occurs in an active groundwater recharge area;
- e. The spill occurs up-gradient and within ½ mile of a karst terrain or shallow alluvial well that is a source of drinking water;
- 3. A spill of 100,000 gallons or more

SAWS Sewer System Improvements Department informs SAWS Communications Department when an SSO meets any of the criteria for public notification. Subsequently, the Communications Department informs the public and media using the required "Notice of Spill From a Wastewater Facility Form", presented as Appendix K, that is required by 30 TAC §319.303.

8.3 Temporary Signage

SAWS staff will attempt to prevent public access by establishing a control zone around the perimeter of the affected surface area using appropriate signs and barricading practices. The temporary signs and barricades will vary for each location; however, the goal will always be to warn the public to avoid contact with areas affected until cleanup is completed. Signs and barricades will be posted after the SSO is confirmed and will remain in place until cleanup activities are completed.

SAWS determines when to post notices of polluted surface water bodies or ground surfaces that result from SSOs. The postings provide a warning of potential public health risks due to sewage contamination. Warning signs will be posted by RPC personnel upon initial investigation that waters have been adversely affected and will not be removed until the threat has been abated (when results of analysis of water samples do not indicate the presence of wastewater). Signs are in Spanish and English to warn of potential public health risks due to sewage contamination. Copies of the Warning Signs are presented in Appendix L.





8.4 Regulatory Notification

SAWS provides notification to the Edward's Aquifer Authority of any SSO of 500 gallons or more occurring over the EARZ and/ or portions of the Contributing Zone as required by the Edwards Aquifer Authority Rules, Sections 713.400-409.

SAWS provides notification to TCEQ within 24 hours of a confirmed SSO. SAWS will subsequently prepare and submit a "5-Day" TCEQ Water Quality Noncompliance Notification Form (No. TCEQ-0501), documenting the original notification to TCEQ within five days of the SSO. A copy of the "5-Day" TCEQ Water Quality Noncompliance Notification Form is provided as Appendix M.

The "5-Day" TCEQ Water Quality Noncompliance Notification Form contains information which is required by TCEQ and is completed by the Operator and approved by management prior to submittal. Information regarding the SSO includes the following:

- General Information:
 - Entity Name
 - Telephone
 - Permitee or Subscriber
 - TCEQ Region
 - County
 - o Permit Number
- Noncompliance Summary:
 - Description of Noncompliance (Location, Discharge Route, and Estimated Volume)
 - Date and Time of start and stop of an SSO or when it is expected to be corrected
 - Potential Dangers to Human Health or the Environment
- Actions Taken:
 - Monitoring Data, Field Measurements, Laboratory Samples, Fish Kill (Note: When fish kill occurs, the regulatory notification to TCEQ will include details of fish species and estimated numbers killed in each species.)
 - Actions to Mitigate Adverse Effects
 - o Actions to Correct the Problem and Prevent Recurrence





- Verification Information:
 - Information Reported By/Title
 - Date Reported
 - Signature

SAWS is also required to report SSOs in the monthly National Pollution Discharge Elimination System (NPDES) Discharge Monitoring Report (DMR), which is submitted to TCEQ. Both the 5-Day and the Monthly Reports are sent to EPA and DOJ the same day they are submitted to TCEQ to meet CD requirements.

8.5 Other Notification

SAWS staff provides notification to the following, as warranted:

San Antonio River Authority (if the San Antonio River or its tributaries are impacted)

Contact: Ronnie Hernandez 210-215-9202 Cell 210-302-3609 Office 866-345-7272 SARA

Metro Health Department (if SSO may have affected a private well or private water source)

Contact: Duty Supervisor 201-207-0135 Office Sanitation Services Manager (After Hours) Contact: Steven Barscewski 210-207-4079 Office 210-389-7848 Cell





9.0 CLEANUP ACTIVITIES - EXCLUDING PRIVATE PROPERTY BACKUPS

Cleanup activities will be completed following containing and relieving the SSO. SAWS cleanup and recovery efforts will be directed at returning the affected area to a pre-SSO condition as quickly and efficiently as possible.

9.1 Timeframe for SSO Cleanup

Generally, cleanup and recovery efforts are completed as quickly and efficiently as practical after restoring flow on small volume SSOs.

SAWS cleanup and recovery efforts on large SSOs (>10,000 gallons) will be directed at returning the affected area to pre-SSO condition as quickly and efficiently as practical and as conditions permit.

The timeframe for the completion of the cleanup activities is dependent on the extent of the areas adversely affected. SAWS goal is to cleanup SSOs with a volume >10,000 gallons as soon as practical and the typical timeframe objective for the completion of cleanup activities is within an average of 5 days.

9.2 Cleanup Activities

The extent and methods used for cleanup actions vary depending upon the situation and the methods selected will be performed thoroughly for all SSOs. No visual residue will remain, including solids, paper, plastic, or rags.

Manual cleanup techniques include the use of handheld tools such as shovels, rakes and brooms to remove readily identifiable waste material originating from the WCTS. Subsequently, the affected area is typically washed down, with the wash water directed to the nearest manhole. If a manhole is not readily available, a Combo truck is used to vacuum the wash water and dispose back into the WCTS. A disinfectant and/or deodorizing agent will be applied to the affected areas.

Mechanical equipment such as a Combo Unit may be used to clean paved areas and excavators may be used to remove contaminated soil, depending on the extent of the impact.

The general process is as follows:

• Response crew will use appropriate personal protective equipment (PPE) during cleanup and recovery





- The affected area from the SSO will be cleaned up as much as possible using rakes, shovels, squeegees, hand picker tools and vacuum equipment
- The affected SSO area will be evaluated for appropriate disinfection. This may include applying bleach to the affected area
- An appropriate buffer zone will be maintained between disinfected areas and surface waters
- The immediate area around the SSO site will be inspected to ensure that no visual residue remains, including solids, papers, and rags
- Photographic evidence of SSO cleanup is taken for all SSOs greater than 10,000 gallons
- All solids and debris will be collected and disposed of properly
- If flushing with potable water from a fire hydrant is warranted and ultimately performed, wash down water will be returned to the WCTS to the extent practical

9.3 Supervisor Approved: Cleaning Complete

SAWS has implemented a sign-off protocol for all SSOs to ensure successful onsite cleanup operations. A representative from RPC is responsible for conducting site inspections and logging data within a database that tracks date and time of the inspection, noting the status of cleanup operations in the comment field.

In the event of a large spill (greater than 10,000 gallons) RPC will perform an additional inspection one week after cleanup activities are confirmed to be completed. The purpose of the additional inspection is to verify all materials were removed and ensure that there has been no seepage to the surface that would warrant additional cleanup activities and removal of any remaining warning signage. Photographic evidence will be included in the final signoff.

An RPC Supervisor will confirm the status of the cleanup operation, that cleanup is complete, or determine that additional action is required. An RPC Supervisor will confirm when cleanup has been successfully completed and provide a sign off of the onsite cleanup operations.





10.0 POST-SSO INVESTIGATION

When it is determined that an SSO originated in SAWS WCTS, an inspection is performed of each sewer pipe that experiences an SSO by means of CCTV utilizing Pipeline Assessment and Certification Program (PACP) scoring captured in Pipe Tech, by pole camera or other appropriate inspection methods as soon as practicable, but not later than forty-eight hours following the cessation of an SSO.

The purpose of the inspection is to capture information of the condition of the pipe soon after experiencing an SSO to help determine the root cause of the SSO and to implement the appropriate measure(s) to minimize the risk of reoccurrence.

10.1 Post SSO Inspection and Case Generation

Typically, inspections of the sewer pipe asset that experienced an SSO and the first adjacent pipe upstream and the first adjacent pipe downstream are included in a Case. The term Case is used to group all inspections pertaining to a particular SSO event. Additional assets may be added to the Case based on historical data or information gathered during the SSO response.

For SSOs and private property backups caused by the gravity portion of SAWS WCTS, a Case is generated simultaneously in the Sewer Main Maintenance and Research database (SMMR db) and Hansen CMMS. Inspection(s) to clean and inspect selected assets are generated and grouped together. The decision to determine which assets are included in a Case is based on reviewing, when warranted, the following: information obtained during onsite SSO activities, historical data for assets of concern and adjacent assets, corrective actions (past or pending) and planned CIP Projects including target project completion timelines. The grouped Inspections for cleaning and CCTV are generated with a Case Number for subsequent tracking purposes.

10.2 Case Assignment

The LC/TV Planning Team emails the Superintendent to inform him/her that a Case has been generated and inspections have been assigned to their department.

Information included in the email includes, but is not limited to:

- Pertinent information of the Case
 - SSO volume estimate
 - o Initial cause of SSO





- Size and type of pipe
- Date of overflow
- Customer Response Number
- Material(s) removed from the line
- Any noted blockages and associated CCTV footage
- Map highlighting Case assets
- Aerial photo highlighting the Case assets
- Maintenance history on assets

Findings from Cases are reviewed by SAWS staff as described in Section 11.0.





11.0 MEASURES TO MINIMIZE THE LIKELIHOOD OF SSO REOCCURRENCE

SAWS will implement the appropriate mitigation measure to minimize the likelihood of recurrence of an SSO. The measures selected will be based on the results of the Post SSO Inspection and Case described in Section 10.0.

11.1 SSO Assessment Investigation (Root Cause)

Post-SSO Assessment Investigations are based on reviewing pertinent information including, but not limited to, maintenance history, CCTV data, crew comments, available photos of the affected area and site location/conditions.

An SSO review meeting is held regularly, as warranted, to review each SSO or Case as it is referred to during the SSO Assessment Investigation. SAWS Operational staff or contractors who performed the field investigation are present at the meeting along with members of various departments involved in WCTS Operations, Maintenance, Engineering, and SAWS FOG Program.

Each Case is discussed by the person who performed the field investigation. The findings during the field investigation, as well as cleaning history, rain events, or other relevant information is evaluated by the team present at the meeting. Based upon this information, the team present at the meeting determines the root cause of the SSO utilizing the guidelines shown in Figure 11-1. In some cases, additional assessment is recommended prior to confirming the root cause.

After identifying the underlying cause of the SSO, the Team develops the corrective measure(s) or actions that will minimize the likelihood of recurrence of an SSO. The type of mitigation and remediation to prevent a recurrence will vary depending on the cause of the SSO, and several strategies or actions SAWS may utilize include:

- Maintain (Adjust cleaning frequency and/or type)
- Monitor (Use of smart covers or more frequent inspection)
- Address condition issues
 - Repair urgent or emergency conditions when appropriate
 - Refer for Alternatives Analysis
- Address potential capacity constraints
 - Referred to SAWS Capacity Assessment Program

If an SSO reoccurs on the same asset, SAWS will consider and implement alternate corrective measures as warranted.













11.2 Post SSO Debriefing

SSOs are unique with various elements and challenges associated with the volume, location, terrain, weather conditions and safety concerns. SAWS is committed to continuous improvement of its processes and procedures for responding to SSOs. After a major SSO, (i.e., Public Notice) event, when warranted, upper management representing all Departments associated with the management of the SSO meet to review the procedures used and to discuss what worked and where improvements can be made in responding to and mitigating future SSOs.





12.0 SORP MAINTENANCE

12.1 Update SORP

As the SORP is revised, or field response SOPs have been changed, personnel shall be informed and training provided as necessary prior to the effective date of the field response changes.

12.2 Distribution and Availability of SORP

The current master copy of the SORP will be scanned and made available to all SAWS personnel via the SAWS internal website. Only the most current version will remain available.





13.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jeffrey J Haby, P.E.

Director - Sewer System Improvements

12-16-2013

(Date)



Appendix A SAWS Organizational Chart





SAWS is governed by the SAWS Board of Trustees that includes the mayor of the City of San Antonio and six members appointed by the City Council.

- The President/CEO is responsible for overall management and leadership at SAWS. The President/CEO implements the policies set by the Board of Trustees to achieve SAWS' mission and goals. Also reporting to the Board of Trustees is the Chief of Internal Audit.
- The Chief of Staff supports Senior Vice Presidents and Vice Presidents (VPs) to make decisions and ensure that projects meet deadlines and groups are operating efficiently as well as responding to Board and CEO office matters.
- The Chief Operating Officer (COO) is responsible for operations related to the four core businesses at SAWS. The position oversees Operations, Operation Services, Distribution & Collection Operations and Production & Treatment Operations.
- The Human Resources VP is responsible for overseeing recruitment, benefits, staffing, employee relations, training and other human resources responsibilities at SAWS.
- The Chief Financial Officer (CFO) is responsible for the overall financial management of the System, which includes Accounting, Financial Planning, Finance and Treasury, Purchasing and Supply functions. The Chief Financial Officer also has responsibility for the Information Services and Customer Service functions. The Information Services function delivers a broad spectrum of applications and technology services and support to all areas of the System. Customer Service is responsible for providing the maintenance of customer accounts as well as accurate and timely billing of System customers.
- The Public Affairs VP is in charge of external and internal relations for SAWS, which includes intergovernmental affairs and communications.
- The General Counsel provides legal advice, researches legal issues, drafts legal memoranda for the Board and SAWS and represents SAWS in matters with customers, regulators and business partners. The General Counsel also oversees the Contracting, Claims and Risk Management Departments.
- The Strategic Resources VP is responsible for infrastructure master planning, water resources, and engineering. This position oversees Engineering and Construction (development of CIP program) and Water Resources (water supply projects) and Conservation departments.



Appendix B

Consent Decree SORP Requirements



13. <u>Sewer Overflow Response Plan ("SORP")</u>. No later than 150 days from the Date of Lodging of the Consent Decree, SAWS shall develop, submit to EPA for review and comment, and implement a SORP that is designed to accomplish the following goals:

- a. Respond to and halt SSOs as rapidly as technically feasible consistent with safety and legal requirements; (See Sections 2.0 and 3.0)
- b. *Employ SSO mitigation measures whenever appropriate;* (See Section 6.0)
- c. Implement appropriate measures to prevent SSO recurrence; (See Section 11.0)
- d. Incorporate in the SORP procedures for responding to SSOs and procedures to minimize the environmental impact and potential human health risk of SSOs. At a minimum, the SORP shall include the following:
 - i. A description of the actions SAWS will undertake to provide notice to the public (through the local news media or other means, including signs or barricades to restrict access) and to any applicable government authorities of the SSO from the WCTS when such notice is required by SAWS TPDES permits or applicable law; (See Section 8.0)
 - ii. A detailed description (including as appropriate the development of standard response procedures) to minimize the volume of untreated wastewater from the WCTS during an SSO event; (See Section 7.0)
 - iii. A detailed plan describing the standard operating procedures to be followed by SAWS personnel in responding to a Building/Private Property Backup, including:
 - A description of SAWS response practices and methods for communicating with customers about: (See Section 4.1)

 How to report Building/Private Property Backups; and
 - b. How to obtain clean-up support from SAWS, as warranted;
 - 2. The typical timeframe objectives for both initial response and completion of cleanup activities; (See Section 4.2) and
 - 3. The types of measures that may be taken by SAWS to cleanup Building/Private Property Backups found to be caused by conditions in SAWS WCTS, including, as warranted by specific circumstances,



procedures necessary to disinfect and/or remove items potentially contaminated by Building/Private Property Backups, wet vacuuming or other removal of spillage, wiping floors and walls with cleaning solution and disinfectant, flushing out and disinfecting plumbing fixtures, carpet cleaning and/or replacement or other appropriate measures to disinfect and/or remove items potentially contaminated by Building/Private Property Backups. (See Section 4.3)

- iv. A description of the process by which measures to correct or repair conditions in the WCTS causing or contributing to Building/Private Property Backups are selected; (See Section 4.4)
- v. An inspection of each sewer pipe that experiences an SSO using CCTV, Pole Camera or other appropriate inspection methods as soon as practicable, but not later than forty-eight hours following the cessation of the SSO. In general, such inspection shall typically involve the first adjacent Pipe Segment upstream and downstream of the specific WCTS asset experiencing an SSO; (See Section 10.0)
- vi. A description of how SAWS will complete cleanup activities of SSOs greater than 10,000 gallons, including:
 - 1. Time frame for completion of SSO cleanup activities;

(See Section 9.1)

2. Photographic evidence that SSO cleanup is complete;

(See Section 9.2) and

- 3. Supervisor approval to confirm that the SSO cleanup is complete. (See Section 9.3)
- vii. A description of standard response procedures for SSOs that occur at Lift Stations or Force Mains. In the event that a repair at a Lift Station or Force Main may cause or lengthen the time of an SSO, the SORP shall provide a procedure for determining when a wastewater pump-around will be provided. (See Section 5.0)


Appendix C Applicable Definitions



7. Terms used in this Consent Decree that are defined in the CWA, or in regulations promulgated pursuant to the CWA, shall have the meanings assigned to them in the CWA or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. "Building/Private Property Backup" shall mean, for purposes of this Consent Decree, a wastewater backup into a building that is caused by blockages, malfunctions, or flow conditions in the WCTS. Building/Private Property Backup does not include wastewater backup into a building that is caused by a blockage or other malfunction of a Private Lateral or other piping or conveyance system that SAWS does not own or operate.
- b. Term defined in the CD, but not used in the SORP
- c. "Capacity Constraint" means those discrete components, or groups of components, of the WCTS that are determined by SAWS, consistent with the Capacity Program in Appendix D, to have verified capacity deficiency issues that have caused or significantly contributed to previous capacity-related SSOs due to wet weather events that are within design parameters; and/or, that are likely to cause or significantly contribute to future capacity-related SSOs due to wet weather events that are within design parameters. As described in Appendix D, potential Capacity Constraints include Priority 1 through 4 and may include Priority 5.
- d. *"CCTV" shall mean closed circuit television.*
- e. "City" shall mean the City of San Antonio, a Texas home rule city.
- f. "Clean Water Act" or "CWA" shall mean the Clean Water Act, formally entitled



the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§ 1251-1387.

- g. "Consent Decree" or "Decree" shall mean this Consent Decree and all Appendices attached hereto (listed in Section XXIII (Integration/Appendices)).
- h. Term defined in the CD, but not used in the SORP.
- i. "Date of Lodging" or "Lodging" shall mean the date on which this Consent Decree is filed for lodging with the Clerk of the United States District Court for the Western District of Texas.
- j. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.
- k. Term defined in the CD, but not used in the SORP.
- 1. *"EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.*
- m. "FOG" shall mean fats, oils, and grease.
- n. Term defined in the CD, but not used in the SORP.
- o. Term defined in the CD, but not used in the SORP.
- p. Term defined in the CD, but not used in the SORP.
- q. *"Force Main" shall mean any pipe that receives and conveys, under pressure, wastewater from the discharge side of a pump. A Force Main is intended to convey wastewater under pressure.*
- r. "Gravity Sewer Main" or "Gravity Sewer" shall mean a pipe that receives, contains and conveys wastewater not normally under pressure, but is



intended to flow unassisted under the influence of gravity.

- s. Term defined in the CD, but not used in the SORP.
- t. Term defined in the CD, but not used in the SORP.
- u. *"I/I" shall mean the total quantity of water from inflow, infiltration, and rainfall induced infiltration without distinguishing the source.*
- v. Term defined in the CD, but not used in the SORP.
- w. Term defined in the CD, but not used in the SORP.
- x. "Lift Station" shall mean facilities in the WCTS (not at the WWTPs) comprised of pumps which lift wastewater to a higher hydraulic elevation, including all related electrical, mechanical, and structural systems necessary to the operation of that lift station.
- y. "Paragraph" shall mean a portion of this Consent Decree identified by Arabic numerals.
- z. Term defined in the CD, but not used in the SORP
- aa. "Pipe Segment" shall mean the reach of Gravity Sewer Main pipe extending from manhole to manhole.
- bb. "Private Lateral" shall mean that portion of the collection system or sanitary sewer system, not owned by SAWS, used to convey wastewater from a building or buildings to that portion of the WCTS owned by SAWS.
- cc. "Remedial Measures" shall mean spot repairs, trenchless sewer rehabilitation, sewer replacement, repair or reconstruction, and any other appropriate WCTS improvement techniques for resolving condition and/or capacity deficiencies in a particular system asset or group of assets within the WCTS



that have caused or significantly contributed to previous SSOs; and/or, that are likely to cause or significantly contribute to the future occurrence of SSOs. Remedial Measures shall not include capital improvement projects implemented exclusively to provide sewer service for new development.

- dd. "SAWS" shall mean the San Antonio Water System, an agency of the City of San Antonio, Texas.
- ee. "Sanitary Sewer Overflow" or "SSO" shall mean, for purposes of this Consent Decree: 1) unpermitted discharges from SAWS WCTS to State water or waters of the United States from SAWS WCTS; and 2) any release of wastewater from SAWS WCTS to public or private property that does not reach State water or waters of the United States, including Building/Private Property Backups.
- ff. Term defined in the CD, but not used in the SORP.
- gg. Term defined in the CD, but not used in the SORP.
- hh. "State" shall mean the State of Texas.
- ii. Term defined in the CD, but not used in the SORP.
- jj. Term defined in the CD, but not used in the SORP.
- kk. *"TCEQ" shall mean the Texas Commission on Environmental Quality and any of its successor departments or agencies.*
- 11. Term defined in the CD, but not used in the SORP.
- mm. "United States" shall mean the United States of America, acting on behalf of EPA.
- nn. "Wastewater Collection and Transmission System" or "WCTS" shall mean the wastewater collection, retention and transmission system, including all Force



Mains, Gravity Sewer Mains, Lift Stations, manholes and other appurtenances thereto which are owned by SAWS, including any new assets constructed under this Decree to resolve condition and/or capacity issues identified that have caused or significantly contributed to previous SSOs; and/or, that are likely to cause or significantly contribute to the future occurrence of SSOs.

- oo. "Wastewater Treatment Plant" or "WWTP" shall mean devices or systems used in the storage, treatment, recycling, and reclamation of municipal wastewater. For purposes of this Consent Decree, this definition shall refer to following treatment facilities: the Leon Creek WWTP, the Medio Creek WWTP, the Salado Creek WWTP and the Dos Rios WWTP, and all components of such sewage treatment plants.
- pp. "Wet Weather-Related SSOs" shall mean historical SSOs identified by SAWS as capacity or I/I-related or that occurred during wet weather events.
- qq. Term defined in the CD, but not used in the SORP.

Definitions applicable to the SORP and not defined in the Consent Decree include:

- "Root Cause Analysis" shall mean investigation performed by SAWS soon after an SSO incident to assign the most likely immediate cause of each SSO.
- "Standard Operating Procedures (SOPs) or Procedures" shall mean guidelines for use by SAWS staff under typical operating conditions; SAWS staff may modify procedures as warranted based on actual conditions encountered and professional judgment.



Appendix D Wastewater Spill Reporting Procedure





WASTEWATER SPILL REPORTING PROCEDURE

Requirements:	30 TAC 305.125(9); 30 TAC Chapter 319 Subchapter C; TCEQ Form No.
	TCEQ-0501: EA Chapter 713 Subchapter E
Effective Date:	03/19/04
Revision #:	3
Revision Date:	11/27/13

PURPOSE

The purpose of this Wastewater Spill Reporting Procedure is to:

- > Identify technical information and requirements for reporting wastewater spills
- Provide guidance so that spills and releases are put in the proper category to facilitate reporting in conformance with the Emergency Management Operations Plan (EMOP). The SAWS Emergency Management Operations Plan (EMOP) is intended to serve as a capstone document for all emergency checklists and event specific contingency plans. Emergency checklists and contingency plans in Annex B of EMOP fulfill emergency response planning requirements under Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act, Public Law 107-188. The EMOP consists of a "core plan" outlining assumptions, concepts and responsibilities for planning, preparedness and response. Annexes with checklists, event specific contingency plans, maps and additional information, prepared by specific Departments and Divisions are components of the core plan, but distributed under separate cover by the responsible Department
- > Identify responsibilities for various SAWS organizations
- Identify communication for customers, Contractors, outside agencies, and SAWS
- Provide a training tool for response to wastewater spills

DEFINITIONS

Edwards Aquifer Recharge Zone (EARZ) - An area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of geologic formations in proximity to the Edwards Aquifer where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge from surface waters to groundwater into the Edwards Aquifer.

Spill/SSO – Occurs when wastewater from the wastewater collection system is inadvertently discharged into or adjacent to any water in the state at a location not permitted as an outfall.

Water in the state - Groundwater, lakes, bays, ponds, reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico, and all other bodies of surface water, natural or artificial, including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.



INITIAL REPORT AND INVESTIGTION PROCEDURES

Wastewater spill is reported to the Emergency Operations Center (EOC).

Emergency Operations Center (EOC)

The EOC is notified of a sewer related problem and will do the following as warranted:

- 1. Obtain the following information:
 - Name and phone number of caller
 - Address or closest address (intersection)
 - Location of manhole or sewer leak (street, alley, on the property, etc.)
 - Discharge route of spill (storm drain, creek, etc.)
- 2. Create a service request or work order.
- 3. Notify the appropriate Spill Investigation and Reporting Group (SIRG):
 - Distribution & Collection Operations
 - Production & Treatment Operations
 - Construction Inspections
 - Other
- 4. After the SIRG provides the EOC with an update, the EOC will notify on-call Resource Protection & Compliance (RPC) personnel and on-call SIRG Supervisor/Superintendent.
- 5. E-mail Situation Report to Water, Wastewater or Recycle Water Issues Group and Others as necessary.
- 6. Report the spill to the TCEQ Regional Office, 403-4050 within 24 hours after receiving the initial report of the release.

Spill Investigation and Reporting Group (SIRG)

The SIRG will assign an Investigator.

Personnel investigating will:

- 1. Perform field investigation to identify and document extent of wastewater spill:
 - Time
 - Location (street address, nearest cross street, Ferguson Map Grid #, and Block Map #)
 - Estimated volume
 - Containment or if the water has reached a waterway
 - Ability of crew to control the spill and status to correct the situation
 - Waterway in proximity (if known)
 - Fish kill in affected waterways
- 2. Report information to the EOC.
- 3. Determine whether to initiate one of the following:
 - Normal Notification, see Normal Notification
 - <u>Public Notice of Spills</u>, spill adversely effects a public or private source of drinking water, 50,000 gallons or greater over the Edwards Aquifer Recharge Zone (EARZ) or Contributing Zone of the EARZ, or 100,000 gallons or greater



REGULATORY AND COMMUNICATION NOTIFICATION PROCEDURES

Normal Notification:

SIRG (Will do the following as warranted):

- 1. Stop the SSO and restore flow if at all possible
- 2. Determine the start and stop times
- 3. Determine the probable cause of the SSO
- 4. Estimate the SSO volume
- 5. Identify the receiving area (street, storm drain, etc.)
- 6. SIRG Management signs the "5-day" TCEQ Water Quality Noncompliance Notification Form (No. TCEQ-0501) after Proactive Planning prepares the report

Resource Protection & Compliance Department

- 1. Notifies as warranted:
 - San Antonio River Authority (if the San Antonio River or its tributaries are impacted)
 - Texas Parks & Wildlife (if there is a fish kill)
 - Metro Health Department
 - EAA (reportable quantity is 500 gallons)
 - Others as necessary, SAFD, SAPD, COSA Public Works
 - SAWS Laboratory
- 2. Provides "closure letter" as warranted, including field and lab analytical results.

Proactive Planning

- 1. Prepares a "5-day" TCEQ Water Quality Noncompliance Notification Form (No. TCEQ-0501) and submits within five (5) days of receiving the initial report of the release. Then the following is done:
 - Fax signed report to TCEQ at 545-4329
 - E-mail signed report to designated SAWS staff
 - Original to Proactive Planning file

Public Notice of Spills Notification:

<u>SIRG</u>

- 1. Designates an "Incident Commander" who may provide information to SAW Executives or Public Relations Department as warranted.
- 2. Refer to SIRG Normal Notification Steps 1 5.
- 3. Determine course of action based on input from the RPC Department.
- 4. SIRG Management signs the "5-day" TCEQ Water Quality Noncompliance Notification Form (No. TCEQ-0501).

Sewer System Improvements or Maintenance Planning

- 1. Notifies:
 - Chief Operating Officer (COO) Senior Vice-President
 - Texas Commission on Environmental Quality immediately but no later than 24 hours
 - Others as necessary, SAFD, SAPD, COSA Public Works, EAA
- 2. Prepares the Notice of Spill From a Wastewater Facility (30 TAC Chapter 319, Appendix D).
- 3. Transmits the Notice of Spill From a Wastewater Facility by fax or e-mail to the SIRG and COO for review and/or revision.



- 4. Transmits the Notice of Spill From a Wastewater Facility by e-mail, fax, or hand delivery to the Public Relations Department.
- 5. Transmits the Notice of Spill From a Wastewater Facility to TCEQ as soon as possible, or in no case later than 24 hours after receiving the initial report of the release.
- 6. Coordinates a Lessons Learned to critique the Public Notice event.

Resource Protection & Compliance Department

- 1. Notifies as warranted:
 - San Antonio River Authority (if the San Antonio River or its tributaries are impacted)
 - Texas Parks & Wildlife (if there is a fish kill)
 - Metro Health Department
 - EAA (reportable quantity is 500 gallons)
 - Others as necessary, SAFD, SAPD, COSA Public Works
 - SAWS Laboratory
- 2. Provides "closure letter" for Public Notice events, including field and lab analytical results.

Public Relations Department

- 1. Transmits the Notice of Spill From a Wastewater Facility to "appropriate local government officials and local media" (Note: no later than 24 hours after notification of spill).
- 2. Develops and distributes additional media release(s) as necessary.
- 3. Reports media notifications to the EOC for the Incident Log and relaying to the field.

Proactive Planning

- 1. Prepares a "5-day" TCEQ Water Quality Noncompliance Notification Form (No. TCEQ-0501) and submits within five (5) days of receiving the initial report of the release. Then the following is done:
 - Fax signed report to TCEQ at 545-4329
 - E-mail signed report to designated SAWS staff
 - Original to Proactive Planning file



Appendix E

Sanitary Sewer Overflow Response Procedure





SANITARY SEWER OVERFLOW (SSO) RESPONSE PROCEDURE

 Effective Date:
 03/15/09

 Revision #:
 2

 Revision Date:
 11/26/13

Purpose

The purpose of this SSO Response Procedure is to:

- Provide guidelines to SAWS staff responding to an SSO
- Report protocol to notify identified SAWS departments
- Implement best action for SSO volume minimization
- > Provide guidelines on volume estimation and cleanup efforts

EOC notifies SAWS staff of SSO for Site Assessment:

- 1. Arrive at SSO location and visually make an initial assessment of the estimated spill rate, volume and impact area and determine whether the spill is continuing to travel downstream.
- 2. If the impact area is contained or you have already requested Service Center assistance, proceed with attempting to open the line. Identify the impact area (e.g. alley, creek bed, drainage culvert, easement, ground, storm drain, street).
- 3. Relay initial information to the Emergency Operations Center (EOC). EOC will contact others as needed or requested, such as a Superintendent, a Service Center crew and Resource Protection & Compliance (RPC) personnel. If the spill continues to flow downstream, a Service Center crew may be needed to build an earthen dam. For smaller SSOs, if you are able to open the line, stop the SSO and restore normal flow, proceed with clean-up and disinfection as is typical or per RPC's guidance (if applicable).
- 4. For larger SSOs, if you are able to open the line, stop the SSO and restore normal flow and contact your Superintendent, or a Service Center to mobilize pumping equipment. Then, proceed with clean-up and disinfection as is typical or per RPC's guidance (if applicable).
- 5. If you are unable to open the line or restore normal flow, contact your Superintendent (if on duty), a Service Center Lead Foreman (after daytime hours), or the EOC to make contact with others to arrange for a Service Center to set up by-pass pumping and possibly dig up the blockage and/or collapsed pipe.
- 6. Upon completion of clean-up or establishing containment, report the SSO volume to the EOC based one of the following 3 estimation methods:
 - Method 1: Visual Estimate
 - Method 2: Measured Volume
 - Method 3: Duration of Flow Rate
- 7. The methods of volume estimation used and the estimated volume should be discussed with your Superintendent if he/she are on duty prior to reporting to the EOC. If not on duty, report the estimated volume to the EOC and email your Superintendent the methods and volumes for follow-up on the following day.
- 8. Document response in Hansen CMMS (e.g. location, extent of SSO, resources employed)





SEWER LATERAL STOPAGE OR BACKUP PROCEDURE

 Effective Date:
 03/15/09

 Revision #:
 2

 Revision Date:
 11/26/13

Purpose

The purpose of this Sewer Lateral Stoppage or Backup Procedure is to:

- Provide guidelines to SAWS staff responding to a customer complaint for a sewer lateral stoppage or backup into the residence
- Provide guidelines to SAWS staff on procedure of assessing the complaint and providing literature to the customer about SAWS process for lateral reimbursement

EOC notifies SAWS staff of SSO for investigation:

- 1. Upon determining that the blockage is not in the main, present the customer with a copy of the Claim Form/Letter.
- 2. The customer hires a plumber to attempt to relieve the blockage and televise the lateral.
- 3. If, despite SAWS' initial investigation and determination, the blockage is found to be in SAWS' sewer pipe, SAWS will reimburse the customer for their plumber's fees.



Appendix F

Water Quality Sampling: Standard Operating Procedures for On Call Response





STANDARD OPERATING PROCEDURES FOR ON-CALL RESPONSE

PROCEDURE NUMBER: <u>1</u> REVISION NUMBER: <u>5</u>

EFFECTIVE DATE: March 1, 2005 REVISION DATE: September 26, 2011

ORIGINATOR: Martin Miller, Industrial Compliance Supervisor

REVISED: Martin Miller, Industrial Compliance Supervisor

SUBJECT: OPERATIONAL INSTRUCTIONS FOR ON-CALL DUTY

APPLICATION: <u>RESOURCE PROTECTION & COMPLIANCE DEPARTMENT</u>

All procedures should be reviewed at least annually.

1.

The Resource Protection & Compliance Department (RPC) is responsible for the implementation of a comprehensive Storm Water Management Program to achieve the goal of controlling the quality of storm water; which is discharged from the Municipal Separate Storm Sewer System (MS4) into the surface waters in the State. The quality of the water discharged into the surface waters in the State from the MS4 can be adversely affected by the introduction of potentially hazardous materials caused by either an accidental spill or an illegal dumping situation. As part of the Storm Water Management Plan SAWS responsibilities include the implementation of several programs that are covered by these procedures. Specifically the Illicit Discharge and Improper Disposal Program include responsibilities to investigate non-storm water discharges. The On-Call duty is a task assigned by the On-call Supervisor to the Environmental Protection Specialist (EPS) position. The program is in place to investigate and assess the impact of any potentially hazardous materials on the quality of the waters of the State.



RESPONSIBILITY:

One of the five RPC Supervisors within the RPC Department is assigned on a rotating basis, to cover a weekly shift to respond to calls from the Emergency Operation Center (EOC) after 5 pm and before 7 am. In addition an EPS is to be available to respond to situations or emergencies. On-Call duty duration is scheduled to last one week (7days), from Monday (7:00 AM). until the next Monday morning (7:00 AM). The EPS will serve On-Call duty based on a prearranged schedule. The direct supervisor and the on-call supervisor must approve all changes to the schedule. Situations or emergencies that arise during the normal work hours will be assigned to an EPS based on the location and nature of the incident by the Industrial Compliance Supervisor.

Exempt/Non-Exempt employees who are On-Call are required to be available to respond to situations or emergencies while they are off duty. Employees who are On-Call must answer the call-in notification (telephone call) within thirty minutes of receiving the message from the Supervisor or EOC. Employees must arrive at the on call situation or emergency within one hour. Employees who are On-Call are subject to corrective action for failing to be available or failing to respond to an On Call situation or emergency within designated response times. See Employee Handbook for all details.

All nonsupervisory employees placed On-Call for a week (7 days) will receive 8 hours pay for the work week which will be considered non-productive time. Employees placed On-Call for less than a week are entitled to 1 hour On-Call pay for each day during the week and 1.5 hours for weekends.

To be eligible for On-Call pay, an employee should have been at work for his/her entire regularly scheduled shift. Incremental time-off taken during the week is at the discretion of management. Employees who are placed On-Call on an <u>official SAWS Holiday</u> will receive pay as outlined in the Employee Handbook. This will be considered non-productive time and will not be used in calculating overtime pay.

In addition to the compensation received as a result of being On-Call, employees responding to a situation or emergency, or who are required to work, will be compensated a minimum of two (2) hours, for the time required to be at work or to handle the situation. Hours worked, while On-Call, start from the time an employee answers the call in notification and stops when the assignment is completed. An assignment is considered complete when the employee contacts his/her supervisor, swipes out if a time clock is available, notifies the dispatcher or uses any other method deemed workable by the department.

Payment for hours worked while On-Call will be subject to the regular overtime rules. A non-exempt employee, who is called in to work, will be paid one and one-half (1-1/2) times their regular hourly wage for any time worked over forty



(40) productive hours per week. See Overtime Pay in the appropriate section of the Employee Handbook for more detail. An exempt employee, who is called in to work, will earn "Earned Time Off" (ETO) and must track the information in a spreadsheet. Using ETO requires attachment of time earned details for payroll purposes.

PROCEDURES

The Supervisor will receive notification from the SAWS EOC to respond to a situation. After receiving the notification the Supervisor may notify the EPS for assistance or follow up.

Equipment needed to respond should include:

- Laptop
- Hach Field Test Kit
- Chemetrics Ammonia test kit
- Shovel, pick, sledge hammer, measuring wheel, hand tools (hammer, crescent wrench, fire hydrant wrench, screwdrivers, and meter box key).
- Sample bottles as required in both quantity and type for the situation (at least twelve 1 liters glass bottles and 6 fecal sample containers).
- Extension pole (with hook and/or bottle holder)
- Spill Response equipment such as oil booms (in various sizes), pillows or pads and other absorbent material.
- SAWS Chain of Custody lab forms
- Camera (with charged batteries and sufficient storage space or film)
- D.O. Meter and pH meter both calibrated and fully operational (with any necessary spare batteries, membranes, calibration standards, and other necessary parts).
 - Meters must be properly calibrated at the beginning of shift, and as needed.
- PPE and safety equipment such as hardhat, safety glasses, earplugs, safety vest, Nitrile gloves, flashlight, cones, etc.

Upon arriving on site park the SAWS vehicle in an appropriate location so that you are not in a "hot zone" and so that you can get out of the site (e.g. It is difficult to get a fire truck or police car to move out of your way once they park). Staff should wear the proper safety equipment (at a minimum the PPE should include: a safety vest, safety shoes and a hard hat). Proper eye and ear protection and gloves for sampling should be readily available for use.

Make sure and identify yourself to the SAWS Supervisor or Incident Commander and state the purpose of your being on site. Wear your SAWS identification and present proper SAWS credentials if asked (take business cards with you). You should identify and note any pertinent contacts (including phone numbers) and



when possible, the responsible parties involved. For example taking photos of truck door logos and license plates or getting business cards will assist with identification later when doing reports. Safety should always a priority issue while at the site.

Interaction with the contacts or responsible parties should be friendly and If needed, a brief explanation of the local requirements and professional. ordinances should be made up front (you should get contact information to send information such as a copy of any applicable ordinances). During the investigation, carry out all of the questioning and other activities as politely as possible. Be inquisitive without being rude; if you see something that is improper; be tactful in finding out more information. The company representative may be concerned with "Human health and safety" first and the environment may be secondary. The EPS should make notes of the site, including the location of any equipment involved and nearby drainage channels that may be impacted by the situation and provide photo documentation of them. The EPS can gather information by interviewing the responsible party or on site contacts. Information on containment should be shared with the Incident Commander or his representative. Be sure and investigate the location that the discharge will end up at. For example if spill enters a storm drain inlet then you need to find the outfall location at the Storm Sewer.

SSO INCIDENT:

When responding to an internal sanitary sewer spill, there are additional responsibilities that RPC needs to perform. A flow chart attached that can be used to provide direction on the incident. It is also located at: "I:\Resource Compliance\SW Complaints\Picture file\spill response procedures"

RPC Supervisor will be contacted by the EOC to respond to the situation. RPC primary duties include assessing the situation with the D&C management to determine the extent of the spill and to develop a plan of action. If the discharge is to a flowing body of water there are sampling requirements outlined on the flow chart that should be followed. Discharge quantity must also be determined. This should be done in conjunction with D&C to report a realistic number based on facts not speculation. Document method used to determine this quantity. Refer to the Wastewater Spill Reporting Procedures to see notes concerning the different reporting requirements for large spills and those on the EARZ. Staff should assist with measurement of spill or make a determination by sampling using Ammonia test kits to determine the extent of SSO. RPC should also document the spill and clean up using photos, field measurements and notes. A summary power point should be made for large spills to document all of the information for future reference or enforcement. Copy should be stored on I drive file under "SW Complaints".

Site cleanup verification is also within RPC responsibility. Staff should revisit the



site to document the cleanup. Site should not have any solids, sewer should be removed and the site should not smell of sewer. D&C crews often use HTH during the cleanup unless the area is directly adjacent to a waterbody. The use of HTH should be minimal to do the job. HTH is an oxidizer as well as a disinfectant and can have a detrimental impact on biological life. It can also significantly reduce Dissolved Oxygen levels in a stream or pond.

The EPS should complete an investigation form; which should include all contact and responsible party information. An entry in the appropriate database (SW Complaint) should also be made, as well as photo documentation stored in the appropriate folder on the "I" Drive. The completed investigation form will be forwarded to the appropriate Supervisor. If samples were taken on site, include the chain of custody and the lab results with the photos on the "I" Drive.

Based on the situation (see flow chart), the Supervisor will determine if the site will require continuous monitoring and if samples are taken. If the need arises and samples are taken the lab needs to be contacted. The properly labeled samples will then be taken to the SAWS lab at Dos Rios or Mission Road (use flow chart for decision on locations and where to take the samples when complete).

SAFETY

On-Call Duty investigations are often carried out in hazardous areas. While working within the area, always observe safety rules and regulations. Wear hardhats, safety glasses and protective clothing as required. A beacon is required on all TXDOT project sites. Hard hats and safety vests are required on all SAWS and City of San Antonio construction project sites. Entry into a "HOT ZONE" is prohibited. Entry into a "Confined Space" should not be made without following SAWS policies and procedures for confined space entry.





San Antonio Water System

WASTEWATER SPILL Sample Management Plan

MATRIX:

Surface water

All samples under this sample management plan will be storm water or surface water contaminated with domestic sewage flow from a failure in a municipal collection system. Additionally, there may be one or more samples collected that represent storm water or surface water that has not been impaired or influenced by domestic sewage flow.

SAMPLE SITE:

Samples will be collected from monitoring points located along an affected waterway. Sites will be chosen with an objective of determining the extent of the impairment relative to the storm water or surface water that has not been influenced by the spill. At minimum, sample sites will be chosen in an area located upstream from the influence of domestic sewage and immediately downstream of the impairment. Additionally, other sample sites may be selected where other fresh water flow enters the impaired stream to evaluate the impact of this confluence. Resource Protection & Compliance staff responding to the incident will determine the extent of sample sites. The sampling strategy for the wastewater spill will depend upon the size of the spill and the time for repair.

PARAMETERS, METHODS, SAMPLE CONTAINERS, PRESERVATIVES and HOLDING TIMES:

Parameter	Test Code		Method	Sample Container	Preservative	Maximum Holding Time
Ammonia Nitrogen (Direct) (mg/l)	1.	ADIR	EPA 350.1	250ml HDPE	Cool 4°C, H ₂ SO ₄ to pH < 2	28 days
Carbonaceous Biochemical Oxygen Demand (mg/l)	2.	CBOD5	SM 18 5210B	1000ml HDPE	Cool 4°C	48 hours
Dissolved Oxygen	3.	fDO	EPA 360.1	100ml HDPE	None	Immediately
Fecal Coliform	4.	FCOL	SM 18 9222D	100ml HDPE (Sterile)	Cool 4°C	8 hours
E. Coli	5.	ECOL	SM 9223 B	100ml HDPE	Cool 4°C	8 hours



				(Sterile)		
pH (S.U.)	6.	fpH	EPA	100ml	None	Immediately
			150.1	HDPE	None	minediately
Total	7	TDS	EDA	100ml		
Dissolved	7.	103	160 1		Cool 4°C	7 days
Solids (mg/l)			100.1	TUPE		
Total		TCC		E O O mail		
Suspended	8.	133		500111	Cool 4°C	7 days
Solids (mg/l)			2540 D	HDPE		
Turbidity	9.	TRB	EPA	100ml		19 hours
			180.1	HDPE	C0014 C	48 nours

SAMPLING TECHNIQUE:

Analysis and collection of samples shall be done in accordance with the methods specified in 40 CFR Part 136. Where an approved Part 136 method does not exist or the method requires techniques that cannot be achieved, any available method may be used unless a particular method or criteria for method selection (such as sensitivity) has been specified.

All parameters will be analyzed from sample aliquots collected using grab technique.

SAMPLING EQUIPMENT:

PRIMARY EQUIPMENT

Orion 210A pH meter or equivalent (w/ all necessary calibration solutions) Thermometer Portable Dissolved Oxygen meter either an Orion 810A+ or equivalent.

MISCELLANEOUS EQUIPMENT

Sample Containers Sample labels Chain-Of-Custody Forms Ice Chest w/ ice to preserve samples Preservatives (as needed) Permanent markers

All field analytical equipment to be field calibrated unless noted.



PERSONAL PROTECTIVE EQUIPMENT:

• NOTE: Additional PPE may be required dependent on sample site assessment. It is the responsibility of the sampling personnel to determine the safety requirements of each site. Sampling personnel are obligated to discontinue sampling at any time their safety cannot be assured.

Safety boots (per SAWS specs.) Safety glasses (per SAWS specs.) Drinking water (optional) Nitrile Gloves (powder free, 8ml) Safety Vest (per SAWS specs.) Sunscreen / Bug Spray (optional)* Leather gloves Hand sanitizing gel Hat & Rain gear

* To be applied away from sampling equipment, area, and bottles.

SAMPLING SCENARIO:

Begin paperwork for sampling event – chain of custody form, etc.Calibrate FiCollect grab samplesCollect fieldPrepare labels for the sample containersPlace labelFill sample containers using proper technique for laboratory testingAdd preserPlace all samples for laboratory analysis into ice chest for cooling to 4 °CEnter sampling data onto the Chain-of-Custody Form including all field analysis resultsAssist with site demobilization (packing up the equipment)Enter sampling data onto the chain of custody up the equipment)

SAMPLE QUALITY ASSURANCE/QUALITY CONTROL:

All QA/QC samples will be collected and analyzed in accordance with methods specified in 40 CFR 136. Quality Control (QC) is used when collecting samples for laboratory analysis. The following QC samples are required.

Reagent Blanks

These types of QC samples are used to determine that chemical preservatives added to the samples are free of contamination. Reagent blanks are collected and analyzed at a frequency of one per lot number.

Rinseate Blanks

These types of QC samples are used only when auto-samplers or other devices are used to collect samples. Rinseate blanks are collected and analyzed for the parameters included in the "Parameters" section of this plan.

Field Duplicate Samples

This type of QC sample provides a check of sampling equipment and the technique used.

Split Samples

• This type of QC sample is used to check the analytical procedures used by a laboratory, <u>and generally</u> <u>only when requested by the operator of the MS4.</u>



Calibrate Field Equipment Collect field readings on DO and pH Place label on sample bottles Add preservatives as required The laboratory will run duplicates and spikes as recommended by laboratory protocol.

CHAIN OF CUSTODY/ANALYTICAL REPORTS:

The chain of custody (COC) will indicate the individual(s) that will receive final analytical reports. All field analysis shall be recorded on the COC and shall be entered into a database maintained at the direction of laboratory staff.

SAMPLING PERSONNEL: Resource Protection & Compliance Staff

SAMPLE PLAN ACCEPTANCE:

Supervisor, Construction Stormwater	Date
Martin Miller – Supervisor, Industry Compliance	Date
Lee Sarate– Supervisor, Environmental Compliance	Date
Mike Barr – Supervisor, Aquifer Protection & Evaluation	Date
Monty McGuffin – Supervisor, Groundwater Resource Protection	Date
Anna Ramos-Polanco – Laboratory Manager	Date



Appendix G Letter to Customer





Dear Customer:

We have received a service call for a sewer lateral stoppage or backup at this address. To help serve you better, we are providing you this outline of San Antonio Water System's policies and procedures to assist you in achieving a faster repair.

Our crew has inspected the sewer main line in the street/alley/easement and should have notified you of the results. If the main line had a stoppage, we will clear the main line and make any necessary repairs.

If we found the sewer main line clear, then the problem is probably in the lateral yard piping leading from your home. We recommend that you hire a licensed plumber to locate the problem with electronic locating equipment and clear the line. If the lateral yard piping requires repair, then we recommend that you obtain price estimates from a licensed plumber for the repair work. If the plumber identifies the location of the problem to be in your lateral yard piping leading from your building/home to the property line, SAWS cannot reimburse you for the plumber's work to clear or repair your line. If you have encountered a sewage spill in your home, then you should immediately review your homeowners' insurance policy and contact your agent.

If despite SAWS inspection, the plumber determines that the problem is located beyond the property line, in the public right-of-way, street or alley, then the plumber must electronically locate the lateral, mark the location of the obstruction with green paint and contact our Emergency Services Section at 704-SAWS (704-7297). If we determine that it is in fact SAWS' responsibility, then we will place a high priority on making the repair. The repair will require that other utilities such as electric, gas, telephone, etc. mark the location of their lines prior to our digging. Within 4-6 weeks you will be reimbursed for the plumber's normal and customary charges for the work. SAWS will only reimburse for work performed by a licensed plumber. Please mail your receipts to:

San Antonio Water System Attn: Sewer Lateral Reimbursement Program/Tommy Melzow 3930 E. Houston San Antonio, TX 78220

We are working hard to insure your satisfaction. If you have any questions or wish to make any comments please contact our Emergency Services Section at 704-SAWS (704-7297) and they will have a SAWS representative contact you as soon as possible.

Sincerely,

Jeff Brown, Director Distribution and Collection Department

NOTICE TO PLUMBERS

Before you start any work, please provide an estimate to the customer. In order for the customer to be reimbursed, the break must be in the public right-of-way/street or alley. SAWS will only reimburse the customer for a plumber's normal and customary charges related to electronically pinpointing the location of the problem. Reimbursements will not be approved for improvements to the property such as new cleanouts, etc. If we excavate and cannot find the break, we will contact you at that time. Plumbers that fail to respond or properly locate the break are subject to a time and materials charge.





Estimado cliente:

Se nos ha notificado que la cloaca lateral de esta dirección está obstruida o desbordándose. Con el fin de brindarle mejor atención, le estamos proporcionando este resumen de las normas y procedimientos del San Antonio Water System que lo ayudarán a obtener una reparación más rápida.

Nuestro equipo de inspectores ya habrán revisado la cloaca maestra en la calle, callejón, o servidumbre de paso, y ya le habrán notificado de los resultados. Si está obstruida, quitaremos la obstrucción y haremos las reparaciones necesarias.

Si determinamos que la cloaca maestra no está obstruida, entonces es probable que el problema está en la cloaca lateral que sale de su casa y conecta con la maestra. Le recomendamos que contrate a un plomero autorizado para que emplee equipos electrónicos para localizar el problema y desatascar la cloaca. Si hace falta reparar la cloaca lateral, entonces le recomendamos que obtenga presupuestos de plomeros autorizados para la reparación. Si el plomero determina que el problema se encuentra en el tramo de cloaca lateral entre su casa o edificio y donde termina su propiedad, SAWS no podrá rembolsarle los gastos ni de desatascar ni de reparar la cloaca. Si ha advertido un derrame de aguas cloacales en su casa, deberá revisar de inmediato su póliza de seguro residencial y comunicarse con su agente de seguros.

A pesar de la inspección hecha por SAWS, si el plomero determina que el problema se encuentra más allá de su propiedad, ya sea en los derechos de la propiedad pública, en una servidumbre de paso, calle, o callejón, deberá localizar la cloaca lateral electrónicamente, marcar con pintura verde la ubicación de la brecha, y comunicarse con la Sección de Servicios de SAWS. El número de teléfono de la Sección de Servicios es 704-7297. Después que se comunique, si determinamos que la reparación es la responsabilidad de SAWS, entonces le asignaremos la más alta prioridad a la reparación, lo que requerirá que otras compañías de servicio público, como electricidad, gas, teléfono, etc., marquen la ubicación de sus cables y tuberías antes de poder nosotros excavar. Le reembolsaremos los gastos normales y usuales de un plomero autorizado para el trabajo. Por favor, envíe sus recibos a:

San Antonio Water System Attn: Lateral Reimbursement Program/Tommy Melzow 3930 E. Houston San Antonio, TX 78220

Nos estamos esmerando por asegurarnos de su satisfacción. Si tiene alguna duda o comentario, por favor que se comunique con nuestra Sección de Servicios de Emergencia al 704-SAWS (704-7297), quienes harán que un representante de SAWS se comunique con usted lo más pronto posible.

Muy atentamente,

Ing. Jeff Brown, Director Departamento de Distribución y Colección

AVISO A LOS PLOMEROS:

Antes de empezar cualquier trabajo, por favor entregue un estimado del costo al cliente. Para que podamos reembolsar al cliente, la brecha deberá estar en los derechos de la propiedad pública, en la servidumbre de paso, calle, o callejón. Por lo regular, la cloaca lateral entre la cloaca maestra y la propiedad del cliente pertenece a SAWS. SAWS reembolsará al cliente únicamente los costos normales y usuales de plomero por localizar electrónicamente la ubicación exacta del problema. No se reembolsarán obras de renovación o rectificación, como nuevas bocas de limpieza, etc. Si excavamos sin poder encontrar la brecha, lo llamaremos. A los plomeros que no respondan o no localicen las brechas debidamente se les cobrará la mano de obra y los materiales.



Appendix H Claims Letter/Form





SAN ANTONIO WATER SYSTEM

Dear Customer:

In the event you feel you have incurred an injury and/or property damages due to work performed/or failed to have performed by the San Antonio Water System, you will need to file your written notice of claim within 90 days as per the City of San Antonio Charter. Please complete the attached form in its entirety and return to:

San Antonio Water System Claims Administration P.O. Box 2449 San Antonio, Texas 78298

Please attach any documentation you wish the San Antonio Water System to consider in order to support your claim for damages (i.e. estimates, pictures, diagrams, bills, receipts, etc.).

<u>The San Antonio Water System cannot initiate its investigation until we have written</u> <u>notice of your claim.</u>

The San Antonio Water System recommends that if you have insurance coverage for your damaged property, you should also notify your insurance company when you send your notice of damages to the San Antonio Water System. Your insurance company may be an immediate source of assistance to you for your loss. Do not wait for someone to look at the damages, it is important that cleanup efforts are started as soon as safely possible. This will prevent additional damages.

San Antonio Water System must complete its investigation to determine legal liability to base its settlement for damages or denial of the such.

Should you have any additional questions, please call Claims Administration at (210) 233-3376 Monday - Friday during business hours – 8:00am – 5:00pm.

FN076-5 (rev 07/03)



NOTICE OF CLAIM AGAINST SAN ANTONIO WATER SYSTEM

PERSONAL INJURY-PROPERTY DAMAGE

FILE THIS CLAIM FOR AN INJURY OR PROPERTY DAMAGE WITH:

San Antonio Water System Claims Administration P.O. Box 2449			
San Antonio, Texas 78298 Fax: (210) 233-4152			
(Please Print or Type)			
Claimant Name:	Telephone No:	Home	Work
Mailing Address:			
	City		State Zip
If known, the TOTAL amount of your claim against SAW	S is: \$		
Describe in your own words WHERE, WHEN, and HOV Give names and addresses of others involved and/or witne	W the damage or sses, if known.	injury occurred. Atta	ach additional pages if necessary.
LOCATI	ON (Please be sp	ecific):	
DATE OF LOSS: APROXÍM	ATE TIME:	(A.)	M) (P.M.)
POLICE CASE # (if known):			
DESCRIPTION OF HOW	DAMAGE OR	NJURY OCCURR	ED:
DESCRIPTION OF IN	JURY OR PRO	PERTY DAMAGE:	e recording this loss).
(Attach good copies of an incurca reports, in		estimates of damage	s regarding this tossy.

The foregoing is true and correct to the best of my knowledge.

Section 150 – Liability of the City and Limitations Thereon:

"Before the City (SAWS) shall be liable for damages for the death or personal injuries of any person or for damage to or destruction of property of any kind, the person injured, if living, or his representatives, if dead, or the owner of the property injured or destroyed, shall give the City Manager or the City Clerk notice in writing of such death, injury, or destruction within ninety (90) days after same has been sustained, stating in such written notice when, where, and how the death, injury or destruction occurred, and the apparent extent of such injury, and the amount of damages sustained, provided, however, that in no event shall the City (SAWS) be liable in damages to anyone on account of any defect in, obstruction, on or anything else in connection with any sidewalk in the City (SAWS), and provided further, that in order to hold the City (SAWS) liable in damages to anyone on account of any injury caused by any defect in, obstruction on, or anything else in connection with any street, alley, or plaza, bridge, riverbank, water course, or any public way, it must be shown that the City (SAWS), had actual knowledge or actual notice of such defect, obstruction or other thing for a sufficient length of time before such injury was received, to have remedied or guarded against such condition of the street, alley or plaza before the injury was received."

NOTE: Once your claim is received, it will be investigated by Claims Administration. Should you have any questions regarding your claim, please contact:

Claims Administration <u>SAWS</u> <u>P.O. Box 2449</u> <u>San Antonio, TX 78298</u> (210) 233-3376



Appendix I

Lift Station and Force Main SSO Response Plans





SANITARY SEWER OVERFLOW (SSO) RESPONSE PLAN FOR LIFT STATIONS

Effective Date:11/26/13Revision #:0Revision Date:N/A

Sewer Overflow Response Plan for Lift Stations

Purpose: To standardize a general response plan for sewer overflows at Lift Stations.

Scope: This procedure applies to all personnel involved in the operation and maintenance of sanitary sewer Lift Stations, as well as personnel in the Distribution and Collection, Construction Inspections Departments who are involved in the response to sewer overflows in Lift Stations.

Keywords: Lift Station SORP

Instructions:

- I. Procedure Description
 - 1. Upon notification of sewer overflow at a Lift Station:
 - 1.1. Emergency Operating Center will contact the Lift Station manager to identify the Lift Station in question.
 - 1.2. Emergency Operations Center will automatically dispatch a Distribution & Collection combo unit to assess the situation.
 - 1.3. Emergency Operations Center will automatically dispatch one mechanic and one electrician from the Lift Stations Group to determine the problem.
 - 2. Upon arrival of Lift Station Maintenance personnel to the Lift Station:
 - 2.1. Lift Station Group will determine problem.
 - 2.2. Lift Station Group will utilize process outlined below as a guideline for determining the appropriate method to restore flows in the system and/or to move flows downstream through the system.





MOST RESOURCEFUL CITY

- 2.3. Lift Station personnel will implement appropriate SSO mitigation measures based upon the guidelines for flow pump-around at Lift Station.
- 2.4. Lift Station personnel will walk perimeter of the contaminated area as directed by the Supervisor or Manager.
- 2.5. Lift Station personnel will estimate the overflow volume as directed by the Lift Station Supervisor or Manager.
 - 2.5.1. Lift Station Manager will report date and time of assessment.
- 3. Lift Station personnel will determine the reason for the spill and take further actions:
 - 3.1. Lift Station personnel will determine if the spill appears to be due to wet weather flows.
 - 3.2. Lift Station personnel will determine if the spill was due to equipment failure.
 - 3.3. Lift Station personnel will determine the components needed to correct the problem at the Lift Station.
 - 3.4. Lift Station personnel will determine the estimated time to bring the Lift Station back into service.
- 4. Dispatching the necessary equipment and crews:
 - 4.1. Lift Station personnel will determine if a portable generator or portable pump is needed.
 - 4.2. Distribution & Collection will dispatch additional equipment and personnel.
 - 4.3. Distribution & Collection will set up backhoe excavators to dam and capture the spill.
 - 4.4. Distribution & Collection will set up auxiliary trash pumps to transfer the spill back into the collection system.
- 5. Cleanup activity:
 - 5.1. Flush potable water to clean the affected areas.
 - 5.1.1. Using combo trucks from Distribution & Collection.
 - 5.1.2. Using a fire hydrant opened by Distribution & Collection.
 - 5.2. Distribution & Collection will capture and transfer contaminated water back into collection system.
 - 5.2.1. Using tanker trucks, combo trucks, or auxiliary trash pumps provided by Distribution & Collection.
 - 5.3. Regulatory Compliance will test for ammonia residuals on various points of area affected by the spill.
 - 5.4. Distribution & Collection will apply disinfectant in all area affected by spill.


6. Reporting:

- 6.1. Distribution & Collection will determine the date and time the spill started and ended.
- 6.2. Distribution & Collection and RPC will determine the volume of spill.
- 6.3. RPC will determine if any potable wells are near the spill area.
- 6.4. Regulatory Compliance will determine if any known sensitive features exist in the spill area.





SANITARY SEWER OVERFLOW (SSO) RESPONSE PLAN FOR FORCE MAINS

Effective Date:	11/26/13
Revision #:	0
Revision Date:	N/A

Sewer Overflow Response Plan for Force Mains

Purpose: To standardize a general response plan for sewer overflows due to broken force mains.

Scope: This procedure applies to all personnel involved in the operation and maintenance of sanitary sewer Lift Stations, as well as personnel in the Distribution and Collection, Construction and Inspections Departments who are involved in the response to sewer overflows and repair of broken force mains.

Keywords: Force Main SORP

Instructions:

- II. Procedure Description
 - 1. Upon notification of sewer overflow due to a force main break:
 - 1.1. Emergency Operating Center will contact the Lift Station manager to identify the Lift Station and force main in question.
 - 1.2. Emergency Operating Center will automatically dispatch a Distribution and Collection combo truck to start capturing the spill.
 - 1.3. Emergency Operating Center will automatically dispatch a Distribution and Collection repair crew to repair broken force main.
 - 1.4. Emergency Operating Center will automatically dispatch one Mechanic and one Electrician to shut down the Lift Station and force main in question.
 - 2. Upon arrival of Lift Station Maintenance personnel at the Lift Station:
 - 2.1. Lift Station personnel will shut down the Lift Station.
 - 2.2. For Lift Stations with single force main:
 - 2.2.1. Lift Station personnel will drain broken force main into wet well.
 - 2.2.2. Lift Station personnel will setup pump and haul operation at the Lift Station.
 - 2.3. For Lift Stations with dual force mains:



- 2.3.1. Lift Station personnel will drain broken force main into wet well.
- 2.3.2. Lift Station personnel will isolate broken force main.
- 2.3.3. Lift Station personnel will turn Lift Station back into operation using the remaining force main.
- 3. Upon response personnel arrival to broken force main area:
 - 3.1. Distribution and Collection repair crew will dig and expose broken force main.
 - 3.2. Distribution and Collection repair crew will perform the force main repair, depending on the failure type:
 - 3.2.1. Distribution and Collection repair crew will replace broken pipe section with new pipe.
 - 3.2.2. Distribution and Collection repair crew will repair with a clamp when applicable.
 - 3.3. Distribution and Collection repair crew will set up backhoe excavators to dam and contain the spill.
 - 3.4. Distribution and Collection repair crew will set up auxiliary trash pumps to return the spill back into the collection system.
 - 3.5. Distribution and Collection repair crew will walk perimeter of contaminated area as directed by a Supervisor or Manager.
 - 3.6. Distribution and Collection repair crew will estimate the spill volume as directed by a Distribution and Collection Supervisor or Manager.
 - 3.6.1. Distribution and Collection repair crew will report date and time of the spill assessment.
- 4. Once force main repair has being completed:
 - 4.1. Distribution and Collection repair crew will place the repaired force main back in service.
 - 4.2. Distribution and Collection repair crew will ensure the repair is leak free.
 - 4.3. Distribution and Collection repair crew will backfill the excavation.
- 5. Cleanup activity:
 - 5.1. Flush potable water through affected area and capture in manmade containment area.
 - 5.1.1. Distribution and Collection repair crew will flush using combo trucks.
 - 5.1.2. Distribution and Collection repair crew will flush using fire hydrants.
 - 5.2. Distribution and Collection repair crew will capture contaminated water and pump back into collection system.
 - 5.2.1. Using tanker trucks, combo trucks, or auxiliary trash pumps set up by Distribution and Collection.



- 5.2 RPC will test for ammonia residuals at various points of the affected area.
- 5.3 Distribution and Collection will apply disinfectant in all areas affected by spill.
- 6. Reporting:
 - 6.1. Distribution and Collection will determine the date and time the spill started and ended.
 - 6.2. Distribution and Collection and RPC will determine the volume of spill.
 - 6.3. RPC will determine if any potable wells are near the spill area.
 - 6.4. RPC will determine if any known sensitive features exist in the spill area.

III. Contact information of Key Personnel

Name	Department	Title	E-Mail	Phone	Role
Mark	Lift Station	Prod. & Treat.	Mark.Villareal@saws.org	233-	Lift Station Manager
Villareal	Maint. & Ops.	Ops.		3097	
		Manager			
Gilberto	Lift Station	Prod. Treat.	Gilberto.Camacho@saws.org	233-	Lift Station Supervisor,
Camacho	Maint. & Ops.	Ops.		3060	South Side
		Supervisor			
Erasmo	Lift Station	Prod. Treat.	Erasmo.Mendiola@saws.org	233-	Lift Station Supervisor,
Mendiola	Maint. & Ops.	Ops.		3608	North Side
		Supervisor			



Appendix J Spill/SSO Volume Calculation Guidance Reference Sheet for Estimating Sewer Spills





SPILL/SSO VOLUME CALCULATION PROCEDURES

 Effective Date:
 03/15/09

 Revision #:
 1

 Revision Date:
 11/26/13

The Spill/SSO Volume Calculation Guidance

A variety of approaches exist for estimating the volume of a SSO. This appendix documents the three methods that are most often employed. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available.

Method 1: Visual Estimate

The volume of small SSOs can be estimated using a "visual estimate". To use this method imagine the amount of water that would spill from a bucket or a barrel. A bucket contains 5 gallons and a barrel contains 50 gallons. If the SSO is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained SSOs up to approximately 200 gallons.

Method 2: Measured Volume

The volume of most small SSOs that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the SSO and the depth is used to calculate the volume.

Method 3: Duration and Flow rate

Calculating the volume of larger SSOs, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the SSO and the flow rate. The methods of estimating duration and flow rate are:

Duration

The duration is the elapsed time from the time the SSO started to the time that the flow was restored.



Common Shapes and Dimensions



- Step 1 Sketch the shape of the contained sewage (see figure above).
- Step 2 Measure or pace off the dimensions.
- Step 3 Measure the depth at several locations and select an average.
- Step 4 Convert the dimensions, including depth, to feet.
- Step 5 Calculate the area in square feet using the following formulas:

Rectangle: Area = length (feet) x width (feet)

Circle: Area = diameter (feet) x diameter (feet) x 0.785

Triangle: Area = base (feet) x height (feet) x 0.5

- Step 6 Multiply area (square feet) times depth (in feet) to obtain volume in cubic feet.
- Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons.

Start Time: The start time is sometimes difficult to establish. Here are some approaches:

- Local residents can be used to establish start time. Inquire as to their observations. SSOs that occur in rights-of-way are usually observed and reported promptly. SSOs that occur out of the public view can go on longer before being reported. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
- 2. Changes in flow on a downstream flow meter can be used to establish the start time. Typically the daily flow peaks are "cut off", or flattened by the loss of flow. This can be identified by comparing hourly flow data during the SSO event with flow data from prior days. This method will likely only be effective with consistent weather.
- 3. Conditions at the SSO site change over time and can be used to establish the start time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process. This method is valid for SSOs that have been occurring for a long time and may be used in conjunction with either of the above methods.



4. It is important to remember that SSOs may not be continuous. Blockages are not usually complete (some flow continues). In this case the SSO would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). SSOs that occur due to peak flows in excess of capacity will occur only during, and for a short period after, heavy rainfall.

End Time: The end time is usually much easier to establish. Field crews on-site observe the "blow down" that occurs when the blockage has been removed. The "blow down" can also be observed in downstream flow meters.

Flow Rate

The flow rate is the average flow that left the sewer system during the time of the SSO. There are three common ways to estimate the flow rate:

- 1. The San Diego Manhole Flow rate Chart: This chart, included at the end of this appendix, shows water flowing from manhole covers at a variety of flow rates. The observations of the field crew can be used to select the appropriate flow rate from the chart. If possible, photographs are useful in documenting basis for the flow rate estimate.
- 2. Flow meter: Changes in flows in downstream flow meters can be used to estimate the flow rate during the SSO.
- 3. Counting Connections: Once the location of the SSO is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 204 gallons per day per connection, or 8.5 gallons per hour per connection. For example:

22 upstream connections * 8.5 gallons per hour per connection

= 187 gallons per hour/60 minutes per hour

= 3.11 gallons per minute

Spill Volume

Once duration and flow rate have been estimated, the volume of the SSO is the product of duration (hours or days) and the flow rate (gallons per hour or gallons per day). For example:

Spill start time = 11:00 Spill end time = 14:00 Spill duration = 3 hours 3.11 gallons per minute x 3 hours x 60 minutes per hour = 560 gallons





City of San Diego Metropolitan Wastewater Department



5 gpm



100 gpm







150 gpm



225 gpm



250 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

Wastewater Collection Division (619) 654-4160





50 gpm



200 gpm



rev. 4/99



Appendix K

Notice of Spill from a Wastewater Facility Form



NOTICE OF SPILL FROM A WASTEWATER FACILITY

A spill from a wastewater treatment or collection facility has occurred.

INFORMATION ABOUT THE SPILL

Facility Name:
Contact for further information:
Location of the spill:
Estimated time and date of spill:
Estimated volume of the spill (number of gallons):
Type of spill: (domestic) (industrial) (other) Explain other:
Area potentially affected:
Suspected cause of spill:

THE FOLLOWING ACTIONS HAVE BEEN TAKEN:

- Appropriate local governmental officials have been notified.
- TCEQ regional office has been notified.
- The spill has been contained.
- Increased monitoring of water supply systems has been initiated.
- The cause of the spill has been corrected.
- Clean-up activities are underway/completed.
- Other:_____

PERSONS MAY WISH TO TAKE THE FOLLOWING PERSONAL PRECAUTIONS

- Use only water that has been distilled or boiled at a rolling boil for at least one minute for all personal uses including drinking, cooking, bathing and tooth brushing.
- Don't swim in affected area streams, ponds or lakes.
- Always wash hands thoroughly before preparing or eating food.
- Always wash hands thoroughly after any contact with animals, soil or diapers.
- Private well owners may wish to treat their well water, have their well water tested and inspect their wells for proper siting, construction and maintenance.



Appendix L Sample of Warning Signs











Appendix M

"5-Day" TCEQ Water Quality Non Compliance Notification Form



Water Quality Noncompliance Notification

Unauthorized Discharge	of Wastewater	Reportable Efflu	ent violation	Other
Seneral Information				
Entity Name:		Telep	phone	
Permitte		Subscriber		
FCEQ Region:	County:	Permit Numb	er:	
Noncompliance Summary				
Description of Noncompliance discharge):	(include location, disc	harge route, and estima	ated volume if an una	uthorized
-				
	10000			
Dr expected	(Date) (Time)	(Date)	(Time)
or expected.	to be contented	(Date)		
Potential Dangers to Human H	ealth and Safety or the	Environment:		
ations Taizan				
Actions Taken Vionitoring Data: Data should i	be attached or submitte yes	ed to TCEQ when availa no Field Measureme no Laboratory Samp	able ents sles	
Actions Taken Vonitoring Data: Data should i	be attached or submitte yes yes yes	ed to TCEQ when availa no Field Measureme no Laboratory Same no Fish Kill, If yes,	able ents stes estimated number killed:	
Actions Taken Monitoring Data: Data should i	be attached or submitte yes yes yes yes	ed to TCEQ when availa no Field Measureme no Laboratory Same no Fish Kill, If yes,	able: ents sles estimated number killed:	
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Actions Taken Monitoring Data: Data should i	be attached or submitte yes yes yes erse Effects: Problem and Prevent Re	ed to TCEQ when availa no Field Measureme no Laboratory Sam no Fish Kill, If yes, ecurrence:	able: ents stes estimated number killed:	
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Actions Taken Monitoring Data: Data should i Actions Taken to Mitigate Adve Actions Taken to Correct the P Verification Information nformation Reported By: Date Reported: CEQ 0501 (November 5, 2002) *if	be attached or submitte yes yes yes erse Effects: roblem and Prevent Re (Name	ed to TCEQ when availa no Field Measureme no Laboratory Same no Fish Kill, If yes, ecurrence: / e) Signature:	able: ents des estimated number killed: (Title) wastewater collection syst	em, use the



Appendix L

SAWS System-Wide Cleaning Program Process and Guidelines (Appendix B in CD)

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Appendix B

SAWS System-Wide Cleaning Program Process and Guidelines

Page 1 of 2



Appendix B

SAWS System-Wide Cleaning Program Process and Guidelines

Page 2 of 2

Large Diameter (LD) Pipes – Greater than or Equal to 24-inch Diameter



Appendix M

SAWS Condition Assessment & Remedial Program Process and Guidelines

(Appendix C in CD)

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Appendix C

SAWS Condition Assessment and Remediation Program Process and Guidelines Overview

Page 1 of 3



Appendix C

SAWS Condition Assessment and Remediation Program Process and Guidelines

	100502010	
Plan, Schedule, and Conduct Syste	m Wide Inspection Activities (CD Subsectio	n V.C)
Small Diameter Gravity Sewer Mains	Large Diameter Gravity Sewer Mains	Manholes
(Less than 24" Diameter)	(Greater than or equal to 24" Diameter)	- Inspection Methods
- Select inspection methods	- Inspection Methods	- Visual
 CCTV (Clay pipe installed prior to 1973, concrete 	 CCTV, Sonar, 360-degree video, 	- Other techniques
pipe, and EARZ pipe)	Laser imaging, Physical entry	(such as new
 Pole Camera (Clay pipe installed from 1973 	 Other methods normally 	technologies or
through 1982)	utilized by other sewer	methods that become
 Visual Inspection methods may include: 	management agencies	available)
Smoke testing,	 Other techniques (such as new 	- Schedule and conduct
 Mechanical proofing, 	technologies or methods that	inspection activities
 Sewer cleaning findings, or 	become available)	- Generally, schedule
Dye testing	- Select and prioritize pipes for inspection	inspection in
 Other techniques (such as new technologies or 	 Generally, prioritize pipe by 	conjunction with small
methods that become available)	age, materials, analysis of past	and large diameter
-Prioritize pipes for inspection	SSO frequency and volumes,	gravity sewer main
- Generally, prioritize pipe selected for CCTV and	proximity of sewer pipes to	inspections
pole camera by age, materials, analysis of past SSO	surface waters and other	
frequency and volumes, proximity of sewer pipes to	appropriate factors	
surface waters, and other appropriate factors	- Group pipes for EARZ	
- Group pipes for EARZ inspections	inspections	
- Additional inspections as needed for	- Additional inspections as	
investigations	needed for investigations	
- Schedule and conduct inspection activities	- Schedule and conduct inspection	
- Generally, schedule visual inspection in conjunction	activities	
with small diameter gravity sewer main cleaning		

Condition Assessment (CD Subsection V.C)

- Perform condition assessment based on these guidelines:

Prioritize the review of inspection data based on the severity of findings. Prioritize review of small diameter gravity sewer pipes using PACP Quick Ratings. In general, review pipes with grade 5 and 4 defects first, followed by pipes with grade 3, 2, or 1 defects.
 Categorize assets based on the following table:

Category	Example Structural Conditions SAWS Anticipates for Each Category	Likely Outcome
E - Very Poor Condition	Structural collapse, which has or could likely cause SSO; or collapse imminent	Alternatives Analysis
D - Poor Condition	Significant missing material or broken material, severe corrosion with exposed pipe wall reinforcement, or pipe wall deformation greater than 25% from structural deterioration combined with hinge fractures.	Alternatives Analysis or Monitoring
C - Fair Condition	Pipe wall deformation less than 25% from structural deterioration combined with hinge cracks, displaced fractures, or moderate corrosion - but no pipe wall reinforcement visible.	Monitoring or Maintenance Analysis
B - Good Condition	Pipe wall deformation from construction impacts or less than 10% of diameter from structural deterioration, minor corrosion, slightly open non-displaced fractures, or other moderate material degradation.	Maintenance Analysis
A - Very Good Condition	Mild defects which may include tight non-displaced cracks or other mild material degradation.	Maintenance Analysis

- Perform condition assessment on inspection data and consider appropriate criteria which shall include factors such as the following:

- Type and severity of structural defects

- Historical operation and maintenance data: Overflows, inspections, cleaning findings, cleaning frequency, previous remediation, customer complaints, and other unique circumstances for each individual asset

- Site conditions: Property rights, access for maintenance and construction, depth, soil type, environmental sensitivity, surface restoration requirements, and other unique circumstances for each individual asset

- Inspection data may also be used to analyze maintenance type and frequency per Appendix B (System-Wide Cleaning Program Process and Guidelines).

Appendix C

SAWS Condition Assessment and Remediation Program Process and Guidelines



Plan and Implement Condition Remedial Measures

(CD Subsection V.C)

- Prioritize remedial measures and periodically evaluate priorities - Generally, prioritize by severity of defects identified during inspections, frequency and history of SSOs, pipe age and material, size, maintenance history, or other factors determined to be appropriate

- SAWS may implement any Condition Remedial Measures work generated consistent with this appendix prior to submittal of the Condition Remedial Measures Report and this work shall be credited towards SAWS compliance

- Coordinate with capacity remedial measures as needed
- Allocate budget
- Design as needed
- Implement remedial measures

Condition Remedial Measures Plan (CD Subsection V.C) - See Condition Remedial Measures Report

Template in Appendix G



Appendix N

SAWS and COSA Collaborative Flowchart - Guidelines

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Appendix O

Example Monthly Private Lateral Letter to COSA

СМОМ







May 14, 2014

Mr. Martin Ruiz Supervisor, Code Enforcement City of San Antonio 1901 S. Alamo San Antonio, Texas 78283-3966

RE: San Antonio Water System **Private Lateral Program: Monthly Report** March 1 – March 31, 2014 Consent Decree Requirement

Dear Mr. Ruiz:

On October 15, 2013 a Consent Decree between the San Antonio Water System (SAWS), the United States of America and the State of Texas was entered in Civil Action No. 5:13-cv-00666 DAE in the United States District Court for the Western District of Texas, San Antonio Division. Pursuant to Section V, Paragraph 17 of the Consent Decree, the San Antonio Water System (SAWS) is required to inform the City of San Antonio (COSA) of damaged/improperly maintained private laterals and to foster monthly coordination with COSA regarding private laterals. This letter is submitted in compliance with that requirement.

The Monthly Private Lateral Report, identifying suspected damaged and/or improperly maintained private laterals obtained by SAWS from March 1, 2014 through March 31, 2014 is included herein. These are addresses that require a cross check on COSA actions (if any) and subsequent input/feedback to SAWS.

As outlined in the Consent Decree we request that COSA provide the following:

- i. Addresses receiving notifications issued by the City pursuant to City Code §34-448.
 - ii. Addresses of all private laterals that have been repaired following a notification issued pursuant to City Code §34-448 and the date of completion of any such repair.
 - iii. Addresses of each connection for which the City is seeking to assess a fine pursuant to City Code §34-449 and the address of each such connection in which the City is seeking to terminate water service pursuant to a hearing as provided in City Code §34-450.

Mr. Martin Ruiz Supervisor, Code Enforcement City of San Antonio

As discussed at our recent meetings, information from COSA will include the following data:

- 1. Addresses of an "Action": associated with B06 (private lateral sewer breaks)
- 2. Addresses receiving a "Notice of Violation"
- 3. Addresses in which the property became Compliant/fixed issue
- 4. Addresses in which a "CASE" was generated

We appreciate your help and support on this program. If you have any questions or need clarification on the information provided herein, please call me directly at 233-3747 or Tamsen McNarie at 233-3285.

Respectfully submitted,

Jeffrey J. Haby P.E. Director, Sewer Systems Improvements

cc. Marc Castro - COSA Jenny Ramirez - COSA File

Attachment: SAWS Private Lateral Report March 1 to March 31, 2014

Private Lateral Report March 1 – March 31, 2014

Private Laterals Referred to COSA: 82 (6 overflows highlighted in red)

1 3/12/2014 276111 Mystic Sumits D10000 Swr Backup - Customer With Partial Service Per Winters #376-7623 2 3/12/2014 377022 Hamilton Ave S012/1 Investigate Possible Min Over flow Cn Lean Wilk At 5, Hemilton - Passerby 3 10/4/An13 377121 Aspen Valley Dr 05522 Swr Backup - No Service - Adam 360-288-7633 5 3/3/2014 3778621 Emira SE 00807 Swr Backup - No Service Per Matrix #49-2799 5 3/6/2014 379601 Emira SE 00807 Swr Back Up, No Service Rev Datrix B44 029 6 3/6/2014 397805 Selmas 50014 Swr Back Up, No Service Rev Datrix B44 029 10 3/6/2014 398076 Ostito Ny 15223 Server Back Up No Service Ada Shahilin Phir 462-9596 110 3/6/2014 398074 Ostito Ny 15223 Server Back Up No Service Ada Shahilin Phir 462-9596 12 3/7/2014 388574 Most Ny 15223 Server Back Up No Service Ada Shahilin Phir 462-9596 12 3/7/2014 380574 Gibbs N0 1342 Server Back Up Partial Service Per Vincent # 394-1456 Obta Forged Back Qrm 13 10/4/2014 380574 Gibbs N0 1	# =	Call Date *	SR .	Property Address	Description	CosA Action
2 J.V.2014. 378022 Melivaine St 00002 Sever Backup Cast Without Syc Elida Robler 325-5127 4 J.V.2014. 377121. Aspen Valley OroS922. Sever Backup No Sevc Fluble Hackworth 672-5653 5 J.J.Z.2014. 377326. Natalen Ave 00236. Sever Backup No Sevc Fluble Hackworth 672-5653 7 J.G.Z.2014. 377802. Flumina S E 00807. Sever Backup No Sevcie Adam 360-298-6139 7 J.G.Z.2014. 37980. Genet(-VinV00137. Sever Backup No Sevcie Race Ph# 598-6159 7 J.G.Z.2014. 37980. Genet(-VinV00137. Sever Backup No Sevcie Are Monthine Ph# 406-2996. 7 J.G.Z.2014. 39750. Chere(I) VinV00137. Sever Backup No Sevcie Are Monthine Ph# 402-5996. 10 J.V.2014. 38057. BinValley OroS022. Sever Backup Contoner Wint Notice 975-4381. 11 J.V.2014. 38056. BinValley OroS022. Sever Backup Contoner Wint Parial Sevcie P Min. Anternance # 563-2695. Outcomer Regan To Dig Her Line In Die Machue - Mach	1	3/1/2014	376111	Mystic Sunrise Dr 04040	Swr Backup- Customer With Partial Service Per Winters # 376-7623	
3 0.4.Mar.14 27121 Apen Valley Dr5522 Server Fadure ProS Ferrier Mark 14: 5: 4: Homition - Passerby 3 37211 Apen Valley Dr5522 Server Fadure ProS Server Fadure No Service - Adam 360: 298: 2613 5 372014 379621 Emira 5: E 00907 Server Fadure No Service - Adam 360: 298: 2613 7 3/6/2014 379600 Chern (Dr W 00137 Server Fadure No Service - Adam 360: 298: 2613 8 3/6/2014 379600 Chern (Dr W 00137 Server Fadure No Vicoleo Loga 257: 4818. 10 3/6/2014 38076 Dakota 5 00643 Server Fadure No Service Ada Shahklin Ph4462: 9596 11 3/7/2014 38057 Moss Way 15223 Server Fadure No Service Ada Shahklin Ph442: 9596 12 3/7/2014 38057 Moss Way 15223 Server Fadure Net Mina Gr K-6734 13 3/7/2014 38055 Selbasce Dr Od75 Server Fadure Od49-499:11 13 3/7/2014 38052 Loga Uhor 0254 Server Fadure Od49-499:11 13 3/7/2014 38052 Server Fadure Od49-499:11 Server Fadure Od49-499:11 14 3/7/2014	2	3/1/2014	376082	Mcilvaine St 00502	Swr Backup Cust Without Svc Elida Robles 735-5127	
4 3/72/11 Aspen Valley Dr05522 Swr Backup - No Swc - Rubie Hadworth 672-563 5 3/72/014 37950 Nale nave 0026 6 3/72/014 379601 Gentle Valley 07422 Sever Backup No Service And ma 360-289-2613 7 3/6/2014 378601 Gentle Valley 07422 Sever Backup No Service Anne Ph B44-0299 9 3/6/2014 378600 Cheryl DW 00137 Sever Backup No Service Anno Ph 506-6159 9 3/6/2014 378601 Sabinas 5 00141 Swr Backup No Service Arton Ph 506-6159 10 3/7/2014 380575 Riv Haley Dr06012 Swr Backup No Service MT Robles @ 954-3813 11 3/7/2014 380565 Seaver Backup No Service MT Robles @ 954-3813 12 3/7/2014 380563 Seaver Backup - Customer With No Service Per Bazna # 608-6038 13 3/7/2014 380564 Gibbs 50 10342 Server Backup Customer With No Service Per Vincent # 394-455 0040 14 3/7/2014 381255 Initiate Net W00109 Swr Backup - Customer With No Service Per Vincent # 394-455 0040 15 Johwar-14 381255 Initiate Net W00101	3	02-Mar-14	376122	Hamilton Ave S 015/1	Investigate Possible Mh Over Flow On Jean Walk At S. Hamilton Passerby	· · · · · · · · · · · · · · · · · · ·
5 3/22014 377336 Natalen Ave 00236 Sever Backup - No Service - Adam 360-288-2613 Image: Sever Backup Costomer With No Service Fer Matos # 449-2799 7 3/6211 Gentle Valley 07422 Sever Backup No Service Fer Matos # 449-2799 Image: Sever Backup No Service Fer Matos # 449-2799 8 3/6/2014 379600 Cheryl Dr W 00137 Sever Backup No Service At Cap Sever 36-8181 Image: Sever Backup No Service Fer Datos 56-8181 10 3/6/2014 38075 Oakota \$100603 Sever Backup No Service Fer Datos 56-8181 13 3/7/2014 38057 Moss Wn 15223 Sever Backup No Service Fer Datos 56-8133 13 3/7/2014 380565 Selbaros Dr 05475 Sever Backup - Customer With No Service Fer Datos 57-248-1010) 15 3/9/2014 38055 Gentaro Mackup - Customer With Patrial Service Per Multer at 384-3450 Ma Forget Body Gym 17 I-Mar-14 38125 Huisache Ave W0248 Swr Backup - Customer With Patrial Service Per Multer at 384-3450 Ma Forget Body Gym 18 I-Mar-14 381255 Guadupe 81 0220 Surbackup - No Service Per Mose 2020 19 I-Mar-14 381255 Surbackup - No Service Pr Moses 2020	4	3/3/2014	377171	Aspen Valley Dr 05522	Swr Backup No Svc Rubie Hackworth 673-5653	
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7 3/292014 379950 Gentle Valley QV422 Sever Back Up No Service Anturo Ph# 508-6159 9 3/6/2014 379800 Cheny Dr W0133 Sabinas 5 0014 Swr Back Up No Service Ada Shanklin Ph# 422-9596 10 3/6/2014 380175 Dakota 3t 05603 Sever Back Up No Service Ada Shanklin Ph# 422-9596 11 3/7/2014 380575 Mosx Way 15223 Sever Backup No Service Ada Shanklin Ph# 422-9596 12 3/7/2014 38055 Selmose Dr 05475 Swr Backup - Notine Woll No Service Pre Baan # 608-6038 12 3/7/2014 38055 Selmose Dr 05475 Swr Backup - Customer With No Service Pre Baan # 608-6038 14 3/7/2014 38055 Selmose Dr 05475 Sever Backup - Seldewood Agris - Maint, (mr. Demosts - 252-248-1010) 15 3/9/2014 38125 Huisehe Ave W 0243 Swr Backup - Customer With No Service Pre Ms. Hermanez # 853-2689. Customer Began To Dig Her Une In The Backyard Buck Advised We Cannot G o D Private All Proteck Property. Please Call With Findings- Customer Works Approx. 5 Mins. Away From Location 18 10-Mar-14 381255 Guadalupe St 0220 Sever Backup - No Service - Alysas 210-422-2590 10 10-Mar-14 382123	6	3/5/2014	378621	Elmira St E 00807	Swr Backup- Customer With No Service Per Maltos # 449-2799	
8 3/F2014 379800 Cheryl Dr. W00137 Sever Back Up. No Service A trutor Ph# 508-6159 9 3/F2014 380176 Dakota 5t 00063 Sever Back Up. No Service Ar Robits @ 954-3813 11 3/F2014 380176 Dakota 5t 00063 Sever Back Up. No Service Ar Robits @ 954-3813 12 3/F2014 380526 Em Valley Dr 66042 Sever Back Up. No Service Ar Robits @ 954-3813 13 3/F2014 380565 Seahorse Dr 69475 Serve Back up. Customer With No Service Per Bacan # 608-6038 14 3/F2014 380524 Einby Stroß S	7	3/6/2014	379961	Gentle Valley 07422	Sewer Back Up No Service Rene Ph# 844-0299	
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15 39/2014 381255 Loop 410 Ne 02554 Sewer Backup - Customer With No Service Per Vincent # 394-1456 Dba Forged Body Gym 16 10-Mar-14 381255 Hussche Ave W 02438 Swr Backup- Customer With No Service Per Vincent # 394-1456 Dba Forged Body Gym 17 10-Mar-14 381825 Hussche Ave W 02438 Swr Backup- Customer With Partial Service Per Ms. Hernandez # 865-2699. Customer Began To Dig Her Line In The Backyard But Advised We Cannot Go On Private Property. Please Call With Findings- Customer Works Approx. S Mins. Away From Location 18 10-Mar-14 381855 Guadalupe St 02220 Sewer Backup - No Service - Alyssa 210-429-2590 19 10-Mar-14 382135 recen Manor Dr 05634 Sewer Backup - No Service - OBA: St. Cecilia's Church - reported by Danny Cervantes @ 210- 744-830 21 11-Mar-14 382334 Whittlier St W 001/1 Sewer Backup No Service Collia's Church - reported by Danny Cervantes @ 210- 744-830 23 11-Mar-14 382425 Nacogdoches Rd 12/1 Swr Backup No Service Pice Arists a Gr-4283 24 11-Mar-14 382937 Nacogdoches Rd 12/1 Swr Backup No Service Melissa G77-4283 23 11-Mar-14 382492 Swr Backup No Service Brista Gr-4286 22	14	3/7/2014	380624	Gibbs St 01342	Sewer Backup (elizabeth @ 449-4691)	
15 Un-Mar-14 381754 Rhapsody W 00119 Swr Backup - Customer With No Service Per Ms. Hernandez # 863-2699. Customer Began To Dig Her Line In The Backyard But Advised We Cannot Go On Private Property. Please Call With Findings- Customer Works Approx. S Mins. Away From Location 19 10-Mar-14 381855 Guadalupe St 0220 Sever Backup - Customer With Partial Service Per Ms. Hernandez # 863-2699. Customer Began To Dig Her Line In The Backyard But Advised We Cannot Go On Private Property. Please Call With Findings- Customer Works Approx. S Mins. Away From Location 19 10-Mar-14 381957 Seafarer Dr 09158 Sewer Backup - No Service - Alyssa 210-429-2590 20 10-Mar-14 382334 Whittier St W 001/1 Sewer Backup - No Service - DBA: St. Cecilia's Church - reported by Danny Cervantes @ 210- 744-8310 21 11-Mar-14 382426 Hays St 01438 Swr Back Up No Srvice Grield AT9-313-7412 23 11-Mar-14 382426 Hays St 01438 Swr Back Up No Service Grield AT9-313-7412 24 11-Mar-14 382497 Hermosa W 01503 Swr Backup No Swr. Cell With, Kamarda 210-736-3678 25 11-Mar-14 383631 Crab Orchard 06334 Sewer Backup - More Crail Mark Kerare 210-922-2831 26 12-Mar-14 383631 Crab O	15	3/9/2014	381256	Loop 410 Ne 02554	Sewer Backup - Saddlewood Apts - Maint, (mr. Demoss - 325-248-1010)	
17 10-Mar-14 381825 Huisache Ave W 02438 Swr Backup - Customer Wirk Partial Service Profts. Hernandez # 863-2699. Customer Began To Dig Her Line In The Backyard But Advised We Cannot Go On Private Property. Please Call With Findings- Customer Works Approx. 5 Mins. Away From Location 18 10-Mar-14 381855 Guadalupe St 02220 Sewer Backup - No Service - Alyssa 210-429-2590 20 10-Mar-14 382135 Green Manor Dr 05634 Sewer Backup - No Service - Alyssa 210-429-2590 21 11-Mar-14 382334 Whittier St W 001/1 Sewer Backup - No Service - DBA: St. Cecilia's Church - reported by Danny Cervantes @ 210-744-8310 22 11-Mar-14 382354 Nacogdoches Rd 122/1 Sur Back Up No Srv: 12234 Nacogdoches (dba Habaneros Grill) Address Not In Hansen *steve Kraft 375-4223 23 11-Mar-14 382429 San Rafael St 01319 Sur Back Up No Srv: 1224N Nacogdoches (dba Habaneros Grill) Address Not In Hansen *steve Kraft 3372-4223 24 11-Mar-14 382297 Hermosa W 01503 Sur Backup No Svc: Elderly, Mis Camacho 210-736-7678 25 12-Mar-14 382493 Calumet Place 00507 Sewer Backup - Mis Garda 0117 Sever Backup - Mis Garda 0112 28 12-Mar-14 383493 Calumet Place 00507 Sewer Backup - Mis Garda 0210-42-5679 <t< td=""><td>16</td><td>10-Mar-14</td><td>381754</td><td>Rhapsody W 00119</td><td>Swr Backup- Customer With No Service Per Vincent # 394-1456 Dba Forged Body Gym</td><td></td></t<>	16	10-Mar-14	381754	Rhapsody W 00119	Swr Backup- Customer With No Service Per Vincent # 394-1456 Dba Forged Body Gym	
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Melissa 512-796-2949 35 15-Mar-14 385431 Lorita Dr 00104 Sewer Leaking From Pipe In Front Of Property // Mobile Home Park // Barbara: 375-3081 Or Tom: 385-6858 36 15-Mar-14 385439 Sixmile 02227 Sewer Backup - No Svc Josephine At 373-5830 37 15-Mar-14 385467 Wilcox 00314 Swr Back Up- Cleanout Is Overflowing Per Pedro Diaz 571-5943 38 15-Mar-14 385485 Sunrise Glade Dr 04143 Sewer Backup // W/o Svc - Also Has Sewer Odor Outside Prop // Jessica: 772-5460 39 15-Mar-14 385495 Castle Way Dr 05515 Sewer Back Up! Per Mrs. Christina Martinez Phone# 264-8713 40 16-Mar-14 385503 Pine St N 00430 Sewer Backup No Svc Per Janice At 204-3486	34	14-Mar-14	385389	Lincolnshire Dr 00627	Swr Back Up No Service	
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38 15-Mar-14 385485 Sunrise Glade Dr 04143 Sewer Backup // W/o Svc - Also Has Sewer Odor Outside Prop // Jessica: 772-5460 39 15-Mar-14 385495 Castle Way Dr 05515 Sewer Back Up! Per Mrs. Christina Martinez Phone# 264-8713 40 16-Mar-14 385503 Pine St N 00430 Sewer Back up! No Svc Per Janice At 204-3486	37	15-Mar-14	385467	Wilcox 00314	Swr Back Un- Cleanout Is Overflowing Per Pedro Diaz 571-5943	
39 15-Mar-14 385495 Castle Way Dr 05515 Sewer Back Up! Per Mrs. Christina Martinez Phone# 264-8713 40 16-Mar-14 385503 Pine St N 00430 Sewer Back up! No Svc Per Janice At 204-3486	38	15-Mar-14	385485	Sunrise Glade Dr 04143	Sewer Backup // W/o Syc - Also Has Sewer Odor Outside Prop // Jessica: 772-5460	
40 16-Mar-14 385503 Pine St N 00430 Sewer Backup No Svc Per Janice At 204-3486	39	15-Mar-14	385495	Castle Way Dr 05515	Sewer Back Up Per Mrs. Christina Martinez Phone# 264-8713	
	40	16-Mar-14	385503	Pine St N 00430	Sewer Backup No Syc Per Janice At 204-3486	-

16-Mar-14	385511	Beaver Crk 23411	Sewer Backup // W/o Svc // Peggy: 488-8883	
16-Mar-14	385526	Beechwood Ln 00108	Sewer Backup - Has Opened Cleanout Lisa At (512) 461-9924	_
16-Mar-14	385527	Castle Way Dr 05515	Re-check Swr Back Up- No Svc- Per Christina Martinez Phone# 264-8713- Please Make Contact W/ Customer	
16-Mar-14	385538	Golden Valley Dr 06162	Sewer Backup // Partial Svc - Neighbor Also Has Sewer Coming From Backyard Into His Prop // Matthew: 995-0389	
17-Mar-14	385632	Westlyn 07307	Sewer Back Up - Customer States Saws Was Digging In The Alley	
17-Mar-14	385771	Midcrown Dr 08000	Investigae Sewer Over Flow, Claims Sewage Coming Out Of Manhole	
Station at	a sector a	A CONTRACTOR OF	City Of San Antonio (laskowski)	
17-Mar-14	385772	Bloomdale 04147	Sewer Back Up Partial Service Was Told By Plumber On Saws Side (kimberly Reed @ 512- 934-3046)	
17-Mar-14	386080	Florida 00916	Sewer Back Up No Service Morales 290-8953	
17-Mar-14	386380	Onslow 01347	Swr Back Up- Partial Svc Per Janice Price 210-744-4849	
17-Mar-14	386396	Houston St W 03722	Sewer Back Up No Service (alley) Kathy @ 210-609-7592	
17-Mar-14	386456	Inez Ave 00406	Swr Backup No Svc - Steve Salazar 210-852-0085	
18-Mar-14	386889	Harvest Bend 13543	Sewer Back Up No Service (sally Lisso # 872-4362)	
18-Mar-14	387048	Franciscan E 001/1	Sewer Back Up At 106 E. Franciscan - No Service (angela Alvarez @ 865-8666 Or 824-6637)	
18-Mar-14	387252	Durr St 00804	Sewer Backup - No Service - Bill 210-289-5073	
19-Mar-14	387953	Frost Fire 01010	Sewer Back Up No Service Martha Hernandez @ 274-08841	
19-Mar-14	387962	Westfield Dr 07231	Sewer Back Up (mary @ 670-0454)	
19-Mar-14	388014	Meadow Rose 01306	Sewer Back Up - No Service - Reported By Maria Harris @ 210-393-4159	
19-Mar-14	388100	Crystal 01131	Sewer Back Up-no Service Rosalinda 932-4488	
19-Mar-14	388281	Rivas St 01414	Sewer Back Up No Service Amelia 330-0982	-
20-Mar-14	389084	Meadow Green 07523	Swr Back Up No Srvc Susan 210-609-6387	
20-Mar-14	389404	Goliad Rd 02803	Sewer Back In No Service (planet K) Robert Reeves @ 333-3043	-
20-Mar-14	389551	Mistletoe Ave W 01810	Sewer Back Up No Service Conthia	
21-Mar-14	390565	Commerce St W 05721	Swr Back Up No Service (issue Emailed By Customer Service)	
21-Mar-14	390739	Brady Blyd 012/1	1223 Brady Swr Back Lin No Service **olumber States Manhole #19690 Is Holding** Dha	
21-10101-14	550755	DIBUY DIVU DIZ/ 1	Cosa Brady Clinic Sam Longoria 207-5639	
21-Mar-14	390991	Waring Dr 00415	Sewer Back Up No Service 824-7676 Deborah 274-3089	
21-Mar-14	391048	Casa Alto 11818	Sewer Stoppage Per Mrs. Arrora Rivera Phone# 842-3316	
21-Mar-14	391049	Belfast Dr 00234	Sewer Stoppage Per Mrs. Venessa Ellis Phone# 979 997-3331	
22-Mar-14	391143	US HWY 281 16620	possible manhole overflow behind Oaks Cleaners (16624 hwy 281) near Sherlock's pub and grill (16620 hwy 281) on the thousand oaks side of property heavy flow Arnold 496-8048	
24-Mar-14	391440	Vestal Place W 00331	Swr Backup Cust Without Svc Mr. Rodriguez 771-3243	
24-Mar-14	391538	Harlan Ave W 01335	Sewer Back Up No Service Virginia Cell# 413-5231 Or Hm 922-6848	
25-Mar-14	392543	Garnett Ave 08802	Swr Backup- Customer With No Service Per Pena # 924-1843	
25-Mar-14	392683	Stony Forest 13619	Sewer Back Up No Service Michael 210-875-9263	
26-Mar-14	393722	Applegate Dr 10427	Sewer Backup - No Service - David 210-264-2106	
26-Mar-14	393788	Gilbert Ln 00511	Swr Backup- Customer With Partial Service Per Vinton # 366-4848	
27-Mar-14	394722	Spruce St 00115	Sewer Backup - No Service - Johnson 210-533-7395	
27-Mar-14	395075	Lakeland 02906	Swr Backup- Customer With No Service Per Cool# 560-7407	
28-Mar-14	395443	Donaldson Ave 00556	Swr Back Up , Partial Service	
			Bustamente 733-1851 Or 844-4766	
28-Mar-14	395817	Randolph Blvd 05106	Swr Back Up , No Serivce, Dba: Howdy Mark 393-0333	
28-Mar-14	396166	Amanda St 00818	Swr Odor Outside Property Lee 241-2813	
29-Mar-14	396290	San Manuel N 00650	Sewer Odor In Area - Per Maria At 279-5834, She And Several Neighbors Are Reporting The Odor In The Area	
30-Mar-14	396341	Ripley Ave 00309	Sewer Backup - Per Dianna At 410-9651	
21 Mar 14	307666	Burlington 00262	Sewer Backuni Der Mr. David Sulliean Phone# 452,0709	
	16-Mar-14 16-Mar-14 16-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 17-Mar-14 18-Mar-14 18-Mar-14 19-Mar-14 20-Mar-14 20-Mar-14 21-Mar-14 21-Mar-14 21-Mar-14 21-Mar-14 21-Mar-14 21-Mar-14 25-Mar-14 26-Mar-14 27-Mar-14 28-Mar-14 28-Mar-14 29-Mar-14 29-Mar-14 29-Mar-14 29-Mar-14 21-Mar-14 28-Mar-14 <td< td=""><td>16-Mar-14 385511 16-Mar-14 385526 16-Mar-14 385527 16-Mar-14 385527 16-Mar-14 385538 17-Mar-14 385632 17-Mar-14 385771 17-Mar-14 385772 17-Mar-14 385030 17-Mar-14 386080 17-Mar-14 386396 17-Mar-14 386396 17-Mar-14 386456 18-Mar-14 387048 18-Mar-14 387048 18-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 389084 20-Mar-14 389084 20-Mar-14 389084 20-Mar-14 3890739 21-Mar-14 3900739 21-Mar-14 390091 21-Mar-14 391048 21-Mar-14 391049</td><td>16-Mar-14 385511 Beaver Crk 23411 16-Mar-14 385526 Beechwood Ln 00108 16-Mar-14 385527 Castle Way Dr 05515 16-Mar-14 385538 Golden Valley Dr 06162 17-Mar-14 385771 Midcrown Dr 08000 17-Mar-14 385772 Bloomdale 04147 17-Mar-14 385772 Bloomdale 04147 17-Mar-14 386080 Florida 00916 17-Mar-14 386380 Onslow 01347 17-Mar-14 386380 Houston St W 03722 17-Mar-14 38689 Harvest Bend 13543 18-Mar-14 387048 Franciscan E 001/1 18-Mar-14 387952 Dur St 00804 19-Mar-14 387952 Westfield Dr 07231 19-Mar-14 387952 Westfield Dr 07231 19-Mar-14 388100 Crystal 01131 19-Mar-14 38904 Goliad Rd 02803 20-Mar-14 38904 Goliad Rd 02803 20-Mar-14 390739 Brady Blvd 012/1 21-Mar-14 39049</td><td>In-Mar.14 38511 Bewer CR: 23411 Sewer Backup / W/D SvC / Peggr: 482-883 Id-Mar.14 385252 Beedwood in 00008 Sewer Backup / Har Opened Clanoot – Lina At (512) 461-9924 Id-Mar.14 385538 Golden Valley Dr 06162 Sewer Backup / Parita Svc - Neighbor Also Has Sewer Coming Drom Backyard Into His Prop // Matthew 995-0889 IJ-Mar.14 385571 Midrown Dr 08000 Investigae Sewer Door Flow, Claims Sewage Coming Out Of Manhole City Of San Antrono (Kakoyaki) IJ-Mar.14 385772 Bioondale D147 Sewer Back UP - Customer States Saws Was Digging In The Alley IJ-Mar.14 385774 Bioondale D147 Sewer Back UP - Customer States Sawer Back UP - Parital Cakoyacki) IJ-Mar.14 385775 Bioondale D147 Sewer Back UP - Parital Service Was Told By Plumber On Saws Side (Kimberly Reed @ 512- 934-3046) IJ-Mar.14 38558 Inversite Saw All Societ Sawer Back UP Natital Service Was Told By Plumber On Saws Side (Kimberly Reed @ 512- 934-3046) IJ-Mar.14 38559 Inversite Saw All Societ Sawer Back UP No Service Call Societ Sawar Back UP Note 1498 Societ Sawar Back UP No Service Face Savar Back UP No Service Savar Back UP No Service Resavar Back UP No Service Resavar Back UP No</td></td<>	16-Mar-14 385511 16-Mar-14 385526 16-Mar-14 385527 16-Mar-14 385527 16-Mar-14 385538 17-Mar-14 385632 17-Mar-14 385771 17-Mar-14 385772 17-Mar-14 385030 17-Mar-14 386080 17-Mar-14 386396 17-Mar-14 386396 17-Mar-14 386456 18-Mar-14 387048 18-Mar-14 387048 18-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 387052 19-Mar-14 389084 20-Mar-14 389084 20-Mar-14 389084 20-Mar-14 3890739 21-Mar-14 3900739 21-Mar-14 390091 21-Mar-14 391048 21-Mar-14 391049	16-Mar-14 385511 Beaver Crk 23411 16-Mar-14 385526 Beechwood Ln 00108 16-Mar-14 385527 Castle Way Dr 05515 16-Mar-14 385538 Golden Valley Dr 06162 17-Mar-14 385771 Midcrown Dr 08000 17-Mar-14 385772 Bloomdale 04147 17-Mar-14 385772 Bloomdale 04147 17-Mar-14 386080 Florida 00916 17-Mar-14 386380 Onslow 01347 17-Mar-14 386380 Houston St W 03722 17-Mar-14 38689 Harvest Bend 13543 18-Mar-14 387048 Franciscan E 001/1 18-Mar-14 387952 Dur St 00804 19-Mar-14 387952 Westfield Dr 07231 19-Mar-14 387952 Westfield Dr 07231 19-Mar-14 388100 Crystal 01131 19-Mar-14 38904 Goliad Rd 02803 20-Mar-14 38904 Goliad Rd 02803 20-Mar-14 390739 Brady Blvd 012/1 21-Mar-14 39049	In-Mar.14 38511 Bewer CR: 23411 Sewer Backup / W/D SvC / Peggr: 482-883 Id-Mar.14 385252 Beedwood in 00008 Sewer Backup / Har Opened Clanoot – Lina At (512) 461-9924 Id-Mar.14 385538 Golden Valley Dr 06162 Sewer Backup / Parita Svc - Neighbor Also Has Sewer Coming Drom Backyard Into His Prop // Matthew 995-0889 IJ-Mar.14 385571 Midrown Dr 08000 Investigae Sewer Door Flow, Claims Sewage Coming Out Of Manhole City Of San Antrono (Kakoyaki) IJ-Mar.14 385772 Bioondale D147 Sewer Back UP - Customer States Saws Was Digging In The Alley IJ-Mar.14 385774 Bioondale D147 Sewer Back UP - Customer States Sawer Back UP - Parital Cakoyacki) IJ-Mar.14 385775 Bioondale D147 Sewer Back UP - Parital Service Was Told By Plumber On Saws Side (Kimberly Reed @ 512- 934-3046) IJ-Mar.14 38558 Inversite Saw All Societ Sawer Back UP Natital Service Was Told By Plumber On Saws Side (Kimberly Reed @ 512- 934-3046) IJ-Mar.14 38559 Inversite Saw All Societ Sawer Back UP No Service Call Societ Sawar Back UP Note 1498 Societ Sawar Back UP No Service Face Savar Back UP No Service Savar Back UP No Service Resavar Back UP No Service Resavar Back UP No
Appendix P

SAWS Grease Reduction Program

Grease Trap Maintenance Procedures & Cleaning Logs

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Grease Trap Maintenance Procedures

Cleaning Logs

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Best Management Practices for Commercial Food and Restaurant Facilities

Train kitchen staff and other employees about how they can help ensure BMPs are implemented. *Reason: People are more willing to support an effort if they understand the basis for it. Benefit: All of the subsequent benefits of BMPs will have a better chance of being implemented.*

Post "No Grease" signs above sinks and on the front of dishwashers. *Reason:* Signs serve as a constant reminder for staff working in kitchens.

Benefit: This will help minimize grease discharge to traps or interceptors and reduce the cost of cleaning and disposal.

"Dry wipe" pots, pans, and dishware prior to dishwashing.

Reason: By dry-wiping and disposing in the garbage, the material will not be sent to grease traps. **Benefit:** This will reduce the amount of material collected in the grease trap or interceptors, and will lessen cleaning and maintenance costs.

Dispose of food waste by recycling and/or solid waste removal.

Reason: To divert food wastes away from grease traps or interceptors. **Benefit:** Recycling or solid waste disposal will reduce the frequency and cost of grease trap and interceptor cleaning.

Recycle waste cooking oil.

Reason: Cooking oil that ends up grease trap or interceptors will have to be pumped, costing businesses money. **Benefit**: Some companies pay to haul used cooking oil and make it into new products.

Cover outdoor grease and oil storage containers.

Reason: Rainwater into open containers can cause an overflow onto the ground leading to storm water collection systems, creeks, and streams. **Benefit:** Avoidance of polluting streams, creeks and other water bodies.

Routinely clean kitchen exhaust system filters.

Reason: If grease and oil escape through the kitchen exhaust system, it can accumulate on exterior surfaces, eventually entering the storm drain system when it rains.

Benefit: Minimizes the chance of grease related fires and the likelihood of grease entering nearby water bodies.

Do not pour grease down the sinks or into toilets.

Reason: Grease poured into a toilet or sink can congeal, clogging sewer pipes and cause backups. **Benefit:** Lower plumbing bills and no loss of business due to sewer backups.

Avoid or limit the use of garbage disposals.

Reason: Garbage disposals grind large food particles into small pieces. These pieces can fill up a grease trap or interceptor causing backups or may require more frequent pump outs of the grease trap.

Benefit: No sewer backups and less money spent cleaning out the grease trap or interceptor.

Clean under-sink grease traps weekly. If traps are more than 25% full when cleaned weekly, the cleaning frequency should be increased.

Reason: Weekly (or more frequent) cleaning of the grease trap by the facilities own staff will reduce maintenance cost and lower the risk of backups.

Benefit: Cleaning under-sink grease traps frequently will reduce the frequency and cost of grease interceptor cleaning.

Use a three-sink compartment dishwashing system, including sinks for washing, rinsing, and sanitizing. *Reason: The three-sink system uses water less than 140°F, whereas a mechanical dishwasher requires a minimum temperature of 160°F.*

Benefit: The facility will reduce energy costs for heating the water and operating the dishwasher.

Use strainers in sinks to catch food scraps and other solids.

Reason: Catching food particles before they enter the drain lines and grease trap or interceptor prevent possible plumbing issues. **Benefit:** Lessens the likelihood sewer backups from clogged lines and more frequent grease trap or interceptor pump outs due to solids taking up space.

Keep a maintenance log on grease trap or interceptors maintenance.

Reason: Maintenance log will tell you when the grease trap or interceptor is due for its next cleaning. **Benefit:** The facility will know when grease traps or interceptors need to be serviced and can plan accordingly. Also, it is a San Antonio Ordinance that all grease traps or interceptors have a record of maintenance and cleanings, regardless of size.



Fats, Oils and Grease Best Management Practices Training Record

Date of Training	Name of Employee	Hours of training	Location of Training

All new and existing employees are to attend training on the importance of keeping



Fats Oils and Grease Best Management Practices Observation Checklist for Restaurants

Approved BMPs for Restaurants:	Yes	No	N/A
 Train kitchen staff and other employees about how they can help ensure BMPs are implemented. Post "No Grosse" signs about sights and on the front of 			
dishwashers.			
3. "Dry wipe" pots, pans, and dishware prior to dishwashing.			
4. Dispose of food waste by recycling and/or solid waste removal.			
5. Recycle waste cooking oil.			
6. Cover outdoor grease and oil storage containers.			
7. Routinely clean kitchen exhaust system filters.			
8. Do not pour grease down the sinks or into the toilet.			
9. Avoid or limit the use of garbage disposals.			
10. Clean under sink grease traps weekly. If grease is more than			
25% full when cleaned weekly, the cleaning frequency should be increased.			
11. Use a 3-sink compartment dishwashing system, including sinks for washing, rinsing and sanitizing.			
12. Use strainers in sinks to catch food scraps and other solids.			
13. Keep a maintenance log on grease interceptor/trap			

Signature of Owner/Manager:

Date of Observation:



Tips on grease trap/interceptor cleaning frequency

It is important to clean your grease trap/interceptor regularly to prevent fats, oil and grease (FOG) in water that is discharged to the sewer. The *minimum cleaning frequency* required for grease traps/interceptors in food service facilities is *90 days*. However, more frequent cleaning intervals may be necessary to prevent your grease trap/interceptor from operating poorly or improperly.

FOG can have a detrimental impact on not only your facility, but the environment as well. FOG clogged lines can back sewage up into your establishment and overflow out of manholes in parking lots and streets.

If you can see floating grease or grease deposits in a cleanout 'downstream' of your trap/interceptor, you need to increase the cleaning frequency to a more regular basis.

Tips on routine maintenance

- It is recommended that a professional service be used to ensure proper maintenance.
- Since grease traps/interceptors may have an unpleasant odor it is recommended that you have them cleaned prior to patrons visiting you establishment.
- Use Allen screws for securing the lid of your trap/interceptor instead of the conventional Phillips or slot screws. Phillips or slot screws may become stripped over time.
- Keep an extra gasket for your grease trap/interceptor's lid on site to prevent leaks and odors in the event of a gasket failure.
- Develop and keep a grease trap/interceptor cleaning procedure and maintenance log sheet posted near the grease trap/interceptor to encourage employees to follow procedures and to promote proper documentation after each cleaning.
- Facilities experiencing high employee turnover or other factors making regular trap/interceptor maintenance difficult should consider using a professional service.
- Keep cleaning documentation for a period of not less than five years.

Tips on cleaning your grease interceptor (less than 100 gallons)

- Prior to cleaning a grease interceptor (less than 100 gallons), let ice melt into the sink connected to the device. This will reduce odors and cause the grease to congeal, making grease removal easier.
- Remove grease periodically (weekly or more often is suggested), using a scoop. Remove only the grease and leave the water behind.
- At a minimum, clean and empty the entire contents of the grease interceptor once a month.
- Remove the grease, water, and any accumulated sludge on the bottom of the interceptor.
- Remove the cleanout at the end of the grease interceptor and perform a visual inspection to check for any grease deposits/build up inside the pipe.
- Clean any greasy deposits from the piping so you can tell when new grease deposits form, and flush with hot soapy water before closing the cleanout.
- Make sure the flow directing baffles inside your grease interceptor are properly replaced after each cleaning. Some of this information above is courtesy of the City of San Jose



Grease Trap/Interceptor Maintenance Procedure

Grease Interceptor maintenance must be conducted a minimum of every ninety (90) days or more frequently if the unit has accumulated waste, both floatable and settleable, accounting for 25% of its wetted depth, as measured from the static water level to the interior tank bottom.

The grease interceptor shall be left completely empty upon completion of maintenance. All floating grease, liquids, sludge, and scrapings from the interceptor must be removed.

Under no circumstances may the waste hauler reintroduce the removed water or materials into the City's sewer system, other than at approved disposal stations. *Flushing an interceptor with hot water or the use of chemicals or other agents to dissolve or emulsify grease and allow it to flow into the wastewater treatment system is prohibited.*

Since the establishment is the generator of the grease waste and is liable for the condition of their pretreatment devices, the owner of the establishment or his designee may want to witness all cleaning/maintenance activities to verify that the grease interceptor is being fully cleaned and properly maintained.

Cleaning Grease Traps (greater than 100 gallons)

- Pump all grease and other floating material from the top of the interceptor. The interceptor may need to be agitated slightly to loosen the grease layer.
- Insert the vacuum tube all the way to the bottom the interceptor to remove all settled solids.
- Vacuum water out of the interceptor.
- Clean the sides and bottom of the interceptor. This may be done by "back flowing" the water from the pump truck or by using a pressurized water source to hose down the interceptor.
- Make sure the interceptor is completely clean.
- Vacuum remaining water out of the trap.
- Check that the sanitary T's on the inlet and outlet sides of the interceptor are not clogged or loose.
- Make sure any baffles are secure and in place.
- Inspect the interceptor for any cracks or defects.
- Check that lids are securely and properly seated after completion of maintenance.
- Provide a receipt or other documentation to the facility owner for their records.

Cleaning Grease Interceptors (less than 100 gallons)

- Bail out any water in the trap. The water may be discharged into the sanitary sewer system.
- Remove the baffles, if possible.
- Dip the accumulated grease out of the interceptor and deposit in a watertight container.
- Scrape the sides, lid and baffles with a putty knife to remove as much of the grease as possible, and deposit in a watertight container.
- Contact a hauler or recycler for grease pick up or place in trash for pick up.
- Replace the baffle and the lid.
- Record the date, employee name and volume of grease removed on the record keeping log.



Grease Interceptor Cleaning Record (greater than 100 gallons)

Business Na	ame:													
Address:									Ph	one:				
Size of Grea	ase Inter	ceptor	(gal):						EPS Initials:					
Date of Service	Initials Emplo Inspec Clean	s of yee ting ing		Name of Clea	ining Se	rvice		Initials of Cleaning Service Employee	Gallons Pumped	Add	itional Co	mmer	nts/Manife	est #
I certify that th accurate, and during an insp	his docun l complet pection b	nent wa e. All re y the Sa	as prepare ecords of n an Antonic	d under my directio naintenance and cle Water System ma	n or supe eaning sh y result ir	ervision. The in nall be retained n fines or other	formation for 3 ye penaltion	on submitted i ears. Failure t es.	s, to the best to provide cop	of my kr bies of m	nowledge a aintenanc	and be e and	lief, true, cleaning lo	ogs
Name:								Title:						
Signature:								Date:						
Schedule Reminder:		Januar Julv	ry	E February		March September	Γ	April		May Noven	nber		June Decemb	er
						2001001								



Grease Interceptor Cleaning Record (less than 100 gallons) 1st Quarter

Business Na	ame:								
Address:							Ph	one:	
Size of Grea	ase Inter	cepto	or (gal):				EPS Initials:		
Date of Service	Initials Emplo Inspec Clean	s of yee cting iing	Na	me of Cleaning Service or Employee	aning Service or Employee Initials of Cleaner		Gallons Pumped		Additional Comments
				· · · · · · · · · · · · · · · · · · ·					
I certify that t accurate and during an ins	his docur complete pection b	ment w e. All r by the \$	vas prepare ecords of r San Antoni	ed under my direction or supervision. The in naintenance and cleaning shall be retained o Water System may result in fines or other	formati for 5 ye r penalti	on submitte ears. Failure ies.	d is, to the be e to provide c	st of my opies of	/ knowledge and belief, true, maintenance and cleaning logs
Name:						Title:			
Signature:						Date:			
Schedule Reminder:		Jai	nuary	E February March					



Grease Interceptor Cleaning Record (less than 100 gallons) 2nd Quarter

Business Na	me:									
Address:								Pho	ne:	
Size of Grea	se Inter	ceptor	r (gal):				EPS Ini	tials:		
Date of Service	Initials Emplo Inspec Clean	s of yee ting ing	Na	me of Cleaning Service o	f Cleaning Service or Employee Initials Cleane		Gallo Pump	ns oed		Additional Comments
I certify that th accurate and during an insp	nis docum complete pection by	nent w e. All re y the S	as prepare ecords of m San Antonic	d under my direction or sup- naintenance and cleaning sh o Water System may result i	ervision. The information nall be retained for 5 in fines or other pena	ation submitteo years. Failure Ilties.	d is, to the to provid	best o e copie	f my kno s of mai	owledge and belief, true, intenance and cleaning logs
Name:						Title:				
Signature:						Date:				
Schedule Reminder:		Ар	ril	🗌 May	June					



Business Nar	ne:			^		~					
Address:									Ph	one:	
Size of Greas	e Interd	ceptor	(gal):						EPS Initials:		
Date of Service	Initials Emplo Inspec Clean	s of yee cting ing	N	ame of Cleanii	ng Service	or Employ	/ee	Initials of Cleaner	Gallons Pumped		Additional Comments
I certify that thi and complete. inspection by the	s docum All recor he San A	nent wa rds of r Antonic	as prepared naintenand Water System	d under my dire te and cleaning stem may result	ction or sup shall be ret t in fines or	pervision. Th tained for 5 other penal	ne informatio years. Failu Ities.	n submitted is, re to provide co	to the best of opies of mainte	my know enance a	ledge and belief, true, accurate nd cleaning logs during an
Name:								Title:			
Signature:								Date:			
Schedule Reminder:		Jul	У	🗌 Aug	gust	🗌 Se	ptember				

Grease Interceptor Cleaning Record (less than 100 gallons) 3rd **Quarter**



Grease Interceptor Cleaning Record (less than 100 gallons) 4th Quarter

Business Na	me:								
Address:							Pho	one:	
Size of Grea	se Interd	ceptor	(gal):				EPS Initials:		
Date of Service	Initials Emplo Inspec Clean	s of yee ting ing	Na	me of Cleaning Service or	Cleaning Service or Employee Initials of Cleaner		Gallons Pumped	Additiona	I Comments
I certify that th and complete inspection by	nis docum . All recor <u>the San /</u>	nent wa rds of m Antonio	is prepared naintenanc Water Sys	under my direction or supervie and cleaning shall be retained tem may result in fines or othe	ision. The informatio ed for 5 years. Failu er penalties.	n submitted is re to provide (s, to the best of copies of mainte	ny knowledge and b nance and cleaning	belief, true, accurate logs during an
Name:						Title:			
Signature:						Date:			
Schedule Reminder:		Oct	tober	November	_ December				



Kitchen Exhaust System Filter Cleaning Record

Business Na	me:											
Address:									Phone:			
Size of Grea	se Intercer	otor (gal):						EPS Initia	als:	·		
Date of Service	Initials o Employe Inspectin Cleaning	nf ne N g	ame of Cleaning S	Service or	Employee		Initials of Cleaning Service Employee	Gallon: Pumpe	s A	dditional C	Comments/Manifes	st #
I certify that th and complete inspection by	iis documer . All records the San Ant	nt was prepare of maintenan tonio Water Sy	d under my direction ce and cleaning shal /stem may result in fi	or superv I be retain ines or oth	vision. The info ned for 5 years ner penalties.	ormation . Failure	submitted is, to provide co	to the best opies of ma	t of my kr aintenanc	nowledge ar e and clear	nd belief, true, accu ning logs during an	rate
Name:							Title:					
Signature:							Date:					
Schedule Reminder:	Jai	nuary y	February		March September		April	er[May Nov	, ember_	June	r





SAWS Annual Grease Interceptor Certification Checklist

Yes	No	
		Interceptor is completely clean and the entire contents removed
		during service.
	Comments:	
		Sanitary "T's" on the inlet and outlet sides of the interceptor compartments are not clogged, loose, or damaged.
	Comments:	
		All baffles are secure and in place.
	Comments:	
		Interceptor does not have cracks or defects (walls and floor).
	Comments:	
		Interceptor sample box or clean out (if equipped) was opened and cleaned.
	Comments:	
		Manhole covers are securely and properly seated after completing cleaning.
	Comments:	
		Storm drains are protected from fats, oil and/or grease. (Only rainwater belongs in the storm drain system)
	Comments:	
		Record of interceptor cleaning is on location and updated.
	Comments:	
		Photo documentation of all inlets and outlet fittings, internal baffles, walls, floor and all other internal structures are attached to this document.
	Comments:	
L certify ur	der penalty of law that this	document and was prepared under my direction or supervision in

ify under penalty of law that this document and was prepared under my direction or supervision in accordance with system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware of penalties for submitting false information, including fines.

 Food Service Name:

 Interceptor Inspection Date:

Plumbing/Qualified Professional Name, Business Name, Address and Phone # & Plumbing License or Qualified Professional #:

Attach photographs of corrections to this checklist. Deficiencies must be corrected on or before next scheduled pump out. Date deficiencies were corrected:

SAWS use only: NSIU #



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Appendix Q

FOG Question & Information Form

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San	<u>AN ANTONIO V</u>	VATER SYS	<u>TEM</u>	
Antonio Water	Resource Com	pliance Division	NSIU #	
System	<u>Q&I </u>	Form		
Site ID #	Initial Inspection / C	Compliance Follow	-Up Date:	
Company Name:	<u>G</u>	<u>roup</u> :	<u>Strip Center</u> : Ye	s/ No
Physical Address:	Zip Cod	e:	Owner:	
Phone #: Hours of (S M I Operation: <u>I I</u>		Principle Activity:	
Log #: SIC	#:	Spray Noz	zle: <u>Yes / No</u> GM Po	ster: <u>Yes / No</u>
WRC Plant:	NAICS:		-	
Grid #:	Water Purve	yor / Acct #:		
Pretreatment device used for	or wastewater disch	arge:		
Grease Trap: Yes/ No Siz	ze:	Sump: Yes/ No	Size:	
Sample Point: Yes/ No Ty	′pe: S	Size:	Dye Testing: Ye	s/ No
Security box needed: Yes/ No	Can sam	oler be secured v	vith chain: Yes/ No	
Waste hauler Information				
Licensed waste hauler used? Ye	s/ No Waste haule	er license #:		
Manifests copies retained? Yes/	No Date / Log #	last manifest:	//	
Pumping Schedule:	Sludge L	evel Formula= <u>I</u>	nches in SJ x 100 = $^{0}/_{0}$) Solids
(Inches of Oil) (Inche	s of Solids)	(Total Depth) _	Total Inches	
Sample: 1x FOG 4x	FOG TC24H	Site Visit	t/no sample (Cl	RCLE ONE)
Miscellaneous Information				
Sample Point Location:				
Industry Representative:			DATE:	-
Environmental Protection Special	list:		DATE:	_
Tracking:				
Lab results returned (date)/ F.O.C F.O.G (mg/l) Limits	3. NOV le s exceeded	etter sent (date)	Return Correspondence Rc'd (Date)	Violation #
mg/l Yes/	No			123456

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Appendix R

SAWS Grease Reduction Program Enforcement Response Guide

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ENFORCEMENT RESPONSE GUIDE

PART

Non- Significant Industrial Users (FSEs/FPEs)

- I. Sec. 34-526. Interceptors
- II. Sec. 34-527. Maintenance
- III. Sec. 34-528. Recordkeeping
- IV. Sec. 34-531. Enforcement
- V. Legend

* NOTE: This is a guidance document only. Particular circumstances may dictate another response or course of action.



ENFORCEMENT RESPONSE GUIDE NON-SIGNIFICANT INDUSTRIAL USERS Food Service Establishments/Food Processing Establishments

Noncompliance	Nature of Alleged Violation	Response Steps	<u>Personnel</u>
I. Interceptor			
FSE/FPE does not have an Interceptor	FSE/FPE does not have or has remove the interceptor	 NOV 180day to install Refer to Environmental Counsel 	E,S S
II. Maintenance			
Interceptor pumping	Greater than 90 days has passed	1. NOV requiring	E,S
	between interceptor pumpings	2. Refer to Environmental Counsel	S
Interceptor	A stick reading determined that the intercenter has $> 25\%$ of ells	1. Field Advisory Notice 2 workdays	E,S
>23 % SUIUS AND UIS	and solids in its wetted height	2. Refer to Environmental Counsel	S
Less than 120 days/year	FSEs/FPEs that operate <120days/year	1. NOV 90 days to correct	E,S
	frequency of interceptor cleaning		5
Interceptor >100gals	No licensed waste hauler	1. NOV 90 days to correct	E,S
		2. Refer to environmental courser	3
Interceptor <100gals	No licensed waste hauler or cleaning logs	 NOV with re-inspection Refer to Environmental Counsel 	E,S S
Interceptor inspection	No annual inspection and/or photographs	Refer to Environmental Counsel	S



III. Recordkeeping

No Quarterly manifest	FSE/FPE does not have any record of interceptor pumping	Refer to Environmental Counsel	S
Manifest/Records off site	No letter of approval from SAWS to store manifest/Records off site	NOV to receive approval to manifest/records off site	S
BMP issues	FSE/FPE is not implementing all BMPs	 Refer to Customer Service Refer to Environmental Counsel 	S S
IV. Enforcement			
Access to Premises	FSE/FPE does not allow SAWS to enter the facility to perform inspections	NOV with follow up visit with LEO	S



V. LEGEND

NSIU - Non Significant Industrial User NOV - Notice of Violation D - Director M - Manager S - Supervisor E -Environmental Protection Specialist FSE/FPE - Food Service Establishment/Food Processing Establishment

TIMEFRAMES FOR RESPONSES

- A. All violations will be identified and documented within thirty days of receiving compliance information.
- B. Initial enforcement responses (involving contact with non-significant industrial user[s] and requesting information on corrective or preventive action[s]) will occur within thirty days of violation detection.
- C. Follow up actions for continuing or recurring violations will be taken within sixty days of the initial enforcement response. For all continuing violations, the response will include a compliance schedule.
- D. Violations which threaten health, property or environmental quality are considered emergencies and will receive immediate responses such as suspension or termination of service.
- E. Administrative enforcement responses include and are not limited to notice of violations and compliance schedules.
- F. Civil enforcement responses include and are not limited to consent orders, compliance orders, settlement agreements, emergency suspension, cease and desist orders, injunctive relief and termination of discharge.
- G. Criminal enforcement responses include those which seek criminal prosecution of non-significant industrial users for whom which evidence of negligence, willfulness, or bad faith have been determined by SAWS Environmental Counsel.



Appendix S

City of San Antonio Plumbing Code

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AN ORDINANCE 2011 - 12 - 01 - 0984

REPEALING CHAPTER 10 OF THE SAN ANTONIO CITY CODE, ENTITLED "ELECTRICAL" AND ADOPTING A NEW CHAPTER 10 ENTITLED "BUILDING-RELATED CODES OF THE CITY OF SAN ANTONIO"; CONSOLIDATING THE FOUR BUILDING-RELATED AND FIRE CODE APPELLATE BOARDS INTO ONE APPEALS AND ADVISORY BOARD; ADOPTING THE 2012 TECHNICAL BUILDING-RELATED CODES AND LOCAL AMENDMENTS; AND PROVIDING FOR PENALTIES, PUBLICATION AND AN EFFECTIVE DATE.

* * * * *

WHEREAS, as an efficiency and effectiveness measure, Councilwoman Ramos initiated a City Council Request (CCR) on July 6, 2011, directing the Development Services Department to review processes and prepare a proposed ordinance consolidating the various building-related codes administrative provisions into one chapter and consolidating the various appellate boards into one board whose members are appointed at large; and

WHEREAS, in response to the CCR, the Development Services Department, as part of the triennial review process for technical code adoption and amendment, took this request through its various technical boards, conducting public meetings regarding the newly published 2012 editions of the International Building Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Existing Building Code, International Fuel Gas Code, and the 2008 edition of the National Electrical Code, and local amendments, and consolidating the various appellate and advisory boards, as well as City Code chapters; and

WHEREAS, the Building and Fire Codes Board of Appeals, the Mechanical Appeals and Advisory Board, the Plumbing and Fuel Gas Appeals and Advisory Board, the Electrical Board, and the Development Services Department recommend approval and adoption of the codes, local amendments, as well as consolidation of the various appellate and advisory boards and City Code chapters; and

WHEREAS, as part of the review process, this initiative was forwarded through the Cit y Council Governance Committee and the Infrastructure and Growth Committee for review, receiving recommendation to proceed to City Council; and

WHEREAS, in order to effectuate a consolidated appeals and advisory board, it is necessary to dissolve the existing Building and Fire Codes Board of Appeals, the Mechanical Appeals and Advisory Board, the Plumbing and Fuel Gas Appeals and Advisory Board, and the Electrical Board, repeal the Ordinances establishing the various boards, and create a new 17-member board named the "Building-related and Fire Codes Appeals and Advisory Board", with improved efficiencies and consolidated responsibilities, advising the Development Services and Fire

Departments on combined technical code related issues as well as fielding technical code appeals; and

WHEREAS, all statutory and Charter prerequisites for adoption of the various codes and local amendments have been satisfied; NOW THEREFORE:

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:

SECTION 1.

- a. Chapter 10, Electrical, of the City Code of San Antonio, Texas, is repealed, and replaced with a new Chapter 10 entitled "Building-related Codes of the City of San Antonio", attached to this Ordinance as Attachment 1.
- b. Chapter 6, Article III entitled "Building Code," Article V entitled "Mechanical Code," Article VI entitled "House Moving," Article VII entitled "Relocation of Buildings," Article XIII entitled "International Residential Code," Article XIV entitled "Demolition Contractor Licenses and Bonding and Demolition Permit Requirements," Article XV entitled "International Energy Conservation Code," are repealed.
- c. Chapter 16, Article IV entitled "Home Improvement Contractor Registration," Article XVI entitled "Local Registration of State Registered Homebuilders," Article XV entitled "Irrigation Systems and Irrigators," are repealed.
- d. Chapter 24 entitled "Plumbing and Fuel Gas Code" is repealed.

SECTION 2. The Building and Fire Codes Board of Appeals, the Mechanical Appeals and Advisory Board, the Plumbing and Fuel Gas Appeals and Advisory Board, and the Electrical Board are abolished. Ordinances establishing the boards, including Ordinance No. 2009-10-01-0776 (fire), passed and approved on October 1, 2009, Ordinance Nos. 2009-10-01-0777A, B, C and E (IRC, IBC, IMC, IPC), all passed and approved on October 1, 2009 are repealed.

SECTION 3. The "Building-related and Fire Codes Appeals and Advisory Board" is established as detailed under Sec. 10-14. "Building-related and Fire Codes Appeals and Advisory Board" of this Ordinance.

SECTION 4. All previous provisions of the 2009 International Fire Code, International Fuel Gas Code, International Building Code, International Existing Building Code, International Residential Code, International Plumbing Code, and International Mechanical Code as well as the 2008 National Electrical Code and the 2009 International Energy Conservation Code with local amendments as adopted by the City of San Antonio, Texas, remain in full force and effect during the period for which they were enacted. Three copies of these codes and local amendments are filed in the office of the City Clerk, pursuant to section 17 of the Charter for permanent record and inspection.

SECTION 5. Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this ordinance, or any appendix, for any reason be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision in this Ordinance be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and

valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

SECTION 6. There is no finan cial impact as a result of the passage of this ordinance.

SECTION 7. No other provision of the City Code is amended by this Ordinance. All other provisions remain in effect.

SECTION 8. The City Clerk for the City of San Antonio is directed to publish notice of this ordinance in a newspaper published in the City of San Antonio, Texas, as required by Article 2, Section 17 of the City Charter of San Antonio, Texas.

SECTION 9. The publishers of the City Code of San Antonio are authorized to amend said Code to reflect the changes adopted in this Ordinance, to correct typographical errors and to index, format and number paragraphs to conform to the existing code.

SECTION 10. This ordinance is effective on the 1st day of March, 2012.

PASSED AND APPROVED this 1st day of December, 2011.



ATTEST:

cia M. Vadek, City Clerk

APPROVED AS TO FORM:

Michael D. Bernard, City Attorney



Agenda Voting Results - 9

Name:	9						
Date:	12/01/2011						
Time:	10:12:25 AM						
Vote Type:	Motion to Approve						
Description:	An Ordinance repealing Chapter 10, Electrical, of the City Code of San Antonio, Texas, and creating a new Chapter 10, Building-Related Codes of the City of San Antonio in order to consolidate the administrative and technical provisions for all of the building-related codes into one chapter, to consolidate the four building-related and fire codes appellate boards into one appeals and advisory board, to adopt the technical building-related codes and local amendments, and to provide for penalties and an effective date. [T.C. Broadnax, Assistant City Manager, Roderick Sanchez, Director, Development Services].						
Result:	Passed						
Voter	Group	Not Present	Yea	Nay	Abstain	Motion	Second
Julián Castro	Mayor		x				
Diego Bernal	District 1		x				
Ivy R. Taylor	District 2		x				
Jennifer V. Ramos	District 3		x				
Rey Saldaña	District 4		x				
David Medina Jr.	District 5		x				
Ray Lopez	District 6	Х					
Cris Medina	District 7		x				
W. Reed Williams	District 8		x			x	
Elisa Chan	District 9		x				
Carlton Soules	District 10		x				X

ATTACHMENT 1

Chapter 10

BUILDING-RELATED CODES OF THE CITY OF SAN ANTONIO

TABLE OF CONTENTS

Art. I	Administration and General	§§ 10-1 –10-24
Art. II	Definitions	§§ 10 -25 – 10-28
Art. III	Building Code	§§ 10-29-10-35
Art. IV	Residential Code	§§ 10-36 - 10-45
Art. V	Existing Building	§§ 10-46- 10-50
Art. VI	Electrical	§§ 10-51 - 10-60
Art. VII	Mechanical	§§ 10-61 - 10-70
Art. VIII	Gas	§§ 10-71- 10-80
Art. IX	Plumbing	§§ 10-81 - 10-90
Art. X	Energy	§§ 10-91 - 10-100
Art. XI	Fire	§§ 10-101 - 10-110
Art. XII	Licensing and Registration	§§ 10-111 - 10-120
• Billboard	§§ 10-111	
Commercial sign operators license		§§ 10-112
• Electrical	contractors and electrical sign contractors, in-	00
stallers, m	§§ 10-113	
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Art. XIII	Signs and Billboards	88 10-125 - 10-150

ARTICLE I. ADMINISTRATION AND GENERAL

Sec. 10-1. Title of chapter; designation of Building Official.

- (a) This chapter is the *Building-related Codes*. Unless otherwise indicated by its use and context, the term "this chapter" refers to this chapter 10 including all provisions incorporated by reference in this chapter.
- (b) The *Building Official* shall be known as the Director of Development Services, and such term shall include his authorized representatives. Further, whenever the

term or title "administrative authority," "code official," "authority having jurisdiction," "responsible official," "*Building Official*," "director" or other similar designation is used in any of the codes adopted by this chapter, it shall be construed as the Director of Development Services, or his designee and authorized representatives.

Sec. 10-2. Purpose and scope of chapter; referenced codes.

(a) **Purpose.** This chapter shall be construed to secure its expressed intent, which is to provide minimum requirements to safeguard the public safety, health and general welfare, insofar as they are affected by building construction, through structural strength, adequate means of egress facilities, stability, sanitary equipment, light and ventilation, energy conservation, fire safety, and in general to promote safety to life and property from fire and other hazards incident to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, repair, location, relocation, moving, quality of materials or use and occupancy, maintenance and operation of building, structures or premises, and to provide safety to fire fighters and emergency responders during emergency operations.

The purpose of this chapter is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this chapter.

- (b) *Scope.* Article I of this chapter provides the administrative procedures to be followed by all persons engaged in the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, location, relocation, land disturbance, moving, quality of materials, or use and occupancy, maintenance and operation of buildings, structures or premises, as regulated by this chapter. All references to any provisions in the administrative chapters of the referenced model codes are construed to be a reference to the provisions of Article I unless otherwise noted.
- (c) *Referenced codes.* The other codes and standards listed in sections (1) through
 (6) and referenced elsewhere in this chapter are considered part of the requirements of this chapter to the prescribed extent of each such reference.
 - (1) **Building.** The provisions of the International Building Code, as amended, apply to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, repair, location, relocation, land disturbance, moving, quality of materials, or use and occupancy of every building or structure or any appurtenances connected or attached to such buildings or structures. See Article II through Article IX of this chapter.

Exceptions:

- a. Detached one- and two-family dwellings and multiple single family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the *International Residential Code*, as amended. See Article IV of this chapter.
- b. Existing buildings and structures undergoing repair, alteration, change of occupancy, addition and/or relocation of existing buildings shall be permitted to comply with the *International Existing Building Code*, as amended. See Article V of this chapter.
- c. Live/work units complying with the requirements of Section 419 of the *International Building Code*, as amended, shall be permitted to be built as one- and two-family dwellings and townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to Section P2904.
- d. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the International *Residential Code for One- and Two-family Dwellings* when equipped with a fire sprinkler system in accordance with Section P2904.
- (2) *Electrical.* The provisions of the *National Electrical Code*, as amended, shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto. See Article VI of this chapter.
- (3) *Mechanical.* The provisions of the *International Mechanical Code*, as amended, shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators, and other energy-related systems. See Article VII of this chapter.
- (4) **Gas.** The provisions of the International Fuel Gas Code, as amended, shall apply to the installation of fuel gas piping from point of delivery, fuel gas appliances, gaseous hydrogen systems and related accessories as covered in this code. These requirements apply to fuel gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of gas appliances and related accessories. Piping system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection and operation and maintenance. See Article VIII of this chapter.

- (5) **Plumbing.** The provisions of the International Plumbing Code, as amended, shall apply to the installation, alteration, repair, relocation, addition to, use or maintenance and replacement of plumbing systems, including equipment, appliances, fixtures and fittings and appurtenances. The code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. See Article IX of this chapter.
- (6) **Energy.** The provisions of the International Energy Conservation Code, as amended, shall apply to all matters governing the design and construction of buildings for energy efficiency. See Article X of this chapter.
- (d) **Process.** The Building Official has the responsibility to make timely recommendations to update this chapter, upon the publication of nationally recognized model codes. Technical committees established by the Building-related and Fire Codes Board of Appeals shall assist the Building Official in determining recommendations for the adoption of any model code.

Sec. 10-3. Applicability.

- (a) **General.** When there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this chapter specify different materials, methods of construction or other requirements, the most restrictive shall govern.
- (b) **Other laws.** The provisions of this chapter do not nullify any provisions of local, state or federal law.
- (c) **Application of references.** References to article or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such article or section or provision of this chapter.
- (d) **Referenced codes and standards.** The codes and standards referenced in this chapter shall be considered part of the requirements of this chapter to the prescribed extent of each such reference. Where differences occur between provisions of this chapter and referenced codes and standards, the provisions of this chapter shall apply.

Exception: Where enforcement of the code provisions would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.
- (e) **Partial invalidity.** In the event that any part or provision of this chapter is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.
- (f) **Existing structures.** The legal occupancy of any structure existing on the date of adoption of this chapter shall be permitted to continue without change, except as specifically covered in this chapter, the 2009 San Antonio Property Maintenance Code or the *International Fire Code*, as amended, or as is deemed necessary to the *Building Official* for the general safety and welfare of the occupants and the public.

Sec. 10-4. Department of Development Services

- (a) **Enforcement agency.** The Department of Development Services shall be the enforcement agency for the Building-related Codes, and the Director thereof shall be known as the *Building Official* and as the code official.
- (b) **Appointment.** The *Building Official* shall be appointed by the City Manager or the City Manager's designee.

Sec. 10-5. Duties and powers of Building Official

- (a) **General.** The *Building Official* is authorized and directed to enforce the provisions of this chapter. The *Building Official* has the authority to render interpretations of this chapter and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in accordance with the intent and purpose of this chapter. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this chapter. The *Building Official* shall have the power to suspend or revoke city issued certificates of license and registration for cause.
- (b) **Application and permits.** The *Building Official* shall receive applications, review construction documents and issue permits for the erection, repair, alteration, addition, demolition, change of occupancy and relocation of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this chapter.
- (c) **Preliminary meeting under Article V.** When utilizing the *International Existing Building Code*, as amended in Article V, and when requested by the permit applicant or the *Building Official*, the *Building Official* shall meet with the permit applicant prior to the application for a construction permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this chapter.

Exception: Repairs and Level 1 alterations.

Building evaluation. The *Building Official* is authorized to require an existing building to be investigated and evaluated by a registered design professional based on the circumstances agreed upon at the preliminary meeting. The design professional shall notify the *Building Official* if any potential nonconformance with the provisions of this chapter is identified.

- (d) **Notices and orders.** The *Building Official* shall issue all necessary notices or orders to ensure compliance with the provisions with this chapter.
- (e) **Inspections.** The *Building Official* shall make all of the required inspections, or may accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and certified by a responsible officer of such approved agency or by the responsible individual. The *Building Official* is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.
- (f) **Identification.** The *Building Official* shall carry proper identification when inspecting structures or premises in the performance of duties under this chapter.
- (g) **Impersonation prohibited.** A person shall not impersonate the *Building Official* or designees through the use of a uniform, identification card, badge or any other means. Any such impersonation shall be deemed a violation of this code.
- (h) **Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this chapter, or where the *Building Official* has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this chapter which makes the structure or premises unsafe, dangerous or hazardous, the *Building Official* is authorized to enter the structure or premises at reasonable times to inspect or perform the duties imposed by this chapter, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the *Building Official* shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the *Building Official* has recourse to the remedies provided by law to secure entry.
- (i) **Notice of defects.** The *Building Official* shall examine, or cause to be examined, every building or structure or portion thereof reported as dangerous or damaged. If such is found to be unsafe as defined in this section, the *Building Official* shall give to the owner of such building or structure written notice stating the defects thereof. This notice shall require the owner or person in charge of the building, structure or premise, within 48 hours to commence either the required repairs or improvements or demolition and removal of the building or structure or portions thereof. All such work shall be completed within 30 days from the date of notice

unless otherwise stipulated by the *Building Official*. Service of notice shall be by certified mail made upon the owner or his agent. The designated period within which said owner or agent is required to comply with the order of the *Building Official* shall begin as of the date he received such notice.

- (j) **Department records.** The *Building Official* shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records are retained in the official records for the period required for retention of public records.
- (k) Liability. The *Building Official*, members and alternate members of the Building-related and Fire Codes Board of Appeals, or employees charged with enforcement of this chapter, while acting for the City of San Antonio in good faith and without malice in the discharge of the duties required by this chapter or other pertinent law or ordinance, are not liable personally and are relieved from personal liability for any damage accruing to persons or property as a result of any act, or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this chapter shall be defended by legal representative of the City of San Antonio until the final termination of the proceedings. The *Building Official* or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this chapter.
- (1) **Approved materials and equipment**. Materials, equipment and devices approved by the *Building Official* shall be constructed and installed in accordance with such approval.
 - (1) **Appliance and fixture listing.** Appliances and fixtures shall be tested and listed in published reports by approved agencies and shall be installed in accordance with all instructions included as part of such listing.
 - (2) Used materials and equipment. The use of used materials which meet the requirements of this chapter for new materials is permitted. Used equipment and devices shall not be reused unless approved by the *Building Official*.
- (m) **Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this chapter, the *Building Official* has the authority to grant modifications for individual cases, upon application of the owner or owner's representative, providing the *Building Official* first finds that special individual reason makes the strict letter of this chapter impractical, and the modification is in compliance with the intent and purpose of this chapter, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Department of Development Services.

- (n) Alternative materials, design and methods of construction and equipment. The provisions of this chapter are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this chapter, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the *Building Official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this chapter, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this chapter in qualify, strength, effectiveness, fire resistance, durability and safety.
 - (1) **Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this chapter, shall consist of valid research reports from approved sources.
 - (2) **Tests.** Whenever there is insufficient evidence of compliance with the provisions of this chapter, or evidence that a material or method does not conform to the requirements of this chapter, or in order to substantiate claims for alternative materials or methods, the *Building Official* has the authority to require tests as evidence of compliance to be made at no expense to the city. Test methods shall be as specified in this chapter or by other recognized test standards. In the absence of recognized and accepted test methods, the *Building Official* shall approve the testing procedures. Testing shall be performed by an approved agency. Reports of such tests shall be retained by the *Building Official* for the period required for retention of public records.

Sec. 10-6. Permits

- (a) **Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, to include a sign or billboard, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this chapter, who performs site work or causes any such work to be done, shall first make application to the *Building Official* and obtain the required permit. See Chapter 28, San Antonio Code, for additional permit requirements for signs and billboards.
- (b) Annual permit. In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the *Building Official* is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The

Building Official shall have access to such records at all times, or such records shall be filed with the *Building Official* as designated.

- (c) Annual electrical maintenance permit. An annual electrical maintenance permit is issued by the City to allow a property owner, property lessee or management company to employ persons qualified by this code to maintain and make minor repairs to existing electrical systems on a property that is registered with the department. An electrical maintenance permit is not required when the property owner, property lessee or management company is registered with the city as an electrical contractor or employs a master electrician of record, registered with the city as an electrical contractor, who oversees and is responsible for the electrical maintenance.
 - (1) **Registration of persons qualified to perform work.** All persons performing electrical work under this section shall be licensed or registered as required by the City or State. All electrical work performed under this permit must be performed by master electricians, journeyman electricians, maintenance electricians, or electrical maintenance technicians. Initial applicants for maintenance technicians will have to complete 8 hours of training approved by the code official.
 - (2) **Limitations of work.** Work that may be performed under this permit by an electrical maintenance technician shall be limited to the maintenance of, repair or replacement of devices or lighting fixtures, having the same characteristics as the existing devices or fixtures, in or on existing outlets and shall include, but not be limited to the following:
 - a. 120-volt receptacles of all types.
 - b. 240-volt 3-wire and 4-wire dryer and range receptacles. Replacement of these receptacles shall be limited to like configuration and amperage receptacles.
 - c. Replacement of overcurrent devices and safety switches of only the same voltage, current, ampere interrupting capacity (AIC) including:
 - 1. One or two pole circuit breakers not exceeding 60-amps at 240-volts.
 - 2. One or two pole safety switches (fused or non-fused) not to exceed 60-amps at 240-volts.
 - 3. Fuses not to exceed 60-amps at 240-volts.
 - d. Photo cells and time clocks not to exceed 277-volts nominal.

- e. Range hoods, disposals and dishwasher motors.
- f. Interior, exterior lighting and switches not to exceed 277-volts nominal.
- g. Ceiling fans on approved boxes with proper bracing.
- h. Pool lights and outlets provided they are protected with GFCI and are replaced with same.
- i. Doorbell transformers and wiring to other low voltage devices with 120-volt connections.
- j. Bathroom-type exhaust vents.
- k. Electric gate repair.

Electrical maintenance work does not include the installation of any new electrical appurtenances, apparatus, equipment, machinery, or controls beyond the scope of any existing electrical installation.

- (3) **Record keeping.** The applicant for an electrical maintenance permit must:
 - a. Maintain a copy of the permit at either the site where the work is being conducted or applicant's place of business if within the city.
 - b. Maintain a copy of the registration card for the certified personnel either at the location where the work is performed or the applicant's place of business if within the city.
 - c. Maintain a record of all work performed by registered personnel for a minimum of 12 months.
- (d) Annual mechanical maintenance permit and annual plumbing maintenance permit for Residential Group R-2 apartment houses. An annual mechanical maintenance permit and an annual plumbing maintenance permit, or the combination of both as one annual mechanical/plumbing maintenance permit, are required for all apartment houses containing more than four dwelling units where the occupants are primarily permanent in nature. In this section the term "permanent in nature" means having dwelling units where the original lease term is greater than two months.

Exception: No permit is required for apartment houses that have self-contained, ductless air conditioning products that have a cooling capacity of three tons or less or for individual apartment houses containing less than 5 dwelling units each.

- (1) *Scope*.
 - a. **Mechanical.** The annual mechanical maintenance permit replaces the necessity of obtaining individual permits for work performed on environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system or commercial refrigeration equipment. The permit does not cover nor is a permit required for the installation, repair, or removal of the following:
 - 1. Vent hood used in residential kitchens.
 - 2. Portable or self-contained ductless air conditioning product that has a cooling capacity of three tons or less.
 - 3. Portable or self-contained heating product that does not require the forced movement of air outside the heating unit.
 - 4. Environmental air conditioning equipment that is intended for temporary use and is not fixed in place.
 - 5. Residential refrigerator, freezer or ice machine.
 - b. **Plumbing.** The annual plumbing maintenance permit replaces the necessity of obtaining individual permits for work performed by an owner or maintenance technician or maintenance engineer employed by the owner who performs plumbing maintenance work incidental to and in connections with other duties.
- (2) **Permit holder.** An annual mechanical maintenance permit for mechanical maintenance work and an annual plumbing maintenance permit for plumbing maintenance work will only be issued to the building owner/manager or their authorized agent. For properties that contain less than 20 dwelling units, the permits holder may obtain one annual mechanical maintenance permit and one annual plumbing maintenance permit covering multiple locations. For properties that contain 20 or more dwelling units, the permit holder shall obtain one annual mechanical maintenance and one annual plumbing maintenance permit for the dwelling units contained within the property.
- (3) Annual mechanical maintenance permit and annual plumbing maintenance permit fees. These fees shall be as follows:

Annual Mechanical Maintenance Permit Fee For Single Location	\$50.00 per permit plus \$0.21 per residential apartment unit
Annual Mechanical Maintenance Permit Fee For Multiple Locations	\$50.00 per permit plus \$2.00 per residential apartment unit
Annual Plumbing Maintenance Permit Fee For Single Location	\$50.00 per permit plus \$0.21 per residential apartment unit
Annual Plumbing Maintenance Permit Fee For Multiple Locations	\$50.00 per permit plus \$2.00 per residential apartment unit

Note: Owners of apartment houses have the option of taking out a combined annual mechanical/plumbing maintenance permit. These fees shall be as follows:

Annual Mechanical/Plumbing Maintenance Permit Fee For Single Location	\$100.00 per permit plus \$0.42 per residential apartment unit
Annual Mechanical/Plumbing Maintenance Permit Fee For Multiple Locations	\$100.00 per permit plus \$4.00 per residential apartment unit

- (4) **Record keeping.** Records of all work performed under the annual mechanical maintenance permit and annual plumbing maintenance permit shall be maintained by the permits holder for no less than 12 months after performing such work and shall be made available for the *Building Official's* review upon request.
- (5) **Periodic inspections.** Work performed under both the annual mechanical maintenance permit and the annual plumbing maintenance permit is subject to the *Building Official's* periodic inspections. No notice will be required by the *Building Official* to make periodic inspections of equipment located on the exterior of apartment houses. For periodic inspections of their rooftops, coordination shall take place with the permits holder with a minimum five days notice prior to the inspections. A date and time for the inspections shall be established by the *Building Official*. Maintenance records for both interior work and exterior work shall be made available during all interior inspections.
- (6) Limits of work performed under annual mechanical maintenance permit and annual plumbing maintenance permit. Work performed under these permits shall be limited as follows:

Mechanical:

- a. All work required for the continued normal performance of an existing environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system or a commercial refrigeration system. Work does not include the following:
 - 1. Total replacement of a system.
 - 2. Installation or repair of a boiler or pressure vessel that must be installed in accordance with rules adopted by the commission under Chapter 755, Health and Safety Code.
- b. Diagnosing and repairing problems associated with air conditioning, commercial refrigeration, or process cooling or heating equipment, and remedying or attempting to remedy these problems.

Plumbing: Repair, maintenance and replacement of existing potable water piping, existing sanitary waste and vent piping, existing plumbing fixtures and existing electric water heaters.

(7) Work not covered by the annual mechanical or plumbing maintenance permit. The following work is not covered by these permits unless it is performed by either a licensed contractor or a state licensed professional engineer:

Mechanical:

- a. Simultaneous replacement of the condensing unit, furnace and evaporator coil.
- b. Replacement of any condensing unit that is more than ½ ton larger than the current size.
- c. Replacement of any furnace that is more than 35,000 BTU's larger than the current size.
- d. Replacement of any evaporator coil that is more than ½ ton larger than the current size.
- e. Extension of any duct work more than one foot.
- f. Relocating any equipment to a new location more than five feet from the original location.

Plumbing:

- a. Cutting into fuel gas plumbing systems.
- b. Installation of gas fueled water heaters.
- (8) **Who may perform work.** The following may perform maintenance work under these permits:
 - a. Licensed air conditioning contractors for the mechanical maintenance permit.
 - b. A person licensed as an engineer under Chapter 1001 of the Texas Occupational Code and who engages in air conditioning and refrigeration contracting work and/or plumbing work in connection with the business in which the person is employed but does not engage in that work for the public.
 - c. A person who performs air conditioning and refrigeration maintenance work and/or plumbing maintenance work if the person:
 - 1. is a maintenance technician or maintenance engineer and is a regular employee of the building owner/manager of the property where the work is being performed;
 - 2. performs the work in connection with the business in which the person is employed; and
 - 3. the person's employer does not engage in air conditioning and refrigeration contracting for the public and/or plumbing contracting work for the public.
- (e) **Work exempt from permit.** Exemptions from permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of the city. Permits shall not be required for the following:

Building:

- (1) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m^2) .
- (2) Minor repairs to fences not over six feet (1829 mm) high. Replacement of up to 25% of the overall contiguous length of a fence shall constitute minor repair.

- (3) Oil derricks.
- (4) Retaining walls that are not over four feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- (5) Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18,925 L) and the ratio of height to diameter or width does not exceed 2:1.
- (6) Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
- (7) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- (8) Temporary motion picture, television and theater stage sets and scenery.
- (9) Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18,925 L) and are installed entirely above ground.
- (10) Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- (11) Swings and other playground equipment accessory to detached one- and two-family dwellings.
- (12) Window awnings supported by an exterior wall that do not project more than 54 inches (1,372 mm) from the exterior wall and do not require additional support of Groups R-3 and U occupancies.
- (13) Nonfixed and movable fixtures, cases, racks, counters and partitions not over five feet nine inches (1,753 mm) in height.
- (14) Patios not more than 30 inches (762 mm) above grade or not over any basement or story below.

Electrical:

(1) Minor repairs or maintenance work when performed by a licensed electrical contractor, the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

- (2) Replacement of a refrigeration or HVAC system motor, solenoid valves or controls associated with the motor when performed by a licensed mechanical contractor.
- (3) The installation of that portion of wiring and equipment for telephone, voice, data, cable TV, broadband and other types of communication systems that operate at fifty volts nominal or less. Such systems shall be grounded according to the applicable provisions of Article 250 and Chapter 8 of the NEC.
- (4) The installation of wiring and equipment by or for the City for the purpose of generating, transmitting and delivering service to its customers.
- (5) **Radio and television transmitting stations:** The provisions of this chapter shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.
- (6) **Temporary testing systems:** A permit shall not be required for the installation for any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- (1) Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- (2) Portable LP-gas appliances and equipment of all types that is not connected to a fixed fuel piping system.
- (3) Installation of farm appliances and equipment such as brooders, dehydrators, dryers and irrigation equipment.
- (4) Raw material (feedstock) applications except for piping to special atmosphere generators.
- (5) Oxygen-fuel gas cutting and welding systems.
- (6) Industrial gas applications using gases such as acetylene and acetylene compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
- (7) Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.

- (8) Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions.
- (9) LP-gas installations at utility gas plants.
- (10) Liquefied natural gas (LNG) installations.
- (11) Fuel gas piping in power and atomic energy plants.
- (12) Proprietary items of equipment, apparatus or instruments such as gasgenerating sets, compressors and calorimeters.
- (13) LP-gas equipment for vaporization, gas mixing and gas manufacturing.
- (14) Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
- (15) Installation of LP-gas systems for railroad switch heating.
- (16) Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.
- (17) Except as provided in Section 401.1.1 of the IFGC as amended, gas piping, meters, gas pressure regulators and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.
- (18) Piping systems for mixtures of gas and air within flammable range with an operating pressure greater than 10 psig (69 kPa gauge).
- (19) Portable fuel cell appliances that are neither connected to a fixed piping system nor interconnected to a power grid.

Mechanical:

- (1) Portable heating appliance.
- (2) Portable ventilation appliances and equipment.
- (3) Portable cooling units.
- (4) Steam, hot water or chilled water piping within any heating or cooling equipment or appliances regulated by this code.

- (5) The replacement of any minor part that does not alter approval of equipment or an appliance or make such equipment or appliance unsafe.
- (6) Portable evaporative coolers.
- (7) Self-contained refrigeration systems that contain 10 pounds (4.5 kg) or less of refrigerant, or that are actuated by motors of 1 horsepower (0.75 kW) or less.
- (8) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

- (1) The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this chapter.
- (2) The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for work conducted in violation of the provisions of this chapter and other laws and ordinances of the city.

- (f) **Emergency repairs.** Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next business day to the *Building Official*.
- (g) **Repairs.** Application or notice to the *Building Official* is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety. When making repairs, defective material or parts shall be replaced or repaired in such a manner so as to preserve the original approval or listing.

- (h) **Public service agencies.** A permit shall not required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.
- (i) **Application for permit.** To obtain a permit, the applicant shall first file an application in writing on a form furnished by the Department of Development Services for that purpose. Such application shall:
 - (1) Identify and describe the work to be covered by the permit for which application is made.
 - (2) Describe the land on which the proposed work is to be done, by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
 - (3) Indicate the use and occupancy for which the proposed work is intended.
 - (4) Be accompanied by construction documents and other information as required in Section 10-8 of this chapter.
 - (5) State the valuation of the proposed work. Valuation shall include the cost of labor, materials and profit.
 - (6) Be signed by the applicant, or the applicant's authorized agent.
 - (7) Give such other data and information as required by the *Building Official*.
- (j) Authorization to obtain plumbing permits. The following lists those individuals, contractors and companies that are authorized to obtain plumbing permits:
 - (1) Any duly licensed master plumber.
 - (2) Any homeowner performing plumbing work on a homestead wherein he/she resides. The installation must be made by the homeowner without the assistance of any person or persons.
 - (3) Licensed irrigators, who have a state irrigators license, for the installation of backflow devices for irrigation systems.
 - (4) Water softener companies that hold a Class III Texas Commission of Environmental Quality (TCEQ) license for the installation or change out of water softeners and associated equipment.

- (5) Licensed fire line contractors for backflow devices on fire lines.
- (6) Plumbing work performed by anyone who is regularly employed or acting as a maintenance man or maintenance engineer, incidental to and in connection with the business in which he is employed or engaged, and who does not engage in plumbing work for the general public. See state licensing law for definition of maintenance person or maintenance engineer.

Exceptions:

- a. Any person who is employed by the railroad for plumbing work done upon the premises or equipment of the railroad, and who does not engage in plumbing work for the general public.
- b. Any person engaged by any public service company for plumbing work in connection with laying, maintaining and the operation of its service mains or lines and the installation, alteration, adjustment, repair, removal or renovation of all types of appurtenances, equipment and appliances directly related to public service companies, properties and/or jurisdiction.
- (7) Gas work performed by a certified LP gas installer licensed under chapter 113, Natural Resources Code, as amended (limited to underground service piping from the tank to the building or pool heater).

Insurance. Before any person shall engage in plumbing work within the city, such person shall provide a certificate of insurance issued by an insurance company authorized and admitted to do business in the state for commercial general liability insurance and products completed operations coverage for master plumber for claims for property damage or bodily injury, regardless of whether the claim arises from a negligence claim or on a contract claim, and shall be in a coverage amount of not less than \$300,000 for all claims arising in any one year period. Further, any persons engaged in plumbing work shall indemnify and hold harmless the city from any and all damages, claims, liens or losses, including, but not limited to personal injury or death and property damage, arising from any acts or omission of any character whatsoever caused by such person, his agents or employees, engaged in plumbing work.

(k) Action on application. The *Building Official* shall examine or cause to be examined application for permits and amendments thereto within a reasonable time after filing. Such applications may be reviewed by other departments of the city to verify compliance with any applicable laws and ordinances under their jurisdiction. If the application or the construction documents do not conform to the requirements of the pertinent laws, the *Building Official* shall reject such application in writing, stating the reasons for the rejection. If the *Building*

Official is satisfied that the proposed work conforms to the requirements of this chapter and applicable laws and ordinances, and that fees specified in ordinances adopted by the city have been paid, the *Building Official* shall issue a permit for the work as soon as practicable. No building permit shall be issued where there is not a supply of approved water for domestic or fire protection use, and adequate to the purposes for which the property is intended to be used, and where there is not an all-weather road surface adequate to withstand the weight of a fire truck.

- (1) **Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued, except that the *Building Official* is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- (m) Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this chapter or of any other ordinance of the city. Permits presuming to give authority to violate or cancel the provisions of this chapter or other ordinances of the city shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the *Building Official* from requiring the correction of errors in the construction documents and other data. The *Building Official* is also authorized to prevent occupancy or use of a structure where in violation of this chapter or of any other ordinances of the city.
- (n) **Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The *Building Official* is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- (o) **Suspension or revocation.** The *Building Official* is authorized to suspend or revoke a permit issued under the provisions of this chapter whenever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this chapter.
- (p) **Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.
- (q) **Demolition permit.** See Section 10-119 of this chapter.
- (r) **House moving permit.** See Section 10-120 of this chapter.

Sec. 10-7. Floor and roof design loads.

- (a) **Live loads posted.** Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m^2) , such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.
- (b) **Issuance of certificate of occupancy.** A certificate of occupancy required by Section 10-12 shall not be issued until the floor load signs, required by Section 10-7, have been installed.
- (c) **Restrictions on loading.** It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this chapter.

Sec. 10-8. Submittal documents.

- (a) **General.** Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data as required by the Development Services Department's application procedures shall be submitted in two or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by this code, the State, or any of its regulatory agencies. Where special conditions exist, the *Building Official* is authorized to require additional construction documents to be prepared by a registered design professional. Buildings, additions and major renovations for the following occupancies shall also require a design professional to prepare the construction documents:
 - (1) All Group A (Assembly) occupancies.
 - (2) All Group E (Educational) occupancies.
 - (3) All Group I (Institutional) occupancies.
 - (4) Buildings and structures three stories or more high.
 - (5) Buildings and structures 5,000 square feet or more in area.
 - (6) Electrical plans and specifications prepared by engineer. Installation or alteration of any equipment on the customer side of the CPS Energy point of delivery (service point) rated over 600 amps at 250 volts or less and rated at over 400 amps at greater than 250 volts, any system above 600 volts or when required by the Texas Engineering Practice Act shall have the electrical plans sealed by a professional engineer, licensed or registered with the State of Texas.

Exception: The *Building Official* is authorized to waive the submission of construction documents and other data not required to be prepared by a registered

design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

- (b) **Construction documents.** Construction documents shall be in accordance with items (1) through (5).
 - (1) **Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be substituted when approved by the *Building Official*. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter and relevant laws, ordinances, rules and regulations, as determined by the *Building Official*.
 - (2) **Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the IBC, as amended. Refer also to Chapter 11 of the City Code for additional requirements regarding fire protection system submittal documents and procedures.
 - (3) **Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this chapter. In other than occupancies of Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.
 - (4) **Exterior wall envelope.** Construction documents for al buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this chapter. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

- (5) **Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, if applicable, flood hazard areas, floodways, and design flood elevations and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The *Building Official* is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.
 - a. **Design flood elevations.** Where design flood elevations are not specified, they shall be established in accordance with Appendix F, Floodplains Areas of Special Flood, of the Unified Development Code.
- (c) **Examination of documents.** The *Building Official* shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this chapter and other pertinent laws or ordinances.
 - (1) **Approval of construction documents.** When the *Building Official* issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance". One set of reviewed construction documents shall be retained by the *Building Official*. The other set shall be returned to the applicant, kept at the work site, and open to inspection by the *Building Official* or his duly authorized representative.
 - (2) **Previous approvals.** This chapter shall not require changes to the construction documents, construction or designated occupancy of a structure for which a lawful permit has been issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this chapter and not abandoned.
 - (3) **Phased approval.** The *Building Official* is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided adequate information and detailed statements have been filed complying with pertinence requirements of this chapter. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the owner's own risk with the building operation and without assurance that a permit for the entire structure will be granted.
 - (4) **Design professional in responsible charge.**

a. **General.** When documents are required to be prepared by a registered design professional, the owner shall engage and designate on the building permit application a registered design professional to act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional who shall perform the duties required of the original registered design professional in responsible charge. The *Building Official* shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

b. **Deferred submittals.** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of application and are to be submitted to the *Building Official* within a specified period.

Deferral of any submittal items shall have the prior approval of the *Building Official*. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the *Building Official*.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the *Building Official* with a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the *Building Official*.

- (d) **Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.
- (e) **Retention of construction documents.** One set of approved construction documents shall be retained by the *Building Official* for a period of not less than 180 days from the date of completion of the permitted work, or as required by state of Texas or local laws.

(f) **Changes to standard tower release agreement.** Changes to the individual control such as tenant and premise description found in the standard tower release agreement, attached to Ordinance Number 83931 as Exhibit II, do not require City Council approval, provided there are no substantial changes to the standard tower lease agreement. All other substantial changes to such agreement shall require City Council approval subject to approval of the Office of the City Attorney.

Sec. 10-9. Temporary structures and uses.

- (a) **General.** The *Building Official* is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The *Building Official* is authorized to grant extensions for demonstrated cause. Chapter 11 of the City Code contains additional requirements for temporary structures and uses.
- (b) **Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this chapter as necessary to ensure public health, safety and general welfare.
- (c) **Temporary power.** The *Building Official* is authorized to give permission to temporarily supply and use power in part of an electric installation before any such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in Article VI of this chapter.
- (d) **Termination of approval.** The *Building Official* is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

Sec. 10-10. Fees.

- (a) **Payment of fees.** A permit shall not be valid until the fees prescribed by the fee schedule adopted by the city have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- (b) Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the fee schedule adopted by the city, for buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit.
- (c) **Building-related permit valuations.** The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations include total value of work, including materials, labor, and profit for which a permit is being issued. If, in the opinion of the *Building Official*, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show

detailed estimates to meet the approval of the *Building Official*. Final building-related permit valuations shall be set by the *Building Official*.

- (d) **Work commencing before permit issuance.** Any person who commences work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to double permit fees for the specified area. The payment of such double fee shall not relieve any person from fully complying with the requirements of this code in the execution of the work nor from any other penalties prescribed in this code.
- (e) Structures being moved; Inspection of buildings or structures that are located outside city limits. An inspection to determine compliance with city requirements shall be made of a building or structure on which an application to move same into the city is pending before the zoning board of adjustment. A fee shall be charged in accordance with the fee schedule adopted by the city.
- (f) **Re-inspection fees.** The re-inspection fee charged shall be in accordance with the fee schedule adopted by the city. In instances where re-inspection fees have been assessed, all fees shall be paid before release of utilities.
- (g) **Refunds.** The *Building Official* is authorized to establish a refund policy.

Sec. 10-11. Inspections and testing.

- (a) **General.** Construction or work for which a permit is required is subject to inspection by the *Building Official* and such construction work shall remain accessible and exposed for inspection purposes until approved. Approval following an inspection is not an approval of a violation of the provisions of this chapter or of other ordinances of the city. Inspections presuming to give authority to violate or cancel the provisions of this chapter or of other ordinances of the jurisdiction are not valid. It is the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the *Building Official* nor the city are liable for expense entailed in the removal or replacement of any material required to allow inspection.
- (b) **Preliminary inspection.** Before issuing a permit, the *Building Official* is authorized to examine or cause to be examined building, structures and sites for which an application has been filed.
- (c) **Required inspections and tests.** The *Building Official*, upon notification, shall make the inspections and tests set forth in paragraphs (1) through (13).
 - (1) **Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to the inspection. Materials for the foundation shall

be on the job, except where concrete is ready mix in accordance with ASTM C 94, the concrete need not be on the job.

- (2) Underground. Underground inspections shall be made after trenches or ditches are excavated and bedded, raceways and cable or conductors installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunk and other rubble that would damage or break the raceway, cable or conductors, or where corrosive action will occur, protection shall be provided in the form of granular or selected material, approved running boards, sleeves or other approved means.
- (3) **Concrete slab and under-floor inspections.** Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.
- (4) **Lowest floor elevation.** In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevations certification required in Section 1612 of the IBC, as amended, shall be submitted to the *Building Official*.
- (5) **Plumbing, mechanical, gas and electrical systems inspections and tests.** Concealment or rough-in inspections of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment, before fixtures or appliances are set or installed, and prior to framing inspection.

Exception: For one- and two-family dwellings, back-filling of ground-source heat pump loop systems tested in accordance with Section M2105.1 of the 2012 IRC, as amended, prior to inspection shall be permitted.

(6) Duct test for one- and two-family dwellings and townhomes. All ducts for one- and two-family dwellings as well as townhomes, in unconditioned spaces, shall be duct tested prior to covering or concealment to disclose leaks and defects. Tests shall be made by an independent certified RESNET energy rater or an alternative approved by the *Building Official* using objective, verifiable testing criteria and results provided to the Building Official. Apparatus, material and labor required for testing a mechanical system shall be furnished by the independent certified RESNET energy rater or *Building Official* approved alternate. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this chapter. The work or installation shall then be re-submitted to the Building Official for inspection and testing. See also Section 403.2.2 of the 2009 IECC, as amended.

- (7) **Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
- (8) Lath and gypsum board inspection. Lath and gypsum board inspections shall be made after the lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or any gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

- (9) **Fire- and smoke-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.
- (10) Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter four of the 2009 IECC for one and two family dwellings and for townhomes, and Chapter five of the 2009 IECC for all other occupancies, as amended, and shall include, but not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency. For one and two-family dwellings and townhomes, an independent certified RESNET energy rater or an alternative approved by the *Building Official* using objective, verifiable testing criteria, shall test or inspect the air barrier as per Section 402.4.2 Air sealing and insulation, of the 2009 IECC. The results must be submitted on a form approved by the *Building Official*. The form shall show that construction is in compliance with the 2009 IECC.
- (11) **Other inspections**. In addition to the inspections specified above, the *Building Official* is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this chapter and other laws that are enforced by the department of development services.
 - a. **Prefabricated construction assembly with electrical work**.
 - 1. **Evaluation report.** Prior to the approval of a prefabricated construction assembly having concealed electrical work and the issuance of an electrical permit, the *Building Official* requires the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the electrical system, including a description of the system and its components, the basis upon which the system is being evaluated, test results and

similar information, and other data as necessary for the *Building Official* to determine conformance to this chapter.

- 2. **Evaluation service.** The *Building Official* shall designate the evaluation service of an approved agency as the evaluation agency and review such agency's evaluation report for adequacy and conformance to this chapter.
- 3. **Follow-up inspection.** Except where ready access is provided to the electrical systems, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the *Building Official* is authorized to conduct the in-plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the *Building Official* with the follow-up inspection manual and a report of inspections upon request, and the electrical system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.
- 4. **Test and inspection records.** Required test and inspection records shall be available to the *Building Official* at all times during the fabrication of the electrical system and the erection of the building, or such records as the *Building Official* designates shall be filed.
- (12) **Special inspections**. For special inspections, see Section 1704 of the IBC, as amended.
- (13) **Final inspection**. The final inspections shall be made after work required by building-related permits is completed. Failure to request a final inspection within 30 days after the completion of a permit's work is a violation of this chapter.
- (d) **Inspection agencies.** The *Building Official* is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.
- (e) **Inspection requests.** It shall be the duty of the holder of the building-related permit or their duly authorized agent to notify the *Building Official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this chapter.
- (f) **Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *Building Official*

The *Building Official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this chapter. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *Building Official*.

(g) **Reinspection and retesting.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this chapter. The work or installation shall then be resubmitted to the *Building Official* for inspection and testing. To receive a reinspection or retest, the applicant shall make a request to the *Building Official* and pay the reinspection fee in accordance with the fee schedule prior to the inspection or test.

Sec. 10-12. Certificate of occupancy.

(a) Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the *Building Official* has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval if a violation of the provisions of this chapter or of other ordinances of the city.

Exception: Certificates of occupancy are not required for work exempt from permits under Section 10-6 (d).

- (b) **Certificate issued.** After the *Building Official* inspects the building or structure and finds no violations of the provisions of this chapter or other laws that are enforced by the department, the *Building Official* shall issue a certificate of occupancy that contains the following:
 - (1) The building permit number.
 - (2) The address of the structure.
 - (3) The name and address of the owner.
 - (4) A description of that portion of the structure for which the certificate is issued.
 - (5) A statement that the described portion of the structure has been inspected for compliance with the requirements of this chapter for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
 - (6) The name of the *Building Official*.
 - (7) The edition of the IBC or IRC under which the permit was issued.

- (8) The use and occupancy, in accordance with the provisions of Chapter three of the IBC.
- (9) The type of construction as defined in Chapter six of the IBC.
- (10) The design occupant load.
- (11) If an automatic sprinkler system is provided, whether the sprinkler system is required.
- (12) Any special stipulations and conditions of the building permit.
- (c) **Temporary occupancy.** The *Building Official* is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The *Building Official* shall set a time period during which the temporary certificate of occupancy is valid.
- (d) **Revocation.** The *Building Official* is authorized to suspend or revoke a certificate of occupancy or completion issued under the provisions of this chapter wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this chapter.

Sec. 10-13. Service utilities.

- (a) **Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this chapter for which a permit is required, until released by the *Building Official*.
- (b) Authority to disconnect service utilities. The *Building Official* has the authority to authorize disconnection of utility service to the building, structure or system regulated by the referenced codes and standards of Section 10-2 (c) of this chapter in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without the approval required by Section (a) or (b). The *Building Official* shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.
- (c) **Connection after order to disconnect.** A person shall not make utility service or energy source connections to systems regulated by this code which have been disconnected or ordered to be disconnected by the code official or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such systems.

- (d) **Changing location of electric meters**. If alterations of the building, dwelling, structure or wiring require changes in the location or size of the electric meter/service equipment, a licensed electrical contractor with the city shall acquire a permit for the work to be performed and coordinate the disconnecting and reconnecting of service with the utility.
- (e) **Emergencies.** Where life or property may be in danger, a licensed electrical contractor with the city may disconnect the electric service to the building, dwelling or structure and shall immediately notify the utility.
- (f) **Utility company rules**. The latest edition of the CPS Energy publication, "Electrical Service Standards," as approved by the *Building Official* and adopted by city council, is hereby incorporated and made a part of this chapter for all electric services and meter installations. All other wiring, either public or private, shall conform to this chapter.

Sec. 10-14. Building-related and Fire Codes Appeals and Advisory Board.

- (a) General. A Building-related and Fire Codes Appeals and Advisory Board also known as the Appeals and Advisory Board is created. The Board shall hear and decide appeals of orders, decisions or determinations made by the *Building Official* or the *Fire Chief* relative to the application and interpretations of Chapter 10, Chapter 11 and specific Articles in Chapter 28 of the City Code, and in order to provide advice to the *Building Official* or *Fire Chief* on code-related matters.
 - (1) Members of the Appeals and Advisory Board shall be appointed by the Mayor and City Council and shall hold office at its pleasure.
 - (2) Applications for appeal for any order, decision or determination made by the *Building Official* or the *Fire Chief* shall be filed on a form obtained from the *Building Official* within 21 calendar days after the notice was served.
 - (3) A filing fee must accompany each application for appeal to the Appeals and Advisory Board, as set forth in the fee schedule adopted by the City.
 - (4) The Appeals and Advisory Board shall meet quarterly on general and codes-related matters and shall meet within 14 calendar days after either the *Building Official* or the *Fire Chief* receives an application appealing an associated order, decision or determination relative to the application and interpretation of Chapter 10, Chapter 11 and specific Articles in Chapter 28.
 - (5) When requested by the *Building Official* or *Fire Chief*, the Appeals and Advisory Board shall conduct public hearings on nationally recognized building-related codes, following publication, and shall make

recommendations to the *Building Official* or *Fire Chief* for adoption or local amendment.

- (b) **Application for Appeal.** An application for appeal shall be based on a claim that:
 - (1) the true intent of Chapters 10, 11 and specific Articles in Chapter 28 or the rules legally adopted thereunder have been incorrectly interpreted;
 - (2) the provisions of this chapter do not fully apply; or
 - (3) an equally good or better form of construction is proposed.

(c) Limitation on Authority.

- (1) The Appeals and Advisory Board shall have no authority to waive requirements of Chapters 10, 11 or 28.
- (2) The Appeals and Advisory Board shall review building-related and fire codes issues when requested to do so by the *Building Official* or *Fire Chief* and shall provide a recommendation to the *Building Official* or *Fire Chief*.
- (3) The Appeals and Advisory Board may also review and make recommendations to the *Building Official* or *Fire Chief* on any buildingrelated or fire code issue, as requested by a citizen or board member when the request for board review is approved by both the *Building Official* and Appeals and Advisory Board chairman.
- (4) Appeals, as defined in § 10-14 (a), do not require approval by either the *Building Official* or chairman of the Appeals and Advisory Board in order to be heard.
- (5) All meetings of the Board must comply with the provisions of the Texas Open Meetings Act. Through Board action, technical issue items may be added for discussion to any future board meeting agenda. Administrative and non-technical agenda items may only be added to the agenda and discussed when approved by the *Building Official*.
- (6) Technical committees shall be established by the board to assist the *Building Official* and *Fire Chief* in determining recommendations for the adoption of the model codes listed in § 10-2, paragraphs (1) through (6) of this chapter and the model code listed in Chapter 11 and any associated local amendments to these codes.
- (7) The responsibilities of the Appeals and Advisory Board shall be limited to those specifically contained in this Chapter.

- (d) Qualifications. The Board of Appeals shall consist of 17 members and 17 alternates who are qualified by experience and training to act on matters pertaining to building-related and fire codes, and may not be employees of the City. Board of Appeals members and alternate members shall reside in the City of San Antonio unless the residence requirement is waived by City Council. Nominations to City Council of both primary and alternate members for each category shall be made to the secretary of the Board of Appeals by industry associations that are affiliated with nationally recognized organizations. Membership of the Appeals and Advisory Board, including alternates, is by category and as follows:
 - (1) One member and one alternate shall be a structural engineer licensed or registered by the State of Texas as a professional engineer.
 - (2) One member and one alternate shall be a fire protection engineer licensed or registered by the State of Texas as a professional engineer.
 - (3) One member and one alternate shall be an electrical engineer licensed or registered by the State of Texas as a professional engineer.
 - (4) One member and one alternate shall be a plumbing engineer or a mechanical engineer licensed or registered by the State of Texas as a professional engineer.
 - (5) One member and one alternate shall be an architect licensed by the State of Texas.
 - (6) Two members and two alternates shall be building contractors registered by the City of San Antonio.
 - (7) Two members and two alternates shall be licensed by the State of Texas as a master electrician. Of these, one member and one alternate represent organized labor, and one member and one alternate represent open shop.
 - (8) Two members and two alternates shall be licensed by the State of Texas as an air conditioning and refrigeration contractor. Of these, one member and one alternate shall represent organized labor and one member and one alternate shall represent open shop.
 - (9) Two members and two alternates shall be licensed by the State of Texas as a master plumber. Of these, one member and one alternate r epresent organized labor and one member and one alternate represent open shop.
 - (10) One member and one alternate shall be a commercial building contractor.
 - (11) One member and one alternate shall be a commercial building owner, manager, or their representative.

- (12) One member and one alternate shall be a Residential Group R-2 multifamily building owner, manager, or their representative.
- (13) One member and one alternate: licensed by either the City of San Antonio or the State of Texas as a master sign electrician.

The *Fire Chief* or designee shall be an ex-officio member. The *Building Official* or designee shall also be an ex-officio member and shall act as secretary to the Appeals and Advisory Board. The *Building Official* or *Fire Chief* or their respective designees shall not have a vote on any matter before the Appeals and Advisory Board.

The Appeals and Advisory Board shall be subject to City Code Chapter two, Article IX entitled "Boards and Commissions", to the extent not in conflict with these provisions. Members shall be limited to three consecutive two-year terms. Board membership shall continue in a holdover capacity until a replacement is appointed. The Appeals and Advisory Board shall elect a chairman and vicechairman annually, shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with copies to the *Building Official* or *Fire Chief*. All vacancies are filled for the unexpired portion of the term only.

(c) **Quorum and majority vote.**

- (1) An appointed alternate member shall not serve on the Appeals and Advisory Board, or any Board committee, when the appointed member for whom they are an alternate is present.
- (2) Nine appointed members or their appointed member alternates, constitutes a quorum of the Appeals and Advisory Board.
- (3) Voting shall only be conducted by appointed members or their appointed alternates, should the member not be present. No proxy votes shall be allowed.
- (4) A majority vote of those members present, including alternate members representing absent members, shall be necessary for approval of any decision of the Appeals and Advisory Board, and each member or alternate member, should the member be absent, shall have one vote including the chairman.
- (5) The Appeals and Advisory Board shall take no action on an appeal unless one appointed member that is a subject matter expert is present for each major part of the appeal. For example: if an appeal has two major parts, structural and plumbing, the structural engineer member and at least one of the two master plumber members must be present in order for the Appeals and Advisory Board to take action on the appeal. Failure of the

Appeals and Advisory Board to have these subject matter experts present does not result in the approval of the applicant's appeal.

- (d) **Committees.** The Appeals and Advisory Board may form committees to advise it on specific matters. Prior to conducting public hearings on any of the nationally recognized building-related codes and any associated amendments thereto, the Appeals and Advisory Board shall form code review committees and shall select a chairman for such committee. The purpose of code review committees is to review the newly published codes and to receive public comments on these codes and their associated amendments. The *Building Official* will provide appropriate staff support to all such committees. The chairman of each code review committee shall report his committee recommendations to the Appeals and Advisory Board during the subsequent public hearings conducted by the board on these codes.
 - (1) **Committee membership.** Committee membership shall consist of appointed members or their appointed alternates, should the member not be present, and may also consist of not more than four individuals who are not appointed by the Mayor and City Council and who are not required to reside in the City. A committee is required to have at least four appointed members or their appointed alternates. Both the primary board member and alternate board member for any category may serve on a committee, but only one category member, primary or alternate, may serve as a voting member on the committee. Committees shall have not more than seven primary and alternate board members.
 - (2) **Committee quorum and voting.** A majority of the appointed members or their appointed alternates, should the member not be present, of the committee shall constitute a quorum. Only committee members who are Appeals and Advisory Board members or their alternates, should the member not be present, shall be allowed to vote on committee items. Committee members not appointed by the Mayor and City Council to the Appeals and Advisory Board, as either a member or alternate member, may not vote on committee matters. A majority of committee members authorized to vote shall be required.
- (e) **Procedure.** The meeting of the Board of Appeals shall be conducted in conformity with Parliamentary Rules (Robert's Rules of Order), or other rules established by the Appeals and Advisory Board, unless otherwise specified in Chapters 10, Chapter 11 and specific Articles in Chapter 28. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.
- (f) **Open hearing and meeting.** All hearings and meetings of the Appeals and Advisory Board shall be open to the public, and subject to the Texas Public Meetings Act. The appellant, the appellant's representative, the *Building Official*

and any person whose interests are affected shall be given equal opportunity to be heard.

- (g) **Appeals and Advisory Board decision on appeals.** A concurring vote of the majority of appointed members present once a quorum is established is required in order for the Appeals and Advisory Board to modify or reverse the decision of the *Building Official* or *Fire Chief.*
 - (1) **Resolution.** The decision of the Appeals and Advisory Board shall be by resolution. Certified copies, signed by the chairman of the Appeals and Advisory Board, shall be furnished to the appellant and to the *Building Official* and *Fire Chief*.
 - (2) Administration. The *Building Official* and *Fire Chief* shall take immediate action in accordance with the decision of the Appeals and Advisory Board.
- (h) **Appeal of Board of Appeals action.** Any action taken by the Building-related and Fire Codes Board of Appeals may be appealed by written petition for a hearing before the Mayor and City Council. Such petition must be filed with the City Clerk within seven days from the receipt of Board's action by certified mail and accompanied by a filing fee as set forth in the fee schedule adopted by the City.

Sec. 10-15. Violations.

- (a) **Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this chapter, or cause same to be done, in conflict with or in violation of any of the provisions of this chapter.
- (b) **Notice of violation.** The *Building Official* is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this chapter, or in violation of a permit or certificate issued under the provisions of this chapter. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- (c) **Prosecution of violation.** If the notice of violation is not complied with promptly, the *Building Official* is authorized to request legal counsel of the city to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of such provisions of this chapter or of the order or direction made pursuant thereto.

- (d) **Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the *Building Official*, or of a permit or certificate issued under the provisions of this chapter, shall be subject to penalties prescribed by law.
- (e) **Misdemeanor.** Any person violating any of the provisions of this code or other ordinances which are enforced by the *Building Official* shall be deemed guilty of a misdemeanor. Each such person shall be deemed guilty of a separate offense for each day or portion thereof during which any violation of any of the provisions of this code is committed, continued or permitted. Each violation may be punishable by a fine not to exceed \$500.

Sec. 10-16. Stop work order.

- (a) **Authority.** Whenever the *Building Official* finds any work regulated by this chapter being performed in a manner either contrary to the provisions of this chapter or dangerous or unsafe, the *Building Official* is authorized to issue a stop work order.
- (b) **Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
- (c) Unlawful continuance. Any person who shall continue any work having been served with a stop work order, except such work as that person is directed to perform to remove the violation or unsafe condition, shall be subject to penalties as prescribed by law.

Sec. 10-17. Unsafe structures and equipment.

- (a) **Conditions.** Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the *Building Official* deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.
- (b) **Record.** The *Building Official* shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.
- (c) Notice. If an unsafe condition is found, the *Building Official* shall serve on the owner, agent or person in control of the structure, a written notice that describes

the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the *Building Official* acceptance or rejection of the terms of the order.

- (d) **Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address as referenced in the deed records with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.
- (e) **Restoration.** The structure or equipment determined to be unsafe by the *Building Official* is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with Sec. 10-6 (d) and Chapter 34 of the IBC.

Sec. 10-18 through 10-24. Reserved.

ARTICLE II. DEFINITIONS

Sec. 10-25. Non-referenced definitions. The following definitions are in addition to or supersede those listed in the referenced model codes of this chapter:

AHJ. Authority Having Jurisdiction

AIR CONDITIONING AND REFRIGERATION CONTRACTING. Performing or offering to perform the design, installation, construction, repair, maintenance, service, or modification of equipment or a product in an environmental air conditioning system, a commercial refrigeration system, or a process cooling or heating system for the general public.

AIR CONDITIONING AND REFRIGERATION MAINTENANCE WORK. All work, including repair work, required for the continued normal performance of an existing environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system, or commercial refrigeration equipment. The term does not include:

• The total replacement of a system; or
• The installation or repair of a boiler or pressure vessel that must be installed in accordance with rules adopted by the commission under Chapter 755, Health and Safety Code.

APPROVED. Approved by the Building Official or other authority having jurisdiction.

APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the *Building Official*.

AWG. American Wire Gauge.

BILLBOARD OPERATOR. An individual licensed by the city as a billboard operator who engages in the business of erecting, painting, servicing or maintaining billboards or any other off-premises advertising in accordance with this chapter and Chapter 28, San Antonio Code.

BOARD OF APPEALS. The Building-related and Fire Codes Appeals and Advisory Board of the City of San Antonio.

BUILDING OFFICIAL. The Director of the Development Services Department or a duly authorized representative who may act on his behalf charged with the administration and enforcement of this chapter. For the purpose of this chapter, the *Building Official* shall also be known as the Code Official and AHJ.

BUILDING OWNER/MANAGER. A person or company that is in the business of managing properties and is responsible for the upkeep and maintenance of such properties.

CERTIFICATE OF OCCUPANCY or C of O. A document issued by the *Building Official* after he inspects the building or structure and finds no violations of the provisions of this chapter or other laws that are enforced by the department.

CHAPTER. Chapter 10 of the City Code of San Antonio, Texas, also known as the *Building-related Codes of the City of San Antonio*, Texas, and any subsequent enactments, amendments and/or reenactment of chapter 10, City Code of San Antonio, Texas.

CITY. The City of San Antonio, Texas.

COMMERCIAL SIGN OPERATOR. An individual licensed by the city as a commercial sign operator who engages in the business of erecting, painting, servicing or maintaining commercial signs in accordance with this chapter and Chapter 28 of the City Code of San Antonio, Texas.

CPS ENERGY. City Public Service Energy.

DEMOLITION. Has the meanings assigned in appendix A of chapter 35 of the City Code of San Antonio, Texas.

DEMOLITION CONTRACTOR. An individual or company or partnership doing the work of demolition for payment.

DEPARTMENT. Development Services Department of the City.

DISTRIBUTED GENERATION (DG). Includes, but is not limited to, electrical power derived from wind, water, sunlight, mechanical equipment, batteries, or fuel cells. DG includes all sources of electrical energy that are derived from equipment and/or systems other than the CPS Energy system that may include, wholly or in part, generation, transmission and distribution of electrical energy.

- 1. All DG systems that are interactive with the electrical grid of CPS Energy shall be approved by the City and CPS Energy prior to the issuance of an electrical permit.
- 2. Stand-alone DG systems that are not connected to the electrical grid of CPS Energy require electrical permits when any portion, segment or component of the DG system operates at or is rated for operation above 50-volts (AC or DC) or above 1,200 watts.
- <u>3.</u> Interactive DG systems shall be installed per CPS Energy regulations.
- <u>4.</u> All DG systems shall meet the requirements of the US Environmental Protection Agency (EPA).
- 5. All DG systems shall meet the requirements of TCEQ.

DRAIN CLEANER. An individual who has completed at least 4,000 hours working under the supervision of a responsible master plumber as a drain cleaner-restricted registrant, who has fulfilled the requirements of and is registered with the State Plumbing Licensing Board, and who installs cleanouts and removes and resets p-traps to eliminate obstructions in building drains and sewers under the supervision of a responsible master plumber.

DRAIN CLEANER - RESTRICTED REGISTRANT. An individual who has worked as a plumber's apprentice under the supervision of a responsible master plumber, who has fulfilled the requirements of and is registered with the State Plumbing Licensing Board, and who clears obstructions in sewer and drain lines through any code-approved existing opening under the supervision of a responsible master plumber.

DWV. Drain, waste and vent.

ELECTRICAL APPRENTICE. An individual, licensed by the State of Texas as an apprentice who works under the on-site direct supervision of a master electrician, a journeyman electrician, or a residential wireman, on behalf of an electrical contractor, or

employing governmental entity who performs "Electrical Work" as defined in this chapter.

ELECTRICAL CONTRACTING. The business of designing, installing, erecting, repairing, or altering electrical wires or conductors to be used for light, heat, power, or signaling purposes. The term includes the installation or repair of ducts, raceways, or conduits for the reception or protection of wires or conductors and the installation or repair of any electrical machinery, apparatus, or system used for electrical light, heat, power, or signaling.

ELECTRICAL CONTRACTOR. A person or entity engaged in electrical contracting.

ELECTRICAL MAINTENANCE TECHNICIAN. An individual registered with the City as an electrical maintenance technician, on behalf of a building owner or management group who performs limited "Electrical Maintenance Work" as defined in this chapter.

ELECTRICAL MAINTENANCE WORK. The replacement or repair of existing electrical appurtenances, apparatus, equipment, machinery, or controls used in connection with the use of electrical energy in, on, outside, or attached to a building, dwelling, structure, property, or premises.

ELECTRICAL SIGN APPRENTICE. An individual, licensed by the State of Texas as an electrical sign apprentice who works under the on-site direct supervision of a master electrician, master sign electrician, journeyman electrician, electrical sign journeyman electrician, or electrical sign technician, on behalf of an electrical sign contractor who performs "Electrical Sign Work" as defined in this chapter.

ELECTRICAL SIGN CONTRACTING. The business of designing, manufacturing, installing, connecting, reconnecting, or servicing an electric sign, cold cathode, neon gas tubing, or outline gas tubing, or altering electric sign wiring or conductors either inside or outside of a building.

ELECTRICAL SIGN CONTRACTOR. A person or entity engaged in electrical sign contracting.

ELECTRICAL SIGN TECHNICIAN. An individual registered in the City as a sign technician who works under the general supervision of a master electrician or master sign electrician on behalf of an electrical sign contractor who performs "Electrical Sign Work" as defined in this chapter.

ELECTRICAL SIGN WORK. All work and material used in manufacturing, installing or contracting to install, erecting, hanging, connecting, reconnecting, servicing or maintaining any electric or neon sign or electric neon tubing for any purpose, whether inside or outside of any building or structure or on any part of the public right-of-way subject to this chapter.

ELECTRICAL SYSTEM. All material, fixtures, devices and appliances for the purpose of conducting or utilizing electrical energy.

ELECTRICAL TRADE. Installing, contracting to install, maintaining, repairing, connecting, reconnecting, or servicing of any wiring, fixtures or equipment used for conducting of electricity for which a permit is required by this chapter.

ELECTRICAL WIRING. Any of the methods and materials described in the *National Electrical Code* as adopted by the City, except as may be amended by this Code.

ELECTRICAL WORK. Labor or material used in installing, maintaining, modifying or extending an electrical wiring system and the appurtenances, apparatus, or equipment used in connection with the use of electrical energy in, on, outside, or attached to a building, residence, structure, property, or premises. The term includes service entrance conductors as defined by the *National Electrical Code* as adopted by the City.

ELECTRO-MECHANICAL INTEGRITY. The condition of an electrical product, electrical system, or electrical equipment installed in accordance with its intended purpose and according to standards at least as strict as the standards provided by the *National Electrical Code*, the manufacturer's specifications, any listing or labeling on a product, and all other applicable codes or ordinances.

ELECTRIC UTILITY COMPANY. The electric utility company is CPS Energy, governed by the CPS Energy Board of Trustees, an appointed board.

ENERGY STAR CERTIFIED ROOF. See Section 1502.1. Sec. 10-26.

FIRE CHIEF. The chief officer of the fire department serving the jurisdiction, or a duly authorized representative.

FIRM. A business entity including, without limitation, a sole proprietorship, corporation, partnership or any other entity that is legally recognized in Texas.

FOSTER CARE FAMILY HOME. A single independent residential occupancy that is the primary residence of the caregiver and licensed by the state to provide twenty-four hour care for six or fewer children (including those related to the caregiver) up to the age of eighteen years.

GENERAL CONTRACTOR. A person actively engaged in and is completely responsible for the construction of commercial or industrial structures within the geographical areas to which this chapter applies.

GOVERNMENT AGENCY. An executive, legislative, or judicial agency, department, board, commission, authority, institution, or instrumentality of the federal government, a state, county, municipality, or other political subdivision of the state.

GREASE TRAP INTERCEPTOR. A plumbing appurtenance installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge and is identified by retention time, baffle(s), a minimum of two compartments, a minimum total volume of 500 gallons, and gravity separation. Gravity grease interceptors are generally installed outside. See definition of gravity grease interceptors in Sec 10-82 of this chapter.

HOME IMPROVEMENT CONTRACTOR. A person or entity engaged in the business of making home improvements or who undertakes or offers to undertake or agrees to perform any home improvement, whether or not such person is registered pursuant to this chapter. Home improvement means the repair, replacement, remodeling, alteration, conversion, or modernization, or addition to any existing building, or any portion of an existing building, not owned by a government agency, which is used or designed to be used as a private residence or dwelling place for not more than two families, and shall include, but not by way of limitation, the construction, replacement or improvement of driveways, swimming pools, porches, garages, carports, fallout shelters, fences and other similar improvements. "Home improvement" shall not include:

- 1. The construction of a new private residence or dwelling place for not more than two families, and the initial construction of improvements or additions to the same lot or lots provided the addition or improvement is commenced within one year from the date of completion of construction of the new residence or dwelling place; nor
- 2. The sale of goods or materials by a seller who neither arranges to perform nor performs directly or indirectly any work or labor in connection with the installation of or application of the goods or materials.
- **IBC**. International Building Code, 2012 edition, as amended by the City.
- IEBC. International Existing Building Code, 2012 edition, as amended by the City.
- IECC. International Energy Conservation Code, 2009 edition, as amended by the City.
- IFC. International Fire Code, 2012 edition, as amended by the City.
- IFGC. International Fuel Gas Code, 2012 edition, as amended by the City.
- IMC. International Mechanical Code, 2012 edition, as amended by the City.
- IPC. International Plumbing Code, 2012 edition, as amended by the City.
- **IRC**. International Residential Code, 2012 edition, as amended by the City.

IRRIGATION INSTALLATION Fabrication of an irrigation system using components that include piping, fittings, valves, sprinkler heads and pumps; replacement, repair, alteration or maintenance of a lawn sprinkler system component; or lawn sprinkler system site preparation including digging, trenching, vibratory flow operation, and final

grading.

IRRIGATION CONTRACTOR. A person licensed under Chapter 37 of the Texas Water Code and Chapter 1903 of the Texas Occupations Code.

IRRIGATION SYSTEM. An assembly of component parts permanently installed for the controlled distribution and conservation of water to irrigate landscape vegetation, reduce dust, or control erosion. The term does not include a system used on or by an agricultural operation as defined by Section 251.002 of the Texas Agriculture Code.

JOURNEYMAN ELECTRICIAN. An individual, licensed by the State of Texas as a journeyman electrician, who works under the general supervision of a master electrician, on behalf of an electrical contractor or employing governmental entity who performs "Electrical Work" as defined in this chapter.

JOURNEYMAN PLUMBER. An individual, licensed by the State of Texas as a journeyman plumber who has met the qualifications for registration as a plumber's apprentice or for licensure as a tradesman plumber – limited licensee, who has completed at least 8,000 hours working under the actual installation, alteration, repair, service and renovating of plumbing, and who has successfully fulfilled the examinations and requirements of the State Plumbing Licensing Board.

JOURNEYMAN SIGN ELECTRICIAN. An individual, licensed by the State of Texas as a journeyman sign electrician, who works under the general supervision of a master electrician or a master sign electrician on behalf of an electrical sign contractor who performs "Electrical Sign Work" as defined in this chapter.

LICENSED BACKFLOW ASSEMBLY TESTER. An individual, licensed by TCEQ as a backflow assembly tester.

LP GAS INSTALLERS. A person is not required to be licensed under this chapter to perform LPG system installation if the person performs LPG system installation as an LP gas installer licensed under Subchapter D, Chapter 113, Natural Resource Code.

MAINTENANCE ELECTRICIAN. An individual, licensed as a maintenance electrician, who works under the general supervision of a master electrician on behalf of an electrical contractor or employing government entity and who performs limited "Electrical Maintenance Work" as defined in this chapter.

MASTER ELECTRICIAN. An individual, licensed by the State of Texas as a master electrician who, on behalf of an electrical contractor, electrical sign contractor, or employing governmental entity, performs "Electrical Work" as defined by this chapter.

MASTER PLUMBER. An individual, licensed in the State of Texas as a master plumber who is skilled in the design, planning, superintending, and the practical installation, repair, and service of plumbing; who is knowledgeable about the codes, ordinances, or rules and regulations governing those matters; who alone, or through an

individual or individuals under his supervision, performs plumbing work; and who has successfully fulfilled the examinations and requirements of the State Plumbing License Board.

MASTER SIGN ELECTRICIAN. An individual licensed by the State of Texas as a master sign electrician who, on behalf of an electrical sign contractor, performs "Electrical Sign Work" as defined in this chapter.

MECHANICAL MASTER. Any person licensed as a mechanical master in compliance with the pre-requisites of this code who holds himself out to the public as being qualified to do the kind of mechanical work or to contract for the doing of the kind of mechanical work by himself or by the employment of mechanical technicians or mechanical apprentices which his license authorizes him to do.

MECHANICAL TECHNICIAN. Any person licensed as a mechanical technician, in compliance with the requirements of this code, who works for and under the general supervision and direction of a mechanical master, doing mechanical work contracted for by mechanical master, and who does not hold himself out to the public as being qualified to contract for the doing of mechanical work.

MEDICAL GAS PIPING INSTALLATION ENDORSEMENT. A document entitling the holder of a master or journeyman plumbing license to install piping used solely to transport gases used for medical purposed including, but not limited to oxygen, nitrous oxide, medical air, nitrogen, and medical vacuum.

MORAL TURPITUDE. Conduct that is contrary to justice, honesty, or good morals.

NEC. *National Electrical Code*, NFPA 70.

NFPA. National Fire Protection Association.

OCCUPANCY. The purpose for which a building, or part thereof, is utilized or occupied.

OCCUPANT. Any person, agent, firm or corporation that occupies a building or part thereof as an owner or a tenant.

ON-SITE. This definition pertains to the definitions of "Electrical Apprentice" and "Electrical Sign Apprentice" in this article. When referencing one- and two-family dwellings, it means residential lots that abut each other. When referencing multi-family dwellings, commercial and industrial structures or facilities, it means within the structure or on the premises.

OPEN WIRING. The types of interior wiring described in the NEC, Articles 334, 338 and 340.

OWNER. Has the meaning provided in Chapter 1, Section 1-2, *Rules of construction* of the City Code and also include any homeowner, property owner, person authorized to procure services of a contractor, or any other person who orders, contracts for or purchases the residential building construction services of a contractor, or the person entitled to the performance of the work of a contractor.

PIPE WELDER. A person who specializes in the welding of pipes and holds a valid certificate of competency from a recognized testing laboratory, based on the requirements of the ASME Boiler and Pressure Vessels code, Section IX.

PLUMBER'S APPRENTICE. An individual other than a master plumber, journeyman plumber, or tradesman plumber-limited licensee who, as the person's principal occupation, is engaged in learning and assisting in the installation of plumbing, is registered by the State Plumbing Licensing Board, and works under the general supervision of a licensed responsible master plumber and the direct supervision of a licensed plumber.

PLUMBING WORK. Any labor or material used in installing, maintaining, or modifying a plumbing system and the appurtenances, apparatus, or equipment used in connection with the use of plumbing in, on, outside, or attached to a building, residence, structure, property, or premises.

PORTE COCHERE. A roofed structure that is open on at least three sides and extends from the building entrance over an adjacent driveway and shelters vehicle ingress and egress.

RECLAIMED WATER. Water from sources such as rainwater harvesting, A/C condensate collection, carwashes, ponds, lakes, rivers or other sources as approved by the *Building Official*.

RECYCLED WATER. Water that, as a result of a tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of treatment and quality of the reclaimed/recycled water shall be approved by TCEQ.

RESIDENTIAL UTILITIES INSTALLER (plumbing). An individual who has completed at least 2,000 hours working under the supervision of a responsible master plumber and a registered plumber's apprentice, who has fulfilled the requirements of and is registered with the State Plumbing License Board, and who constructs and installs yard water service piping for one- and two-family dwellings and building sewers.

RESIDENTIAL APPLIANCE. A unit of electrical equipment designed and installed in a dwelling by direct connection to an existing electrical circuit to perform a specific function.

RESIDENTIAL APPLIANCE INSTALLER. A person, other than a licensed electrician, who is licensed to perform electrical appliance installation.

RESIDENTIAL APPLIANCE INSTALLATION CONTRACTOR. A business entity, other than an electrical contractor or electrical sign contractor, engaged in residential appliance installation contracting.

RESIDENTIAL BUILDING CONTRACTOR. A person, company, association, agency, or other entity registered by the code official to engage in the business of constructing, structurally altering or enlarging any one- or two-family detached dwelling or townhouse including detached accessory buildings in excess of 400 square feet in area thereto as regulated by the *International Residential Code*.

REGISTERED CONTRACTOR. A *residential building contractor*, as defined in this chapter, registered in the City of San Antonio to do residential building contracting.

RESIDENTIAL WIREMAN. A person licensed by the State of Texas who may only perform electrical installations in single-family and multifamily dwellings not exceeding three stories.

RESPONSIBLE MASTER PLUMBER. A person licensed as a master plumber who allows his master plumber license to be used by only one plumbing company for the purposes of offering and performing plumbing work under the person's master plumber license; is authorized to obtain permits for plumbing work; assumes responsibility for plumbing work under the person's license; and has submitted a certificate of insurance as required by Section 1301.3576 of the Plumbing License Law and Section 367.3 of the State Plumbing License Board Rules.

RP DEVICE. See definition of Reduced Pressure Principle Backflow Preventer.

SAWS. San Antonio Water System (http://:saws.org/).

SITE WORK. Site work includes any of the following:

- The changing of grade on a site by more than twelve inches (305 mm) vertical from the existing contours through cut or fill operations.
- The removal of trees or the process of grubbing.
- The construction of a commercial driveway and/or surface parking lot.
- The trenching of a site in order to install underground utilities.

SPECIAL INSPECTOR. See definition in Section 10-30 of this chapter.

STATE. Texas.

SUBCONTRACTOR. One who performs services under contract to a contractor.

TCEQ. Texas Commission on Environmental Quality (http://:www.tceq.state.tx.us/).

TDLR. Texas Department of Licensing and Regulation (http://:www.license.state.tx.us/).

TOPS PERMIT. An electrical permit designed to allow the use of an existing or new electrical distribution and/or service prior to obtaining a Certificate of Occupancy. Connection to a service also requires the approval of CPS Energy.

TRADESMAN PLUMBER – LIMITED LICENSE. An individual, who has completed at least 4,000 hours working under the direct supervision of a journeyman or master plumber as a registered plumber's apprentice, who has passed the required examination and fulfilled the other requirements of the State Plumbing License Board, who constructs and installs plumbing for one- and two-family dwellings under the supervision of the responsible master plumber, and who has not met or attempted to meet the qualifications for a journeyman plumber license.

WORKING DAYS. Days exclusive of federal, state, or local holidays and weekends unless otherwise stated.

Sec. 10-26 through 10-28. Reserved.

ARTICLE III. BUILDING CODE

Sec. 10-29. Adoption of International Building Code (2012).

The 2012 edition of the *International Building Code*, promulgated by the International Code Council, Chapters 2 through 35, and Appendix H is hereby adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-30. Provisions of this article are in addition to the provisions of the *International Building Code*. The following provisions coinciding with the provisions of the *International Building Code* supersede, or delete, when indicated, the corresponding provisions of the *International Building Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through X of this chapter.

Sec. 10-30. Amendments to the adopted chapters of the International Building Code (2012).

Additions to the International Building Code are shown as <u>underlined</u> text. Deletions to the International Building Code are shown as bracketed [strikethroughs].

Chapter 2, DEFINITIONS, is amended for SPECIAL INSPECTOR and is to read as follows:

SPECIAL INSPECTOR. A qualified person employed or retained by an *approved* agency who shall prove to the satisfaction of the *registered design professional in responsible*

<u>charge</u> and <u>[approved by]</u> the <u>Building Official</u> that he/she has [building official as having] the competence necessary to inspect a particular type of construction requiring special inspection.

SECTION 304, BUSINESS GROUP B, is amended by adding Fire Stations in the group as follows:

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers Ambulatory care facilities Animal hospitals, kennels and pounds Banks Barber and beauty shops Car wash Civic administration *Clinic*, *outpatient* Dry cleaning and laundries: pick-up and delivery stations and self-service Educational occupancies for students above the 12th grade Electronic data processing Fire stations (including the dormitory, apparatus bays, living and offices areas) if installed with an automatic smoke detection system in accordance with 907.2.10.2 and smoke alarms installed in accordance with 907.2.11.2 through 907.2.11.4 Laboratories: testing and research Motor vehicle showrooms Post offices Print shops Professional services (architects, attorneys, dentists, physicians, engineers, etc.) Radio and television stations Telephone exchanges Training and skill development not within a school or academic program

Section 310.4, Residential Group R-3, is amended by adding Foster Care Family Homes as follows:

310.5 Residential Group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two *dwelling units* Boarding houses (nontransient) with 16 or fewer occupants Boarding houses (transient) with 10 or fewer occupants Care facilities that provide accommodations for five or fewer persons receiving care Congregate living facilities (nontransient) with 16 or fewer occupants Congregate living facilities (transient) with 10 or fewer occupants

Foster Care Family Homes

Section [F] 501.2, Address identification, of the IBC is amended to read as follows:

[F] 501.2 Address identification. All existing commercial and industrial buildings issued certificates of occupancy after September 10, 2006 and all new [New and existing] buildings shall be provided with *approved* address numbers or letters. Each character shall be not less than six inches (153 mm) [4 inches (102 mm)] in height and not less than 0.5 inch (12.7 mm) in width. For buildings with individual suites, the suite numbers shall be a minimum of four inches high with a minimum stroke width of 0.5 inch (12.7mm). They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. When required by the fire code official, address numbers shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the *public way*, a monument, pole or other *approved* sign or means shall be used to identify the structure. Address numbers shall be maintained.

Section 510.2, Horizontal building separation allowance, is amended by adding Section 510.2.1, Two-story "podium" construction with horizontal building separation allowance, to read as follows:

510.2.1 Two-story "podium" construction with horizontal building separation allowance. A building shall be considered as a separate and distinct building for the purpose of determining area limitations, continuity of *firewalls*, limitation of number of *stories* and type of construction where all of the following conditions are met:

- 1. The buildings are separated with a *horizontal assembly* having a minimum three hour *fire-resistance rating*.
- 2. The building below the *horizontal assembly* is no more than two *stories above* grade plane.
- 3. The building below the *horizontal assembly* is of Type IA construction except that floor construction and associated structural members shall have a minimum three hour *fire-resistance rating*.
- 4. All exit stairs, exit ramps and elevator shaft enclosures, whether or not they penetrate through the horizontal assembly, shall have not less than a three-hour fire-resistance rating with opening protectives in accordance with Section 715.4. All other vertical opening through the horizontal assembly shall have not less than a two-hour fire-resistance rating with opening protectives in accordance with Section 715.4.
- 5. Both buildings (i.e., above and below the *horizontal assembly* listed in Item 1 are protected throughout by an *approved automatic sprinkler system* in accordance with Section 903.3.1.1.

6. The buildings shall be permitted to be any of the following occupancies:

- 6.1. Group S-2 parking garage used for the parking and storage of private motor vehicles;
- 6.2 Multiple Group A, each with an occupant load of less than 300;
- <u>6.3</u> <u>Group B;</u>
- <u>6.4</u> <u>Group M;</u>
- 6.5 Group R; and
- 6.6 Uses incidental to the operation of the building (including entry lobbies, mechanical rooms, storage areas and similar uses).
- 7. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 503 for the building having the smaller allowable height as measured from the *grade plane*.
- 8. The height of the entire structure shall not be more than six *stories above grade plane*.
- 9. The highest occupied floor (including mezzanines and occupied roofs) shall not be greater than 75 feet from the lowest level of fire department vehicle access.

Section 703.4, Automatic sprinklers, is repealed in its entirety.

Section 901.5, Acceptance testing, is amended by adding the following sentence to the end of the section to read as follows:

901.5 Acceptance tests. Fire protection systems shall be tested in accordance with the requirements of this code and the *International Fire Code*. When required, the tests shall be conducted in the presence of the *Building Official*. Tests required by this code, the *International Fire Code* and the standards listed in this code shall be conducted at the expense of the owner or the owner's representative. It shall be unlawful to occupy portions of a structure until the required *fire protection systems* within that portion of the structure have been tested and *approved*. A representative of the Fire Marshal shall witness all required acceptance tests for all these systems.

SECTION 901, GENERAL, is amended by adding Section 901.9, Permits, to read as follows:

901.9 Permits. Permits for fire protection systems shall be required as set forth in the *International Fire Code*, as amended.

Section 902.1, Definitions, is amended by adding the following exception to the definition of fire area as follows:

[B] FIRE AREA. The aggregate floor area enclosed and bounded by *fire walls, fire barriers, exterior walls* or *horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

Exception: Outdoor covered areas shall not be considered *fire areas* nor shall they be considered as part of the *fire area* of a connected building where all of the following conditions are met:

- 1. The outdoor covered area is a Group A2 Occupancy less than 1,000 ft² or is a Group A3 Occupancy. If multiple Group A2 Occupancy outdoor covered areas are proposed, then the aggregate area of all of these areas shall be less than 1,000 ft² or separated by a minimum of 20 feet from each other.
- 2. The outdoor covered area is open on at least three sides and open a minimum of 50% of the perimeter of the area covered. In order to be considered "open" for the purpose of this exception, an open side shall be at least 50% open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.
- 3. The outdoor covered area shall have adequate independent means of egress such that the occupants of the outdoor covered area are not required to egress through a connected or adjacent building.

Section [F]903.1, General, is amended by adding Section 903.1.2, Safety Factor, and Section 903.1.3, High volume low speed fans in new and existing buildings, to read as follows:

<u>903.1.2 Safety factor. Automatic sprinkler systems shall be designed with a minimum of 10% or five psi safety factor (whichever is greater) to the hydraulically most demanding design area.</u>

903.1.3 High volume low speed fans in new and existing buildings. The use of High Volume Low Speed (HVLS) or High Volume Low Velocity (HVLV) fans shall be prohibited in areas protected by an *automatic sprinkler system*.

Exception: When a technical opinion and report is provided in accordance with Section 104.7.2, the Fire Marshal or his designee shall analyze the opinion and report and recommend changes as necessary.

Section 903.2.1.3, Group A-3, is amended by adding the following item to the list of conditions:

[F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m²);
- 2. The fire area has an occupant load of 300 or more;-[or]
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies; or
- 4. <u>Any Group A-3 occupancy that serves alcohol shall comply with the fire</u> <u>sprinkler requirements for Group A-2 occupancies in Section 903.2.1.2.</u>

Section [F] 903.2.8, Group R, is amended by adding the following exception:

[F] 903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exception: Foster care family homes as defined in Section 202

Section [F] 903.2.11.1.1, Opening dimensions and access, is amended by adding the following sentence to the end of that section to read as follows:

[F] 903.2.11.1.1 Opening dimensions and access. Openings shall have a minimum dimension of not less than 30 inches (762 mm). Such openings shall be accessible to the fire department from the exterior and shall not be obstructed in a manner that fire fighting or rescue cannot be accomplished from the exterior. Openings shall have a finished sill height which is no more than 44 inches (1117 mm) above the finished floor level of the story which the opening is serving.

Section [F] 903.2, Where required, is amended by adding Section [F] 903.2.13, Porte-cocheres, to read as follows:

[F] 903.2.13 Porte-cocheres. For buildings protected with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, porte-cocheres greater than 1,000 square feet (92 m²) in area shall be sprinklered.

Section [F] 903.3.1.1.1, Exempt locations, is amended by adding item 7 as follows:

[F] 903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or area are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.

- 2. Any room or space where sprinklers are considered undesirable, because of the nature of the contents, when *approved* by the *fire code official*.
- 3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a *fire-resistance rating* of not less than 2 hours.
- 4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- 5. Fire service access elevator machine rooms and machinery spaces.
- 6. Machine rooms and machinery spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.
- 7. Equipment storage areas of fire stations where sprinklers are considered undesirable because of the nature of the contents, including firefighting apparatus and specialized equipment, when *approved* by the fire code official.

Section [F] 903.3.1.2, NFPA 13R sprinkler systems, is amended by adding Section [F] 903.3.1.2.2, Elevator machine room, to read as follows:

[F] 903.3.1.2.2 Elevator machine room. In all R occupancies or occupancies using a 13R system with elevator systems, the elevator machine room shall be sprinklered per NFPA 13.

SECTION 903, AUTOMATIC SPRINKLER SYSTEMS, is amended by adding Section [F] 903.6, Separation from non-sprinklered areas, to read as follows:

[F] 903.6 Separation from non-sprinklered areas. Unless otherwise exempted by this code or the 2012 *International Fire Code* (IFC) or required to be of a higher fire resistive construction by this *code* or the IFC, a minimum one hour *fire barrier* constructed in accordance with Chapter 7 shall be between sprinklered and non-sprinklered areas within a *building*.

Section [F] 905.1, General, is amended by adding Section [F] 905.1.1, Safety factor, as follows:

[F] 905.1.1 Safety factor. Standpipe systems shall be designed with a minimum 10% or five psi safety factor, whichever is greater, to the hydraulically most demanding system and/or outlet.

Section [F] 905.2, Installation standard, is amended by adding Section [F] 905.2.1, Class-I reducers, as follows:

[F] 905.2.1 Class-I reducers. A 2.5 inch by 1.5 inch reducer shall be provided on Class-I standpipe connections with caps and chains.

SECTION [F] 905, STANDPIPE SYSTEMS, is amended by adding Section [F] 905.11, Hose stations, as follows:

[F] 905.11 Hose stations. No fire hose is required for standpipes in fully sprinklered *buildings*, except on stages as defined by Section 410.2. The hose shall be equipped with smooth bore nozzles with shutoffs unless otherwise approved by the fire marshal.

SECTION [F] 906, PORTABLE FIRE EXTINGUISHERS, is amended by adding Section [F] 906.2.1, Travel distance, as follows:

[F] 906.2.1 Travel distance. Travel distance is calculated from a point in the occupancy to the location of fire extinguisher located on the same floor level in accordance with the maximum distances listed in [F] Table 906.3(1) or [F] Table 906.3(2). Travel distance is calculated per floor when determining travel distance to a fire extinguisher in multi-story buildings.

Section [F] 907.1.2, Fire alarm shop drawings, is amended to read as follows:

[F] 907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following:

- 1. A floor plan that indicates the use of all rooms.
- 2. Locations of alarm-initiating devices.
- 3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
- 4. Location of fire alarm control unit, transponders and notification power supplies.
- 5. Annunciators.
- 6. Power connection.
- 7. Battery calculations. <u>Calculations are to be completed using a battery derating</u>

factor of 20% minimum.

8. Conductor type and sizes.

- 9. Voltage drop calculations. <u>Calculations shall be completed using a maximum</u> starting voltage of 20.4 volts for 24-volt systems and 10.2 volts for 12-volt systems.
- 10. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices and materials.
- 11. Details of ceiling height and construction.
- 12. The interface of fire safety control functions.
- 13. Classification of the supervising station.

Section [F] 907.2.1.2, Emergency voice/alarm communication captions, is repealed in its entirety.

Section [F] 907.2.3, Group E, is repealed and replaced with Section [F] 907.2.3 Group E as follows:

[F] 907.2.3 Group E. A manual *fire alarm system* that activates the occupant notification system in accordance with Section [F] 907.5 shall be installed in Group E occupancies. When *automatic sprinkler systems* or *smoke detectors* are installed, such systems or detectors shall be connected to the building *fire alarm system*.

Exceptions:

- 1. <u>A manual *fire alarm system* is not required in Group E occupancies with an occupant load of less than 50.</u>
- 2. <u>Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:</u>
 - 2.1. Interior corridors are protected by *smoke detectors*
 - 2.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat *detectors* or other approved devices.
 - 2.3. Shops and laboratories involving dusts or vapors are protected by *heat detectors* or other approved devices.
 - 2.4. The capability to activate the evacuation signal from a central point is provided.

- 2.5. In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in location specifically designated by the *fire code official*.
- 3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system in accordance with [F] 903.3.1.1, the notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

Section [F] 907.2.7.1, Occupant notification, is repealed in its entirety.

Section [M] 907.2.13.1.2, Duct smoke detection, is amended by adding condition 3 as follows:

[M] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

- 1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
- 2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air-inlet openings.
- 3. In systems with open air returns, the duct *smoke detector* shall be placed on the supply side.

Section [F] 907.2, Where required – new buildings and structures, is amended by adding Section [F] 907.2.24, High occupant load, to read as follows:

[F] 907.2.24 High occupant load. In addition to the requirements listed in other sections of this code, any occupancy having an occupant load of 1000 or more shall be provided with a manual fire alarm system.

Exception: Open parking garages.

Section [F] 907.3, Fire safety functions, is amended to read as follows:

[F] 907.3, Fire safety functions. Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control unit where a fire alarm system is required by Section 907.2. Detectors shall, upon actuation, perform the intended function and activate the alarm notification appliances or activate a visible and audible supervisory signal at a constantly attended location. In buildings not equipped with a fire alarm system, the automatic fire detector shall be powered by normal electrical service and, upon actuation, perform the intended function. The detectors shall be located in accordance with NFPA 72, except that the duct smoke detectors shall be located in accordance with the 2012 *International Mechanical Code*.

Section [F] 907.3.1, Duct smoke detectors, is amended to read as follows:

[F] 907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be *listed* for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is required by Section 907.2. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a *constantly attended location* and shall perform the intended fire safety function in accordance with this code and the *International Mechanical Code*. Duct smoke detectors shall not be used as a substitute for required open area detection. In systems with open air returns, the duct smoke detector shall be placed on the supply side.

Exceptions:

- [1. The supervisory signal at a *constantly attended location* is not required where duct smoke detectors activate the building's alarm notification appliances.]
- 1. [2.] In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an *approved* location. Smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.
- 2. For fire alarm systems which cannot be programmed for supervisory signals, duct detectors shall be allowed to activate the alarm signal.

Section [F] 907.3., Fire safety functions, is amended by adding Section [F] 907.3.5, Fire alarm systems - emergency control, as follows:

[F] 907.3.5 Fire alarm systems – e mergency control. At a minimum, the following functions, where provided, shall be activated by the fire alarm system:

- 1. Elevator capture and control in accordance with ASME/ANSI A17.1b-2007, Safety Code for Elevators and Escalators.
- 2. Release of automatic door closures and hold open devices.
- 3. <u>Stairwell and/or elevator shaft pressurization.</u>

- 4. Smoke management and/or smoke control systems.
- 5. Initiation of automatic fire extinguishing equipment.
- 6. Emergency lighting control.
- 7. Unlocking of doors.
- 8. Emergency shutoff of gas and fuel supplies that may be hazardous provided the continuation of service is not essential to the preservation of life.
- 9. Emergency shutoff of audio systems for sound reinforcement or entertainment (i.e. music systems, systems for announcement and broadcast which are separate from public address systems) provided that such systems are not used to issue emergency instructions.
- 10. Emergency shutoff of systems used for the creation of displays or special effects (i.e. lighting effects, laser light shows, projection equipment).

Section [F] 907.4.2.1, Location, is amended to add the following exception to read as follows:

[F] 907.4.2.1 Location. Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each exit. Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200 feet (60 960 mm).

Exception: Where construction of the *building* prohibits the proper installation of a pull station (e.g. glass walls, interior brick or rock walls), a pull station shall be allowed to be located in the normal path of egress, where approved by the fire marshal.

Section [F] 907.5.1, Presignal feature, is amended to read as follows:

[F] 907.5.1 Presignal features and positive alarm sequences. A presignal feature or Positive Alarm Sequence as defined in NFPA 72 shall not be installed unless *approved* by the fire code official and the fire department. Request to use a presignal feature or a Positive Alarm Sequence must be submitted in writing to the Fire Marshal and approval granted before installation. Where a presignal feature or Positive Alarm Sequence is provided, a signal shall be annunciated at a *constantly attended location approved* by the fire department, in order that occupant notification can be activated in the event of fire or other emergency. When *approved* by the fire code official, the presignal feature or Positive Alarm Sequence shall be implemented in accordance with the requirements of NFPA 72.

Section [F] 907.5.2.1, Audible alarms, is amended by adding Section [F] 907.5.2.1.3, Testing of audible alarms in occupancies other than Group R, as follows:

[F] 907.5.2.1.3 Testing of audible alarms in occupancies other than Group R. Audibility levels for all occupancies other than Group R shall be in accordance with the public mode requirements of NFPA 72, and shall be tested utilizing the following criteria:

- 1. <u>A UL listed sound pressure level meter, which has been calibrated within the last calendar year, and supplied by the *fire alarm system* installing contractor, shall be utilized to obtain readings. The audiometer will be held five feet above floor, pointed in the direction of the audible device.</u>
- 2. All doors within the occupancy, including the bathroom and balcony doors shall be in the closed position.
- 3. Levels shall be taken in the most remote areas of the occupancy first, including bathrooms and balconies.
- 4. Initial readings to confirm the average ambient sound level in each area shall be taken.
- 5. The *fire alarm system* shall be activated and readings in the tested areas shall be retaken and compared with the requirements.

Section [F] 907.5.2.1, Audible alarms, is amended by adding Section [F] 907.5.2.1.4, Testing of audible alarms in Group R occupancies, as follows:

[F] 907.5.2.1.4 Testing of audible alarms in Group R occupancies. Audibility levels for all Group R occupancies shall be in accordance with the requirements of Section [F] 907.6.2.1.1, and shall be tested utilizing the following criteria:

- 1. <u>A UL listed sound pressure level meter, which has been calibrated within the last calendar year, and supplied by the fire alarm system installing contractor, shall be utilized to obtain readings. The audiometer will be held five feet above floor, pointed in the direction of the audible device.</u>
- 2. Sleeping room doors within the occupancy shall be in the closed position.
- 3. Bathroom doors within the occupancy shall be in the closed position.
- 4. Ambient sound level shall be established with the television set at 50% of maximum volume, showers running, bathroom exhaust systems running, and air conditioning units running.
- 5. Levels shall be taken in the most remote area of the dwelling or sleeping unit first, including bathrooms.

- 6. Initial readings to confirm the ambient sound level in each area shall be taken.
- 7. The *fire alarm system* shall be activated and readings in the tested areas shall be retaken and compared with the requirements.

Section [F] 907.5.2.2, Emergency voice/alarm communication systems, is amended to read as follows:

[F] 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving *approved* information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404 of the *International Fire Code*. In high-rise buildings, the system shall operate on a minimum of the alarming floor, the floor above and the floor below. If the system is not reset after five minutes, the building shall sound the general evacuation signal and message in all zones unless an alternative Positive Alarm Sequence has been approved by the Fire Marshal. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

- 1. Elevator groups.
- 2. Exit stairways.
- 3. Each floor.
- 4. *Areas of refuge* as defined in Section 1002.1.

Exception: In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

Section [F] 907.5.2.2.4, Emergency voice/alarm communication captions, is repealed in its entirety.

Section [F] 907.5.2.3.1, Public and common areas, is amended to read as follows:

[F] 907.5.2.3.1 Public and common areas. Visible alarm notification appliances shall be provided in public areas and common areas. <u>A common area is defined as an area that may</u> be shared by two or more individuals (e.g., shared office, meeting room, conference room, huddle room, break room, storage room with a total area of 100 square feet or more that is accessible from a corridor, open work area to which access is not restricted, etc.).

Section [F] 907.5.2.3, Visible alarms, is amended by adding a subsection [F] 907.5.2.3.5, Group R-2 sleeping areas, to read as follows:

[F] 907.5.2.3.5 Group R-2 sleeping areas. Living room in Group R-2 occupancies shall have visible notification devices that meet the effective intensity requirements of NFPA 72, Table 7.5.4.6.2.

Section [F] 907.5.2.3, Visible alarms, is amended by adding Section [F] 907.5.2.3.6, Combination devices, to read as follows:

[F] 907.5.2.3.6 Combination devices. Combination 120 VAC single or multiple-station smoke detectors with an onboard visible notification appliance if utilized to meet the requirements of Section [F] 907.2.11, will not be given credit for meeting the visible alarm notification requirements of Section [F] 907.6.2.3.4 if these devices do not have the capability of supplying backup power for the visible notification appliance portion of the device. Should such devices be utilized to comply with Section [F] 907.2.11, the visible appliance side of the device shall flash in synchronization with the notification appliances required in the unit.

SECTION 907, FIRE ALARM AND DETECTION SYSTEMS, is amended by adding Section [F] 907.9, Alarm signal silencing switch, to read as follows:

[F] 907.9 Alarm signal silencing switch. A switch for silencing the alarm signal sounding appliances shall be permitted only if it is key operated or located within a locked cabinet. Such a switch shall be permitted only if visible zone alarm indication or equivalent has been provided by *approved* annunciation, printout, or other *approve d* means, and subsequent alarms on other initiating devices circuits will cause the audible alarm signaling appliances to resound. A switch that is left in the "silence" position when there is no alarm shall operate trouble signals until the switch is restored to normal.

Section [F] 912.3.1, Locking fire department connection caps, is repealed and replaced to read as follows:

[F] 912.3.1 Locking fire department connection caps. Fire department connection(s) shall have locking caps in the following areas/occupancies: the area described in Section 11-37 of the *city*'s fire code; Group A, E, I occupancies; *high-rise buildings*; any other location that the fire code official determines that a locking cap would be necessary and/or beneficial for firefighting needs.

SECTION [F] 912, FIRE DEPARTMENT CONNECTIONS, is amended by adding Section [F] 912.6, Location and type, as follows:

[F] 912.6 Location and type. Sprinkler system and standpipe fire department hose connections shall be as follows:

1. Within 40 feet of a public street, *approved* fire lane or access roadway; and

- 2. Within 250 feet of an *approved* fire hydrant measured per hose lay criteria in Section 507.5.1.2 except for R-2 apartments the fire department connection shall be within 500 feet of an *approved* fire hydrant measured per hose lay criteria in Section 507.5.1.2 ; and
- 3. Minimum of two feet above finished grade and a maximum of four feet above finished grade for standard inlets and minimum of 30 inches at lowest point above finished grade and maximum of four feet above finished grade for the five inch "Stortz" inlet.
- 4. <u>The Fire Code Official shall approve the location of freestanding fire department</u> connections. Freestanding FDCs must be physically protected against impact per the requirements of Section 312 or other *approved* means.
- 5. Where provided, the five inch "Stortz" inlet shall be installed at a 30 degree angle pointing down;
- 6. Fire department connections for H occupancies will be freestanding remove and located as determined by the fire code official; and
- 7. <u>See Table 912.6</u>

Sprinkler Systems:	Either a 5 Inch		
Wet	Stortz inlet or (2)2		
Dry	$\frac{1}{2}$ Inch inlets		
Standpipes:		Either a 5 Inch	
Automatic Wet		Stortz inlet or	
Automatic Dry		$(2)2\frac{1}{2}$ Inch	
Semiautomatic Dry		inlets	
Standpipes:			A 5 Inch Stortz inlet for
Manual Wet			the first 1000 gallons
Manual Dry			system demand and an
			additional 2 1/2 inlet for
			each additional 250
			gallon demand or portion
			thereof

<u>Table 912.6</u> FDC Connections required by System Type

There shall be no more than one Stortz connection in any configuration

Section [F] 1003, General Means of Egress, is amended by adding the Section [F] 1003.8, Special provisions, as follows:

[F] 1003.8 Special provisions. Rooms in E occupancies used for kindergarten or daycare classified as an E occupancy shall not be located above or below the first story.

Exceptions:

- 1. Basements or stories having floor levels located within four feet, measured vertically, from adjacent ground level at the *level of exit discharge*, provided the *basement* or *story* has exterior *exit* doors at that level.
- 2. In *buildings* equipped with an *automatic sprinkler system* throughout, rooms used for kindergarten or for daycare purposes may be located on the second *story*, provided there are at least two exterior *exit* doors for the exclusive use of such occupancies.

Section 1004.1.2, Areas without fixed seating, is amended by adding a sentence to the end of the main body of the section to read as follows:

1004.1.2 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2. For areas without *fixed seating*, the occupant load shall not be less than that number determined by dividing the floor area under consideration by the occupant load factor assigned to the function of the space as set forth in Table 1004.1.2. Where an intended function is not listed in Table 1004.1.2, the *Building Official fbuilding officialf* shall establish a function based on a listed use that most nearly resembles the intended function. When the calculated number is not a whole number, it is required to round up to the next whole number for determination of the *occupant load* of a space.

Exception: Where approved by the <u>Building Official</u> <u>fbuilding official</u>, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*.

Section 1006.3, Emergency power for illumination, is amended by adding Section 1006.3.2, Illumination in Group E occupancies, to read as follows:

<u>1006.3.2 Illumination in Group E occupancies.</u> Group E occupancies shall have emergency lighting in interior stairs, corridors, windowless areas with student occupancy, shops, and laboratories.

SECTION 1007, ACCESSIBLE MEANS OF EGRESS, is repealed and replaced with a new SECTION 1007 to read as follows:

SECTION 1007

ACCESSIBLE MEANS OF EGRESS

All *buildings* or portions of *buildings* must comply with the accessibility standards adopted by the *State*. Projects shall be submitted to the Texas Department of Licensing and Regulation for review, inspection and approval in accordance with *state* law.

Section 1008.1.9.8, Access-controlled egress doors, is amended as follows:

1008.1.9.8 Access-controlled egress doors. The entrance doors in a *means of egress* in *buildings* with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2 and interior doors in Group I-2 occupancies, with the approval of the *Building Official*, are permitted to be equipped with an *approved* entrance and egress access controls system, listed in accordance with UL 294, which shall be installed which shall be installed in accordance with all of the following criteria:

- 1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- 2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
- 3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock independent of the access control system electronics and the doors shall remain unlocked for a minimum of 30 seconds.
- 4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
- 5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- 6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

Section 1008.1.9.6, Special locking arrangements in Group I-2, is amended as follows with the remaining code sections staying unchanged:

1008.1.9.6 Special locking arrangements in Group I-2. Where *approved* by the *Building* <u>Official, approved [Approved]</u> special egress locks shall be permitted in a Group I-2 occupancy where the clinical needs of persons that require specialized security measures for their safety (i.e., infant/pediatric security safe areas, dementia and Alzheimer's disease care areas, etc.) [receiving care]</u> require such locking. Special egress locks <u>on doors, including</u> stairway doors, shall be permitted in such occupancies where the *building* is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 of an *approved* automatic smoke or heat detection system in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 7 below.

- 1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The doors unlock upon loss of power controlling the lock or lock mechanism.
- 3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
- 4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
- 5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
- 6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
- 7. Emergency lighting shall be provided at the door.

Exception: Items 1 through 4 shall not apply to doors to areas where persons, which because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.

Section 1008.1.9.7, Delayed egress locks, is amended as follows:

1008.1.9.7 Delayed egress locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors, including stairway doors in a Group I-2 occupancy, serving any occupancy except Group A, E and H occupancies in *buildings* that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A *building* occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit*.

- 1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The doors unlock upon loss of power controlling the lock or locking mechanism.
- 3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
- 4. The initiation of an irreversible process which will release the latch is not more than 15 seconds when a force of not more than 15 pound (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted.

- 5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.
- 6. Emergency lighting shall be provided at the door.

Section 1008.1.9.8, Access-controlled egress doors, is amended by amending the first paragraph as follows with items 1 through 6 remaining unchanged:

1008.1.9.8 Access-controlled egress doors. The entrance doors in a *means of egress* in *buildings* with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2 and interior doors in Group I-2 occupancies, with the approval of the *Building Official*, are permitted to be equipped with an *approved* entrance and egress access controls system, listed in accordance with UL 294, which shall be installed which shall be installed in accordance with all of the following criteria:

- 1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- 2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
- 3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 Mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall

result in direct interruption of power to the lock – independent of the access control system electronics – and the doors shall remain unlocked for a minimum of 30 seconds.

- 4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
- 5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- 6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

SECTION 1026, EXTERIOR EXIT RAMPS AND STAIRWAYS, is amended by adding Section 1026.7, Exterior fire escape, to read as follows:

1026.7 Exterior fire escape. Any existing fire escape which is deemed to be adequate fire escape under the laws of the state or under the provisions of the city fire prevention regulations shall be deemed an adequate means of egress for emergency use, as required by this chapter, and the number of existing exterior fire escapes shall be provided to comply with the fire escape law of the state and the city fire prevention regulations.

CHAPTER 11, ACCESSIBILITY, is repealed and replaced with a new CHAPTER 11 to read as follows:

CHAPTER 11 ACCESSIBILITY

All buildings or portions of buildings must comply with the accessibility standards adopted . by the state. Projects shall be submitted to the Texas Department of Licensing and Regulation for review, inspection and approval in accordance with state law.

CHAPTER 15, ROOF ASSEMBLIES AND ROOFTOP STRUCTURES is amended by amending Section [P]1503.4, Roof drainage, by adding Section 1503.4.4, Zero lot line development, and Section 1503.4.5 to read as follows:

1503.4.4 Zero lot line development. On zero lot line development where roof projections are allowed by deed covenant or ingress/egress easements and the roof slopes towards the adjoining property, adequate gutters and downspouts shall be provided to direct roof water away from adjacent property. Roof projections shall not extend beyond a point one third the width of the easement or a maximum of 24 inches (610 mm). If there is no slope towards zero lot line, gutters are not necessary.

1503.4.5 Any Group R or Group U occupancy with roof edges less than three feet (914 mm) to any property line shall be provided with gutters and downspouts to direct roof water away from adjacent property.

SECTION 1704, SPECIAL INSPECTIONS, CONTRACTOR RESPONSIBILITIES AND STRUCTURAL OBSERVATIONS, is amended by amending Section 1704.2, Special inspections, to read as follows:

1704.2 Special inspections. Where application is made for construction as described in this section, the owner or the *registered design professional in responsible charge* acting as the owner's agent shall employ one or more *approved agencies* to perform inspections during construction on the types of work listed under Section 1705. <u>The special inspector shall not be employed by the contractor</u>. These inspections are in addition to the inspections identified in Section <u>10-6 of this chapter.</u> [110.]

Exceptions:

- 1. Special inspections are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as *approved* by the *Building* <u>Official [building official]</u>.
- 2. Unless otherwise required by the <u>Building Official</u> [building official], special inspections are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
- 3. Special inspections are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 of the conventional light-frame construction provisions of Section 2308.

Section 1704.2.1, Special inspector qualifications, is amended to read as follows:

1704.2.1 Special inspector qualifications. Upon request, the [The] special inspector shall provide written documentation to the *Building Official [building official]* demonstrating to the *Building Official [building official]* his or her competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of *special inspection* activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other section of this code.

The *registered design professional in responsible charge* and engineers of record involved in the design of the project are permitted to act as the *approved agency* and their personnel are permitted to act as the special inspector for the work designed by them, provided they qualify as special inspectors personnel meet the qualification requirements of this section to the

satisfaction of the <u>registered design professional in responsible charge</u> and the <u>Building</u> <u>Official [building official]</u>.

Section 1704.2.4, Report requirement, is amended to read as follows:

1704.2.4 Report requirement. Special inspectors shall keep records of inspections. The special inspector shall furnish inspection reports to the *Building Official* upon request, [*building official*] and to the *registered design professional in responsible charge*. Individual inspection reports [Reports] shall indicate that work inspected was or was not completed in conformance to *approved construction documents*. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the *Building Official* [*building official*] and to the *registered design professional in responsible charge* prior to completion of that phase of the work. A final report written by the *registered design professional in responsible charge* professional in responsible charge documenting all of the required special inspections, the special inspectors, and the corrective action taken for and correction of any discrepancies noted in the inspections shall be submitted [at a point in time agreed upon prior to the *Building Official* [*building official*] prior to t

Section 1704.2.5.2, Fabricator approval, is amended to read as follows:

1704.2.5.2 Fabricator approval. Special inspections required by Section 1704 are not required where the work is done on the premises of a fabricator that is enrolled in a nationally accepted inspections program acceptable to the registered design professional in responsible charge. [registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency.] At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the <u>Building Official</u> [building official] upon request. A certificate of compliance shall also be submitted to the registered design professional in responsible charge stating that the work was performed in accordance with the approved construction documents.

Section 3306.7, Covered walkways is amended by adding an exception "B" to read as follows:

3306.7 Covered walkways. Covered walkways shall have a minimum clear height of 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. In no case shall the design live load be less than 250 psf (7.2 kN/m²) for the entire structure.

Exception <u>A</u>: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (7.2 kN/m^2) or the loads imposed on them, whichever is greater. In

lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:

- 1. Footings shall be continuous 2-inch by 6-inch (51mm by 152 mm) members.
- 2. Posts not less than 4 inches by 6 inches (102 mm by 152 mm) shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.
- 3. Stringers not less than 4 inches by 12 inches (102 mm by 305 mm) shall be placed on edge upon the posts.
- 4. Joists resting on the stringers shall be at least 2 inches by 8 inches (51 mm by 203 mm) and shall be spaced not more than 2 feet (610 mm) on center.
- 5. The deck shall be planks at least 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification of at least 23/32 inch (18.3 mm) thick nailed to the joists.
- 6. Each post shall be knee braced to joists and stringers by 2-inch by 4-inch (51 mm by 102 mm) minimum members 4 feet (1219 mm) long.
- 7. A 2-inch by 4-inch (51 mm by 102 mm) minimum curb shall be set on edge along the outside edge of the deck.

Exception B: Pedestrian canopies for construction or demolition of *buildings* not exceeding 36 feet (10.97 m) in height or three stories, whichever is less, may be constructed of metal scaffolds of two-inch (51mm) tubing adequately braced by 1.25 inch (32 mm) tubing. The passageway shall not be less than 39 inches (991 mm) in width at any point with a head room of not less than eight feet (2.44 m). The scaffold ends shall be braced by *approved* diagonal cross bracing maintaining a maximum of eight feet (2.44 m) between ends. A solid, tightly sheathed cover between scaffold and job site to be not less than 0.5 inch (12.7 mm) ply board with railing when required by this section. The roof shall be tightly sheathed with a minimum of two-inch (51 mm) nominal wood planking.

CHAPTER 34, EXISTING STRUCTURES is repealed and replaced with a new CHAPTER 34, EXISTING STRUCTURES, to read as follows:

<u>CHAPTER 34</u> EXISTING STRUCTURES

SECTION 3401 GENERAL

3401.1 Scope. The provisions of this chapter shall control the *repair*, *alteration*, change of occupancy, *addition* and relocation of *existing structures*.

Exception: Existing *bleachers*, grandstands and folding and telescopic seating shall comply with ICC 300-02.

3401.2 Maintenance. Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code edition under which they were installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the Building Official shall have the authority to require a building or structure to be reinspected. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures.

<u>3401.3 Compliance.</u> The *repair*, *alteration*, change of existing occupancy classification, *addition* and relocation of *existing structures* shall be required to meet the provisions of the 2012 *International Existing Building Code* as adopted by the *City*.

APPENDIX H, SIGNS, is amended as follows:

SECTION H101, GENERAL, SECTION H102, DEFINITIONS, SECTION H103, LOCATION, SECTION H104, IDENTIFICATION, SECTION H113, MARQUEE SIGNS, and SECTION H114, PORTABLE SIGNS, are repealed. See Chapter 28, San Antonio Code, for additional requirements.

Section H105.2, Permits, drawings and specifications, is amended to read as follows:

H105.2, Permits, drawings and specifications. Where a permit is required, as provided in Article I of this chapter [Chapter 1], submittal documents consisting of construction documents, engineering calculations and other data shall be submitted in two or more sets with each permit application. [shall be required.] These documents shall show the dimensions, material and required details of construction, including loads, stresses and anchors. The submittal documents shall also be accompanied by the written consent of the owner or lessee of the premises upon which the sign is to be erected. The construction documents and engineering calculations shall be prepared by a Texas registered professional engineer and shall be signed and sealed.

Exception. Construction documents identified above will not be required to be stamped and sealed by a Texas registered professional engineer for the following conditions unless otherwise required by the *Building Official* because of unusual design or site conditions:

- 1. Pole signs that are 12 feet (3.66 m) or less in height.
- 2. Monument signs that are eight feet (2.44 m) or less in height.
- 3. Wall signs that weigh 600 lbs. (272 kg) or less.

<u>4.</u> <u>Channel letters that weigh 7.5 psf (359.1 N/m²) or less.</u>

Section H107, COMBUSTIBLE MATERIALS, is amended by repealing Sections H107.1.2 and H107.1.3.

Section H109, GROUND SIGNS, is amended by repealing Section H109.1, Height restrictions, and Section H109.2, Required clearance.

Section H110, ROOF SIGNS, is amended by repealing Section H110.3, Height of solid signs, Section H110.4, Height of open signs, and Section H110.5, Height of closed signs.

Section H112, PROJECTING SIGNS, is amended by repealing Section H112.4, Height limitation.

Section H115, REFERENCED STANDARDS, is amended by referencing the 2011 NEC as follows:

 NFPA 70-11
 [70-08]
 National Electrical Code
 H106.1, H106.2

Sec. 10-31 Fee Schedule

Development Services establishes minimum values for the cost of commercial construction based upon the costs per square foot as published and updated by the International Code Council and used with the Army Corp of Engineers' modifier for the city. This value is established at the time the building plans are submitted. Additional valuation checks may be performed by the plans examiners during their review of the plans.

Commercial Plan Review Fees		
Valuation \$0-\$1,000	\$100.00	
Valuation \$1,001-\$200,000	\$100.00+\$1.60/\$1,000, or fraction thereof, over \$1,000	
Valuation \$200,001-\$1,000,000	\$418.40+\$1.50/\$1,000, or fraction thereof, over \$200,000	
Valuation \$1,000,001- \$5,000,000	\$1,618.40+\$0.75/\$1,000, or fraction thereof, over \$1,000,000	
Valuation \$5,000,001+	\$4,618.40+\$0.50/\$1,000, or fraction thereof, over \$5,000,000	
School District Plan Reviews:		
School districts with school distri shall be entitled to a twenty-five shall said school district pay less cents (\$868.40) for plan review, and one hundred thirty-six dollar	ct projects valued at over five hundred thousand dollars (\$500,000.00) e (25) percent waiver of plan review and permit fees, but in no case than a minimum fee of eight hundred sixty-eight dollars and forty one thousand four hundred ten dollars (\$1,410.00) for building permit, s and seventy cents (\$136.70) for the related surcharges.	
Landscape Plan Review		
Base fee Plus 11% of the Building Plan Review Fee	\$27.50	
Commercial Irrigation Plan	\$100.00	

Review				
Commercial Swimming Pool Plan Review Fee	(based upon valuation)			
Pool Commercial Landscape Plan Review				
Base fee Plus 11% of the Building Plan Review Fee	\$27.50			
Commercial Permit Fees				
Valuation: \$0-\$1,000	\$100.00			
Valuation: \$1,001-\$25,000	\$100.00+\$7.28/\$1,000, or fraction thereof, over \$1000			
Valuation: \$25,001-\$75,000	\$274.87+\$5.72/\$1,000, or fraction thereof, over \$25,000			
Valuation: >75,000	\$560.00+\$2.00/\$1,000, or fraction thereof, over \$75,000			
School District Plan Reviews:				
School districts with school district projects valued at over five hundred thousand dollars (\$500,000.00) shall be entitled to a twenty-five (25) percent waiver of plan review and permit fees, but in no case shall said school district pay less than a minimum fee of eight hundred sixty-eight dollars and forty cents (\$868.40) for plan review, one thousand four hundred ten dollars (\$1,410.00) for building permit, and one hundred thirty-six dollars and seventy cents (\$136.70) for the related surcharges.				
Commercial Conditional Permit Fees (plus the Building Permit Fee)	\$200.00			
Commercial Fence (plus Plan Review Fee)	Based Upon Building Valuation			
Commercial Re-Roof (plus Plan Review Fee when applicable)	Based Upon Building Valuation			
Document Management Fee	Walk Through Plans - \$10.00; School Districts - Interior Finishout - \$10.00; Retaining Walls - \$10.00; Demolition - \$10.00; 10 Day Plans - \$25.00; Site Plans - \$30.00; 20 Day Plans - \$50.00; 35 Day Plans - \$150.00/Roll; School Districts - New - \$150/Roll			
Special Services Fees—Building Plan Review and Inspection				
Additional Plan Review (i.e. revised)—Per Reviewer (All Disciplines) per Hour (1 hour minimum)	\$100.00			
Administrative Exception	\$350.00			
Code Variance	\$350.00			
After-hour Inspection Fee (per hour with 1 hour minimum)	\$100.00			
After-hours Commercial Plan Review—Per Reviewer (All Disciplines) per Hour (1 hour minimum)	\$100.00			
Commercial Plan Retrieval Fee per Plan	\$100.00			
Commercial Project Modification	\$350.00			
Request Fee per Modification Request				
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Commercial Walk-Through Fee for Plans over 500 Square Feet (per plan)	\$100.00			
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	\$100.00			
Inspection Schedule Fee (Free on-line)	\$3.00			
Mail-in Building Plan Fee (Processing Fee for Building Plans received in the mail) per Plan	\$500.00			
Plan Review by Appointment Processing Fee (per appointment)	\$200.00			
Plus Additional Plan Review Fee per Reviewer per hour (1 hour minimum)	\$100.00			
Preliminary Plan Review				
Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)	\$100.00			
Plus Additional Plan Review Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)	\$100.00			
Re-inspection Fee	\$50.00			
Median and turn lane review (outside of plat) per hour	\$100.00			
Permit extension fee: 50% of perm	nit (plus cost of permit)			
Building related and Fire Codes A	Incasts and Advisory Roard East			
Building related and Fire Codes				
Appeal Fee	00.00			
Appeal to City Council	\$155.00			
Certificate of Occupancy				
Commercial				
Commercial Certificate of Occupancy	\$200.00			
Temporary Commercial Certificate of Occupancy	\$500.00			
Temporary Commercial	\$100.00			

Certificate of Occupancy Extension	
Expired Certificate of Occupancy Fine (basic fee plus C of O fee)	\$500.00
Fine for New Commercial Construction Occupancy without C of O	\$500.00
Fine for Existing Commercial Construction Occupancy without C of O (plus C of O Fee)	\$200.00
Miscellaneous	
Certificate of Occupancy Tent Fee	\$100.00
Certificate of Occupancy Mall Cart	\$100.00
Certificate of Occupancy-Name Change	\$50.00
Certificate of Occupancy- Address Correction	\$50.00
Duplicate Copy of Certificate of Occupancy (plus tax)	\$5.00
Re-inspection Fee	\$50.00
Miscellaneous Building Developme	ent Fees
Permit Processing Fee	\$10.00
Building Permit ready/status letter	\$50.00
Link child-parent permits in Hansen, per commercial permit	\$10.00
Permit Refund Fee	\$50.00
Permit Amendment Fee	\$10.00
Building/Suite assignment fee:	
Building	\$100.00
Suite	\$20.00
Permit Reprint Fee (subject to sales tax)	\$5.00
Name, Address or DBA Change on Permit	\$50.00
Notary Public	\$3.00
Open Permit Review Fee	\$3.00/Permit

Rental of Facility Fees: \$125/hr (daily min. fee of \$250; Max fee of \$1000); Security Personnel: \$15/hour/staff (with 1 hour minimum); DSD Staff: \$30/hour/staff (with 1 hour min.); Custodian Service: \$15/hour (with 2 hour min.)			
Commercial			
Occupant load adjustment fee per hour .	100.00		

Sec. 10-32 through 10-35. Reserved.

ARTICLE IV. RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS

Sec. 10-36 Adoption of International Residential Code (2012).

The 2012 edition of the International Residential Code for One-and-Two-family Dwellings, promulgated by the International Code Council, Chapters 2 through 10, 12 through 23, Section P2904, Chapter 44 and Appendices G, J and K is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of Section 10-37. Provisions of this article are in addition to the provisions of the International Residential Code. The following provisions coinciding with the provisions of the International Residential Code supersede, or delete, when indicated, the corresponding provisions of the International Residential Residential Code.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-37. Amendments to the adopted chapters and Appendix G of the International Residential Code (IRC) (2012).

Additions to the International Residential Code (IRC) are shown as <u>underlined</u> text. Deletions of the IRC are shown as bracketed [strikethroughs].

TABLE R301.2(1) is amended to read as follows:

TABLE R301.2(1)CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND WIND DESIGN		SEISMIC	SUBJECT TO DAMAGE FROM				
	SNOW LOAD	Speed ^d (mph)	Topographic effects ^k	DESIGN CATEGORY ^f	Weathering ^a	Frostline depth ^b	Termite ^c
	5	90	NO	A	Negligible	0	<u>Moderate</u> To Heavy

WINTER	ICE BARRIER		AIR	MEAN
DESIGN TEMP ^e	UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	FREEZING INDEX ⁱ	ANNUAL TEMP ^j
0		Appendix F,		
30	NQ	2009 UDC	<u>16</u>	<u>68.7°</u>

Section R303.4, Mechanical ventilation, is amended to read as follows:

R303.4 Mechanical ventilation. Where local exhaust or whole house mechanical ventilation is provided, the dwelling unit shall be ventilated [Where the air infiltration rate of a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch we (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole house mechanical] ventilation in accordance with Section M1507.3.

Section R308.4 Hazardous locations, subsection R308.4.2, Glazing adjacent doors, exception number 4 is amended to read as follows:

R308.4.2 Glazing adjacent doors. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface shall be considered a hazardous location.

Exceptions:

- 1. Decorative glazing.
- 2. When there is an intervening wall or other permanent barrier between the door and the glazing.
- 3. Glazing in walls on the latch side of and perpendicular to the plane of the door in a closed position.
- 4. Where access through the door is to a closet or storage area. [3 feet (914 mm) or less in depth. Glazing in this application shall comply with section R308.4.3.]
- 5. Glazing that is adjacent to the fixed panel of patio doors.

Section R313.2, One- and two-family dwellings automatic fire systems, and Section R313.2.1, Design and installation, are repealed in their entirety and replaced with the following:

R313.2 One and two-family dwellings automatic fire systems. Where automatic residential fire sprinkler systems are installed, they shall be designed and installed in accordance with Section P2904 or NFPA 13D.

Section R315.3, Where required in existing dwellings, is amended to read as follows:

R315.3 Where required in existing dwellings. Where work requiring a <u>building</u> permit occurs inside of [in] existing *dwellings* that have attached garages or inside of existing

dwellings within which fuel-fired *appliances* exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

Section R317.1.2 Ground contact is amended to read as follows:

R317.1.2 Ground contact. All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures intended for human occupancy shall be *approved* pressure-preservative-treated wood suitable for ground contact use, except untreated wood may be used where entirely below groundwater level or continuously submerged in fresh water. <u>Creosote-treated railroad ties will not be *approved* for use in retaining wall construction unless the wall is exempt from the requirement for a permit under Section 10-6(e)(4) of this chapter and the wall is located greater than four feet (1.22 m) from the public right-of-way.</u>

SECTION R322, FLOOD-RESISTANT CONSTRUCTION, is hereby repealed and replaced with the city's flood plain ordinance found in Appendix F, Floodplain Areas of Special Flood Hazard, of the Unified Development Code (UDC).

Section R403.1.6 Foundation anchorage is amended in the first paragraph only to read as follows:

R403.1.6 Foundation anchorage. Sill plates and walls <u>that are part of the braced wall</u> <u>provisions of this code and</u> supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Wood sole plates at all exterior walls on monolithic slabs, wood sole plates of braced wall panels at building interiors on monolithic slabs and all wood sill plates shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. Bolts shall be at least ½ inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. Cold-formed steel framing systems shall be fastened to wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.3.1.

Exceptions:

- 1. Foundation anchorage, spaced as required to provide equivalent anchorage to ¹/₂inch-diameter (12.7 mm) anchor bolts.
- 2. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in item 8 of Table R602.3(1).

3. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in item 8 of Table R602.3(1).

Section R903.4, Roof drainage, is amended by adding Sections R903.4.2, Zero lot line development, and R903.4.3, Gutters and downspouts, to read as follows:

R903.4.2 Zero lot line development. On zero lot line development where roof projections are allowed by deed covenant or ingress/egress easements, adequate gutters and downspouts shall be provided to direct roof water away from adjacent property. Roof projections shall not extend beyond a point one third the width of the easement or a maximum of 24 inches (610 mm).

R903.4.3 Gutters and downspouts. Any Group R or Group U occupancy with roof edges less than three feet (914 mm) to any property line shall be provided with gutters and downspouts to direct roof water away from adjacent property.

Section M1305.1.3 Appliances in attics, is amended by adding Subsection M1305.1.3.2, Access for cooling or heating appliance, to read as follows:

M1305.1.3.2 Access for cooling or heating appliance. For residential applications, the attic space in which any cooling or heating appliance is installed shall be provided with a permanent ladder or fold-away ladder.

SectionM1411.3.1, Auxiliary and secondary drain systems, is amended by eliminating auxiliary protection method #2 and #4 and renumbering as follows:

<u>M1411.3.1 Auxiliary and secondary drain systems.</u> In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be a minimum of ³/₄-inch (19 mm) nominal pipe size. One of the following methods shall be used:

1. An auxiliary drain pan with a separate drain shall be installed under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1.5 inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236-inch (0.6010 mm) (No. 24 Gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).

- [2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary-drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.]
- 2. [3] An auxiliary drain pan without a separate drain line shall be installed under the coils on which condensation will occur. This pan shall be equipped with a water level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The pan shall be equipped with a fitting to allow for drainage. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.
- [4. A water level detection device conforming to UL 508-shall be installed that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the *equipment* supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.]

Section M1411.3.2 Drain pipe materials and sizes, is amended by adding a sentence at the end of the section to read as follows:

M1411.3.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the materials specified in Article IX of this chapter. Condensate waste and drain line size shall be not less than ³/₄-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an *approved* method. Non-PVC primary *drain* lines located in unconditioned spaces, except for crawl spaces, shall be insulated with foam plastic rubber based insulation or other *approved* material with a minimum thickness of 3/8 inch.

Section M2005.2 Prohibited locations, is amended as follows:

M2005.2 Prohibited locations. Fuel fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that *combustion air* will not be taken from the living space. Installation of direct-vent water heaters within an enclosure is not required. Storage type water heaters shall not be installed in an attic unless accessible from a door opening from the house on the same floor level. Water heaters installed in a garage having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor, unless the ignition source is listed as flammable vapor ignition resistant. An electric water heater is the only type of water heater that may be installed under a stairway or landing.

Section G2415.6 Underground penetrations prohibited, is amended as follows:

G2415.6 Underground penetration prohibited. *Gas piping* shall not penetrate building foundation walls at any point below grade. *Gas piping* shall enter and exit the building at a point above grade and the annular space between the *pipe* and the wall shall be sealed.

Exception: Gas piping may penetrate a slab-on-grade foundation, above or below grade, where the installation complies with Section G2415.14.

APPENDIX G, SWIMMING POOLS, SPAS AND HOT TUBS, is amended by repealing Section AG101.2, Pools in flood hazard areas, and Subsections AG101.2.1, Pools located in designated floodways, and AG101.2.2, Pools located where floodways have not been designated.

Sec. 10-38. Fee Schedule.

Building			
Residential Plan Review Fees			
Valuation: \$0-\$24,000	\$100.00		
Valuation: \$24,001-\$200,000	\$100.00 plus \$1.38/1000, or fraction thereof, over \$24,000		
Valuation \$200,001—\$1,000,000	\$342.88+\$0.72/\$1,000, or fraction thereof, over \$200,000		
Valuation \$1,000,001+ \$918.88+\$0.17/\$1,000, or fraction thereof, over \$1,000,000 \$1,000,000			
Construction for new homes valued under \$100,000 plan review fees.) will receive a 25% discount applied to the building		
Mobile home Installation	\$50.00		
Landscape Plan Review			
Base Fee	\$27.50		
Plus percent of the Building Plan Review Fee	11%		
Residential Swimming Pool Plan Review Fee Based upon valuation			
Residential Plan Retrieval Fee \$100.00			
Residential Permit Fees			
Residential Building Permit Fees			
Valuation: \$0-\$1,000	\$100.00		
Valuation: \$1,001-\$25,000	\$100.00+\$7.28/\$1,000, or fraction thereof, over \$1000		
Valuation: \$25,001—\$75,000	\$274.87+\$5.72/\$1,000, or fraction thereof, over \$25,000		
Valuation >\$75,000	\$560.00+\$1.25/\$1,000, or fraction thereof, over \$75,000		
*Homes valued under \$100,000 will receive a 25% c	*Homes valued under \$100,000 will receive a 25% discount applied to the building permit fees.		

	Y
Residential Fence Permit	\$25.00
Residential Swimming Pool Permit Fee	Based upon valuation with \$30,000/minimum value
Residential Re-roof Permit	\$25.00
Special Services Fees-Building Plan Review and Inspection	d
Additional Plan Review (i.e. revised)—Per Reviewer per Hour (1 hour minimum)	\$100.00
Administrative Exception/Code Variance	\$350.00
After-hours Plan Review—per Reviewer per Hour (1 hour minimum)	\$100.00
After-hours Plan Review–Residential–Building, Tree Preservation, Drainage (Per hour with 1.24 hour minimum)	\$100.00
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	\$100.00
After-hour Inspection Review–per Reviewer per Hour (1 hour minimum)	\$100.00
Link child-parent permits to Hansen	\$5.00/residential permit
Inspection Schedule Fee (Free on-line)	\$3.00
Mail-in Building Plan Fee (Processing Fee for Building Plans received in the mail) per Plan	\$500.00
Re-inspection Fee	\$50.00
Residential Building Plan Application Administrative Processing Fee (free on-line)	\$10.00
Permit extension fee	50% of permit
Building-related and Fire Codes Appeals and Advisory Board	Fees
Building-related and Fire Codes Appeal Fee	\$155.00
Appeal to City Council	\$155.00
Certificate of Occupancy	
Residential	
Temporary Residential Certificate of Occupancy	\$150.00
Temporary Residential Certificate of Occupancy Extension	\$75.00
Residential Construction Moving in without Certificate of Occupancy	\$300.00
License and Registration Fees	
HomebuildersAnnual State License Registration for Homebuilders	\$85.00
Home Improvement Contractor-Initial-City License	\$75.00
Home Improvement Contractor-Renewal-City License	\$75.00
Home Improvement Contractor—Appeal	\$75.00
Home Improvement Contractor—Duplicate license (plus tax)	\$5.00
Salesman Initial City License	\$60.00

tem No. 9	
Salesman Renewal City License	\$35.00
Salesman Duplicate City License (plus tax)	\$5.00
House Moving Contractor License	
Annual License	\$60.00
Duplicate (plus tax)	\$5.00
Moving Buildings	
Moving building on same property in one section	\$18.00
Moving buildings or structures over 400 sq. ft. per section, per day on city street	\$100.00
Moving buildings or structures under 400 sq. ft. per section, per day on city street	\$90.00
Street Number Painter License	
Annual License	\$35.00
Building Plan Review and Permit Fees	
times standard rate for occupancy) of each building or bu building square footage shall be the total area of all floor surface of the outside enclosing walls or columns. The fee separately calculated.	ilding addition. For fee calculation purposes, s under roof and enclosed within the outer es for each separate building shall be
Minimum valuation of the work for residential projects s and shall include architectural, structural, electrical, plu profit.	shall be determined by the foregoing table mbing, mechanical work and contractor's
Minimum valuation of the work for commercial projects based on nationally recognized standards and shall includ plumbing, mechanical work and contractor's profit.	shall be determined by the Building Official e architectural, structural, electrical,
Residential Construction	
Residential Building Plan Review Valuation Check	
Development Services established minimum values for t the following costs per square foot. This value is establish submitted. Additional valuation checks may be performed of the plans. For residential projects, determination of m established as follows:	he cost of residential construction based upon bed at the time the building plans are I by the plans examiners during their review inimum value per square foot shall be
Wood Frame	\$65.00
Wood Frame with Masonry	\$70.00
Solid Masonry	\$80.00
Concrete Block on Slab Foundation	\$16.00
Residential Accessory Building	· · · · · · · · · · · · · · · · · · ·
Finished (percent of valuation/square footage)	100%
Unfinished Interior (including Carport) (percent of valuation/square footage)	50%
Future Construction—Foundation Only (per square foot) \$3.00

square \$3.00

Detached Accessory Building Foundation over 600 feet (per square foot)

Foundation over 600 square feet (per square foot)	\$3.00
Miscellaneous Building Development Fees	
Permit Refund Fee	\$50.00
Permit Reprint Fee (subject to sales tax)	\$5.00
Permit Refund Fee	\$50.00
Permit Amendment Fee	\$10.00
Name, Address or DBA Change on Permit	\$50.00
Notary Public	\$3.00

Sec. 10-39 through 10-45. Reserved.

ARTICLE V. EXISTING BUILDING CODE

Sec. 10-46. Adoption of International Existing Building Code (2012).

The 2012 edition of the *International Existing Building Code*, promulgated by the International Code Council, Section 101 and 102 of Chapter 1, and Chapters 2 through 15, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-47. Provisions of this article are in addition to the provisions of the *International Existing Building Code*. The following provisions coinciding with the provisions of the *International Existing Building Code* supersede, or delete, when indicated, the corresponding provisions of the *International Existing Building Code*.

Sec. 10-47. Amendments to the adopted chapters of the *International Existing Building* Code (2012).

Additions to the International Existing Building Code (IEBC) are shown as <u>underlined</u> text. Deletions of the IEBC are shown as bracketed [strikethroughs].

Section 101.1, Title, is amended as follows:

101.1 Title. These regulations shall be known as the Existing Building Code <u>of San Antonio</u>, <u>Texas</u>, <u>[NAME OF JURISDICTION]</u> herein referred to as "this code."

Section [A] 101.4.2, Buildings previously occupied, is amended by amending the reference to the International Property Maintenance Code to read as follows:

[A] 101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code, or the <u>San Antonio</u> [International] Property Maintenance Code, or as is deemed necessary by the code official for the general safety and welfare of the occupants and the public.

BUILDINGS, SECTION 605, ACESSIBILITY, SECTION 705, ACCESSIBILITY, SECTION 806, ACCESSIBILITY, SECTION 906 ACCESSIBILITY, Section 912.8, Accessibility,

SECTION 1006, ACCESSIBILITY, SECTION 1205, ALTERATIONS, and Section [B] 1401.2.5, Accessibility requirements, are repealed in their entirety.

Sec. 10-48. Fee Schedule. See the Fee Schedule for the International Building Code above.

Sec. 10-49 through 10-50. Reserved.

ARTICLE VI. ELECTRICAL CODE

Sec. 10-51. Adoption of National Electrical Code (2011).

The 2011 edition of the *National Electrical Code*, promulgated as a standard by the National Fire Protection Association, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-52. Provisions of this article are in addition to the provisions of the *National Electrical Code*. The following provisions coinciding with the provisions of the *National Electrical Code* supersede, or delete, when indicated, the corresponding provisions of the *National Electrical Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-52. Amendments to the adopted chapters of the National Electrical Code (2011).

Additions to the National Electrical Code (NEC) are shown as <u>underlined</u> text. Deletions of the NEC are shown as bracketed [strikethroughs].

Article 200.6, Means of Identifying Grounded Conductors, paragraph (A), items (1) through (3) and paragraph (B), items (1) through (4) are amended by changing the size of the conductors, by clarifying the color of the conductor and by prohibiting a method of identification and are to read as follows:

- (A) Sizes <u>10</u> [6] AWG or Smaller. An insulated grounded conductor of <u>10</u> [6] AWG or smaller shall be identified by one of the following means:
 - (1) A continuous white outer finish shall be used on all systems with a voltage of less than 150Volts between the grounded and ungrounded conductors.
 - (2) A continuous gray outer finish shall be used on all systems with a voltage of 150 Volts or higher between the grounded and ungrounded conductors.
 - (3) [Three continuous white stripes along the conductor's entire length on other than green insulation]

- (4) Wires that have their outer covering finished to show a white or gray color but have colored tracer threads in the braid identifying the source of manufacture shall be considered as meeting the provisions of this section.
- (5) The grounded conductor of a mineral-insulated, metal-sheathed cable shall be identified at the time of installation by distinctive marking at its terminations.
- (6) A single-conductor, sunlight-resistant, outdoor-rated cable used as a grounded conductor in photovoltaic power systems, as permitted by 690.31, shall be identified at the time of installation by distinctive white marking at all terminations.
- (7) Fixture wire shall comply with the requirements for grounded conductor identification as specified in 402.8
- (8) For aerial cable, the identification shall be as above, or by means of a ridge located on the exterior of the cable so as to identify it.
- (B) Sizes <u>eight</u> [4] AWG or Larger. An insulated grounded conductor of <u>eight</u> [4] AWG or larger shall be identified by one of the following means:
 - (1) A continuous white outer finish shall be used on all systems with a voltage of less than 150 Volts between the grounded and ungrounded conductors.
 - (2) A continuous gray outer finish shall be used on all systems with a voltage of 150 Volts or higher between the grounded and ungrounded conductors.
 - (3) [Three continuous white stripes along the conductor's entire length on other than green insulation.]
 - (3) [(4)] At the time of installation, by a distinctive white or gray marking <u>tape</u> at its terminations. <u>The [This]</u> marking <u>tape</u> shall encircle the conductor or insulation <u>a</u> minimum of two-inches in length.

The title of Article 200.7 is amended to limit this method of identification for use on cables listed in Article 334 to read as follows:

200.7 Use of Insulation of White or Gray Color or with Three Continuous White Stripes on Cables Listed in Article 334.

Article 210.5, Identification for Branch Circuits is amended to read as follows:

(A) Grounded Conductor. The grounded conductor of a branch circuit shall be identified in accordance with 200.6

- (B) Equipment Grounding Conductor. The equipment grounding conductor shall be identified in accordance with 250.119.
- (C) Identification of Underground Conductors. Underground conductors shall be identified in accordance with 210.5(C)(1), (2), and (3).
 - (1) **Application.** Where the premises wiring system has branch circuits supplied from more than one nominal voltage system, each underground conductor of a branch circuit shall be identified by phase or line and system at all termination, connection, and splice points.
 - (2) Means of Identification. <u>Conductors 10 AWG and smaller shall have</u> factory colored insulation. <u>Conductors eight AWG and larger may have</u> factory colored insulation or black insulation with a marking tape that encircles the insulation a minimum of two-inches in length. <u>Color of</u> insulation or marking tape shall comply with the following table: [The means of identification shall be permitted to be separate color coding, marking tape, tagging, or other approved means.]

UNGROUNDED CONDUCTOR IDENTIFICATION			
	COLORS FOR EL	ECTRICAL STSTEMS	an de la companya de Recompanya de la companya de la comp
208Y/120 Volts	<u>120/240 Volts</u>	480Y/277 Volts	120/240 Volts
Three phase	Three phase	Three phase	Single phase
<u>A - Black</u>	<u>A - Black</u>	<u>A - Purple</u>	<u>A - Black</u>
	<u>B - Orange (high</u>		
<u>B - Red</u>	leg)	<u>B - Brown</u>	<u>B - Red</u>
C - Blue	C - Blue	C - Yellow	

Informational Note 1: Conductors used for switch legs shall be the same color as the branch circuit conductors.

Informational Note 2: Conductors used for travelers may be of the same color as its associated switch leg or may be any of the above colors not used on the project. The colors designated for the grounded conductor, grounding conductors or for identification of the high leg may not be used for travelers.

Informational Note 3: In existing installations where modifications to the electrical system are required, and there is an established system of colors for ungrounded conductors, the existing color coding system may continue to be used.

(3) **Posting of Identification Means.** The method utilized for conductors originating within each branch-circuit panelboard or similar branch-circuit distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment.

Article 210.19(A)(1), Conductors – Minimum Ampacity and Size (1) General, is amended by adding the following sentence to the end of paragraph (1) to read as follows:

210.19(A)(1), Conductors – Minimum Ampacity and Size.

(A) Branch Circuits Not More Than 600 Volts.

(1) General. Branch-circuit conductors shall have an ampacity not less than the maximum load to be served. Where a branch circuit supplies continuous loads or any combination of continuous and noncontinuous loads, the minimum branch-circuit conductor size, before the application of any adjustment or correction factors, shall have an allowable ampacity not less than the noncontinuous load plus 125 percent of the continuous load. No conductor smaller than 12 AWG copper or 8 AWG aluminum shall be used; however, conductors smaller than 12 AWG AWG copper may be used for taps if part of an approved assembly.

Exception: If the assembly, including the overcurrent devices protecting the branch circuit(s), is listed for operation at 100 percent of its rating, the allowable ampacity of the branch circuit conductors shall be permitted to be not less than the sum of the continuous load plus the noncontinuous load.

Informational Note No. 1: See 310.15 for ampacity ratings of conductors.

Informational Note No. 2: See Part II of Article 430 for minimum rating of motor branch-circuit conductors.

Informational Note No. 3: See 310.15(A)(3) for temperature limitation of conductors.

Informational Note No. 4: Conductors for branch circuits as defined in Article 100, sized to prevent a voltage drop exceeding 3 percent at the farthest outlet of power, heating, and lighting loads, or combinations of such loads, and where the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed 5 percent, provide reasonable efficiency of operation. See Informational Note No. 2 of 215.2(A)(3) for voltage drop on feeder conductors.

Article 210.52(B)(1), Small Appliances - Receptacle Outlets Served, is amended by deleting Exception No. 2 and adding language as follows:

In the kitchen, pantry, breakfast room, dining room, or similar area of a dwelling unit, the two or more 20-ampere small-appliance branch circuits required by 210.11(C)(1) shall serve all wall and floor receptacle outlets covered by 210.52(A), and all countertop outlets covered by 210.52(C) [and receptacle outlets for refrigeration equipment.] Receptacle outlets for refrigeration equipment shall be supplied from an individual branch circuit rated 20 amps or greater.

Exception <u>*[No. 1]*</u>: In addition to the required receptacles specified by 210.52, switched receptacles supplied from a general-purpose branch circuit as defined in 210.70(A)(1), Exception No. 1, shall be permitted.

[Exception No. 2: The receptacle outlet for refrigeration equipment shall be permitted to be supplied from an individual branch circuit rated 15 amperes or greater.]

The last sentence of Article 210.63, Heating, Air-Conditioning, and Refrigeration Equipment Outlet, is amended to clarify the mounting and circuiting requirements of the receptacle outlet required by this Article. The sentence is amended as follows with the Exception and Informational Note remaining as published in the NEC:

210.63. Heating, Air-Conditioning, and Refrigeration Equipment Outlet. A 125-volt, single-phase, 15- or 20- ampere-rated outlet shall be installed at an accessible location for the servicing of heating, air-conditioning, and refrigeration equipment. The receptacle shall be located on the same level and within 7.5 m (25 ft) of the heating, air-conditioning, and refrigeration equipment. The receptacle outlet shall not be mounted on the equipment and shall not be connected to the circuit serving the equipment. [connected to the load side of the equipment disconnecting means.]

Article 210.70, Lighting Outlets Required, is amended by adding Subsection (D), Open Lamps, to read as follows:

210.70 Lighting Outlets Required. Lighting outlets shall be installed where specified in 210.70(A), (B), and (C).

* * * * *

(D) Open Lamps. Lighting outlets required by 210.70(A)(3) and 210.70(C) with open lamps shall be guarded where installed less than seven feet above the working surface measured directly below the lamp or where exposed to physical damage.

Article 220.14(J) Dwelling Occupancies, is amended by adding the following sentence to the end of the paragraph:

220.14(J) Dwelling Occupancies. In one-family, two-family, and multifamily dwellings and in guest rooms or guest suites of hotels and motels, the outlets specified in (J)(1), (J)(2), and (J)(3) are included in the general lighting load calculations of 220.12. No additional load calculations shall be required for such outlets. <u>A maximum of eight receptacle outlets shall be permitted on a 15 A branch circuit and a maximum of 10 receptacle outlets shall be permitted on a 20 A branch circuit.</u>

(1) All general-use receptacle outlets of 20-ampere rating or less, including receptacles connected to the circuits in 210.11(C)(3).

- (2) The receptacle outlets specified in 210.52(E) and (G).
- (3) The lighting outlets specified in 210.70(A) and (B).

Article 230.43 Wiring Methods for 600 Volts, Nominal, or Less amended to restrict the wiring methods for service entrance conductors inside of buildings to read as follows:

230.43 Wiring Methods for 600 Volts, Nominal, or Less. Service-entrance conductors shall be installed in accordance with the applicable requirements of this *Code* covering the type of wiring method used and shall be limited to methods (3), (4), (8), (9), and (10) of the following methods for service entrance conductors inside of buildings and methods (1) through (19) of the following methods for service entrance conductors outside of buildings: [the following methods]

- (1) Open wiring on insulators
- (2) Type IGS cable
- (3) Rigid metal conduit
- (4) Intermediate metal conduit
- (5) Electrical metallic tubing
- (6) Electrical nonmetallic tubing (ENT)
- (7) Service-entrance cables
- (8) Wireways
- (9) Busways
- (10) Auxiliary gutters
- (11) Rigid polyvinyl chloride conduit (PVC)
- (12) Cablebus
- (13) Type MC cable
- (14) Mineral-insulated, metal-sheathed cable
- (15) Flexible metal conduit not over 1.8 m (6 fit) long or liquidtight flexible metal conduit not over 1.8 m (6 ft) long between raceways, or between raceway and service equipment, with equipment bonding jumper routed with the flexible metal conduit or the liquidtight flexible metal conduit according to the provisions of 250.102(A), (B), (C), and (E)
- (16) Liquidtight flexible nonmetallic conduit
- (17) High density polyethylene conduit (HDPE)
- (18) Nonmetallic underground conduit with conductors (NUCC)
- (19) Reinforced thermosetting resin conduit (RTRC)

Article 250.52(A)(3)(1), Concrete-Encased Electrode, is amended by adding the following Informational Note:

230.52 Individual Conductors Entering Buildings or Other Structures. Where individual open conductors enter a building or other structure, they shall enter through roof bushings or through the wall in an upward slant through individual, noncombustible, nonabsorbent insulating tubes. Drip loops shall be formed on the conductors before they enter the tubes.

Informational Note: A piece of reinforcing steel conforming to (1) above which has additional length, without splice, extended up past the sole plate of the structure to which the grounding electrode may be connected to and extended to the service equipment is acceptable. The portion of the reinforcing steel extending above the sole plate shall be painted green and the paint removed from the bar where the connection is made to the grounding electrode conductor.

Article 250.52(A), Electrodes Permitted for Grounding, (5) Rod and Pipe Electrodes, is amended to clarify the minimum diameter of rod-type grounding electrodes to read as follows:

250.52 Grounding Electrodes.(A) Electrodes Permitted for Grounding.

* * * * *

- (5) Rod and Pipe Electrodes. Rod and pipe electrodes shall not be less than 2.44 m (8 ft) in length and shall consist of the following materials.
 - (a) Grounding electrodes of pipe or conduit shall not be smaller than metric designator 21 (trade size ³/₄) and, where of steel, shall have the outer surface galvanized or otherwise metal-coated for corrosion protection.
 - (b) Rod-type grounding electrodes of stainless steel and copper or zinc coated steel shall be at least 15.87 mm (5/8 in.) diameter[, unless listed].

Article 250.118, Types of Equipment Grounding Conductors, is amended to require an equipment grounding conductor to be installed in all feeders and branch circuits. The first sentence of Article 250.118 is amended to read as follows with items (1) through (14) remaining as published in the NEC:

As a minimum the equipment grounding conductor shall consist of a conductor as described in item (1) as follows and may be supplemented by any of the other means described in items (2) through (14) as follows: [The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:]

* * * * *

Article 250.119(A), Conductors Larger Than 6 AWG, is amended to read as follows:

250.119 Identification of Equipment Grounding Conductors. Unless required elsewhere in this Code, equipment grounding conductors shall be permitted to be bare, covered, or insulated. Individually covered or insulated equipment grounding conductors shall have a continuous outer finish that is either green or green with one or more yellow stripes except as permitted in this section. Conductors with insulation or individual covering that is green, green with one or more yellow stripes, or otherwise identified as permitted by this section shall not be used for ungrounded or grounded circuit conductors.

Exception: Power-limited Class 2 or Class 3 cables, power-limited fire alarm cables, or communications cables containing only circuits operating at less than 50 volts where connected to equipment not required to be grounded in accordance with 250.12(1) shall be permitted to use a conductor with green insulation or green with one or more yellow stripes for other than equipment grounding purposes.

- (A) Conductors Larger Than <u>10</u> [6] AWG. Equipment grounding conductors larger than <u>10</u> [6] AWG shall comply with 250.119(A)(1) and (A)(2).
 - (1) An insulated or covered conductor larger than 6 <u>10</u> AWG shall be permitted, at the time of installation, to be permanently identified as an equipment grounding conductor at each and every point where the conductor is accessible.

Exception: Conductors larger than 10 [6] AWG shall not be required to be marked in conduit bodies that contain no splices or unused hubs.

- (2) Identification shall encircle the conductor and shall be accomplished by one of the following:
 - a. Stripping the insulation or covering from the entire exposed length
 - b. Coloring the insulation or covering green at the termination
 - c. Marking the insulation or covering with green tape, a minimum of twoinches in length, or green adhesive labels at the termination.

Article 300.5(D) Protection from Damage is amended to read as follows:

300.5. Underground Installations.

* * * * *

- (D) Protection from Damage. Direct-buried conductors and cables shall be protected from damage in accordance with 300.5(D)(1) through (D)(4).
 - (1) **Emerging from Grade.** Direct-buried conductors and cables emerging from grade and specified in columns 1 and 4 of Table 300.5 shall be protected by enclosures or race-ways extending from the minimum cover distance below grade required by 300.5(A) to a point at least 2.5 m (8 ft.) above finished grade. In no case shall the protection be required to exceed 450 mm (18 in.) below finished grade.
 - (2) **Conductors Entering Buildings.** Conductors entering a building shall be protected to the point of entrance.

(3) Service Conductors. Underground service conductors <u>installed</u> horizontally shall be encased in a minimum 75 mm (3 in.) thick concrete envelope, be buried a minimum of 450 mm (18 in.) below final grade and [that are not encased in concrete and that are buried 450 mm (18 in.) below grade] shall have their location identified by a warning ribbon that is placed in the trench at least 300 mm (12 in.) above the underground installation.

Table 310.15(B)(3)(c), Ambient Temperature Adjustment for Circular Raceways Exposed to Sunlight on or Above Rooftops, is amended by adding the following Informational Note to include the design ambient temperature for San Antonio to read as follows:

Informational Note to Table 310.15(B)(3)(c): The temperature adders in Table 310.15(B)(3)(c) are based on the results of averaging the ambient temperatures.

Informational Note to Table 310.15(B)(3)(c): For purposes of calculating the temperature adjustment factors for installations in San Antonio, the design ambient temperature is 98.5°F (0.4%) per 2009 ASHRAE Handbook, Chapter F-14.

Article 314.19, Boxes Enclosing Flush Devices, is amended by adding a sentence to end of the article that requires a minimum volume for such boxes to read as follows:

314.19 Boxes Enclosing Flush Devices. Boxes used to enclose flush devices shall be of such design that the devices will be completely enclosed on back and sides and substantial support for the devices will be provided. Screws for supporting the box shall not be used in attachment of the device contained therein. Boxes for flush devices shall have a minimum volume of $221 \text{ cm}^3 (13.5 \text{ in.}^3)$.

ARTICLE 320, Armored Cable: Type AC, is repealed.

ARTICLE 330, Metal-Clad Cable: Type MC, is amended to restrict its use and construction specifications as follows with the remainder of the Article unchanged and as published in the NEC:

330.10 Uses Permitted.

- (A) General Uses: Type MC cable shall be permitted as follows:
 - (1) For [services,] feeders and branch circuits.

* * * * *

(B) Specific Uses.

* * * * *

- [(3) Installed as Service-Entrance Cable. Type MC cable installed as service entrance cable shall be permitted in accordance with 230.43.]
- (3) [(4)] Installed Outside of Buildings or Structures or as Aerial Cable. Type MC cable installed outside of buildings or structures or as aerial cable shall comply with 225.10, 396.10, and 396.12.

Article 330.40, Boxes and Fittings is amended to read as follows:

330.40 Boxes and Fittings. Fittings used for connecting Type MC cable to boxes, cabinets, or other equipment shall be listed and identified for such use. <u>Additionally, all fittings shall</u> be equipped with an anti-shorting bushing.

Article 330.104, Conductors is amended to read as follows:

330.104 Conductors. Conductors shall be of copper, aluminum, copper-clad aluminum, nickel or nickel-coated copper, solid or stranded. The minimum conductor size shall be <u>12</u> [18] AWG copper, nickel or nickel-coated copper, or <u>eight [12]</u> AWG aluminum or copper-clad aluminum.

Article 330.112, Insulation is amended to read as follows:

330.112 Insulation. Insulated conductors shall comply with 330.112(A) or (B) and shall be color coded per the requirements of this chapter.

Article 330.116, Sheath is amended to read as follows:

330.116 Sheath. Metallic covering shall be [one of the following types: smooth metallic sheath, corrugated metallic sheath,] interlocking metal tape armor. The metallic sheath shall be continuous and close fitting. A nonmagnetic sheath or armor shall be used on single conductor Type MC. Supplemental protection of an outer covering of corrosion-resistant material shall be permitted and be required where such protection is needed. The sheath shall not be used as a current-carrying conductor. The sheath of branch circuit wiring shall be factory color-coded its entire length by the manufacturer as follows: blue for general use and green for use in health care facilities, where permitted by Article 517; however, color-coding is not required for cable listed for direct burial, concrete encasement or in wet locations. The sheath may be field painted after it has passed all required inspections. The cutting of the interlocking metal tape armor shall be performed with an approved rotary cutting tool designed for cutting MC cable.

Article 334.10, Uses Permitted, Items (3) and (4) and their informational notes are deleted, and Items (6) through (9) added to limit the use of Types NM, NMC and NMS cables in multifamily dwellings and other structures as follows with the remainder of the article remaining as published in the NEC:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following:

* * * * *

[(3) Other structures permitted to be of Types III, IV, and V construction except as prohibited in 334.12. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.]

[Informational Note No. 1: Types of building construction and occupancy classifications are defined in NFPA 220-2009, Standard Types of Building Construction, or the applicable building code, or both.]

[Informational Note No. 2: See Informative Annex E for determination of building types [NFPA 220, Table 3-1].]

[(4) Cable trays in structures permitted to be Types III, IV, or V where the cables are identified for the use.]

[Informational Note: See 310.15(A)(3) for temperature limitation of conductors.]

* * * * *

- (6) Dwelling units used as Type B Occupancies, limited to churches only, as described in the International Building Code (IBC) Section 303.1.2, with an occupant load of less than 50 persons.
- (7) Dwelling units used as Single Station Barber and Beauty Salons which comply with the requirements of the Unified Development Code (UDC) Section 35-399.01.
- (8) Home Occupations which comply with the requirements of the Unified Development Code (UDC) section 35-378, excluding those used for medical purposes for the treatment of patients.
- (9) The residential portion of a Live-Work Unit which meets the definition of and complies with the requirements of the International Building Code (IBC) Section 419. All conductors in the non-residential portion of the structure shall be installed in an approved non-open wiring method.

Article 362.20(B) is amended to limit the maximum size of the raceway to 1" and reads as follows:

362.20 Size.

- (A) Minimum. ENT smaller than metric designator 16 (trade size ¹/₂) shall not be used
- (B) Maximum. ENT larger than metric designator <u>27 (trade size 1)</u> [53 (trade size 2)] shall not be used.

ARTICLE 394, Concealed Knob-and-Tube Wiring, is repealed.

Article 400.7(A)(2), Flexible Cords and Cables, Uses Permitted, is amended to limit the use of flexible cords as follows with the remainder of the Article unchanged and as published in the NEC:

400.7 Uses Permitted.

- (A) Uses. Flexible cords and cables shall be used only for the following:
 - (1) Pendants
 - (2) Wiring of luminaires (fixtures) when supplied as part of a UL listed luminaire

* * * * *

Article 408.30, is amended to specify the location of a panelboard in one- and two-family dwelling units by adding the following sentence to the end of the article.:

408.30 General.

All panelboards shall have a rating not less than the minimum feeder capacity required for the load calculated in accordance with Part III, IV, or V of Article 220, as applicable. Panelboards containing the 120 Volt branch circuits serving the interior of one- and two-family dwelling units shall be located in the interior of the structure in a readily accessible location.

Article 424.19, Disconnecting Means is amended to specify the type and location of the disconnecting means by adding the following sentences to the end of the article.:

424.19 Disconnecting Means.

Means shall be provided to simultaneously disconnect the heater, motor controller(s), and supplementary overcurrent protective device(s) of all fixed electric space-heating equipment from all ungrounded conductors. Where heating equipment is supplied by more than one source, the disconnecting means shall be grouped and marked. The disconnecting means specified in 424.19(A) and (B) shall have an ampere rating not less than 125 percent of the total load of the motors and the heaters. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed. An integral factory installed or a separate field installed disconnecting means is permitted. An accessible field installed disconnecting means may be installed on or within sight of the equipment. The

branch circuit serving the equipment shall be clearly marked on the equipment or the disconnecting means.

Article 440.14, Locations is amended to specify the type and location of the disconnecting means by deleting the second sentence of the first paragraph and replacing as follows with the remainder of the Article unchanged and as published in the NEC:

440.14 Locations. Disconnecting means shall be located within sight from and readily accessible from the air-conditioning or refrigerating equipment. An integral factory installed or a separate field installed disconnecting means is permitted. A field installed disconnecting means may be installed on the equipment. The branch circuit serving the equipment shall be clearly marked on the equipment or the disconnecting means. [The disconnecting means shall not be located on panels that are designed to allow access to the air conditioning or refrigeration equipment or to obscure the equipment nameplate(s).]

The disconnecting means shall not be located on panels that are designed to allow access to the air-conditioning or refrigeration equipment or to obscure the equipment nameplate(s).

* * * * *

Article 525.20(B), Wiring Methods, Single-Conductor, is amended for temporary events such as, carnivals, circus, fairs, and similar events, to add minimum requirements for flexible cords to read as follows:

525.20 Wiring Methods

(B) Flexible Cords and Single-Conductor Cables. Flexible cords shall be permitted only in sizes 12 AWG or larger and shall contain a separate grounding conductor. A maximum of one 25 foot (7.65 m) extension cords may be connected to each individual receptacle provided as part of the manufacturers listed generator. Single-conductor cable shall be permitted only in sizes 2 AWG or larger.

Article 600.32 Neon Secondary-Circuit Wiring, over 1000 Volts, Nominal, paragraph (A)(1) is amended to prohibit the use of PVC conduit and liquid tight flexible nonmetallic conduit and paragraph (A)(3) is amended to allow the use of 3/8" conduit as follows with the remainder of the Article unchanged and as published in the NEC:

600.32 Neon Secondary-Circuit Wiring, over 1000 Volts, Nominal.

(A) Wiring Methods.

(3) **Installation.** Conductors shall be installed in rigid metal conduit, intermediate metal conduit, [PVC-conduit,] RTRC, [liquidtight flexible nonmetallic conduit,] flexible metal conduit, electrical metallic tubing, metal enclosures, on insulators in metal raceways, or other equipment listed or use with neon secondary circuits over 1000 volts.

- (4) **Number of Conductors.** Conduit or tubing shall contain only one conductor.
- (5) Size. Conduit or tubing shall be a minimum of metric designator <u>12 (trade size 3/8"). [16 (trade size 1/2")]</u>
- * * * * *

ARTICLE 604, Manufactured Wiring Systems, is amended to restrict its uses and construction specifications and installation as follows in Sections 604.1, 604.4, 604.6 and 604.7 with the remainder of the Article unchanged and as published in the NEC:

604.1 Scope. The provisions of this article apply to field-installed wiring using off-site manufactured subassemblies for <u>lighting and underfloor</u> power branch circuits[, remote-control circuits, signaling circuits, and communications circuits] in accessible areas.

604.4 Uses Permitted. Manufactured wiring systems shall be permitted in accessible and dry locations and in ducts, plenums, and other air-handling spaces where listed for this application and installed in accordance with 300.22.

Exception No.1: In concealed spaces, one end of tapped cable shall be permitted to extend into hollow walls of manufactured wall systems, with removable panels for access to the wiring system, for direct termination at switch and outlet points.

Exception No.2: Manufactured wiring system assemblies installed outdoors shall be listed for use in outdoor locations.

604.6 Construction.

- (A) Cable or Conduit Types.
- (1) Cables. Only type MC cables conforming to item (2), below, and color coded per the requirements of this Code are permitted. [Cables shall be one of the following:]

* * * * *

604.7 Installation. Manufactured wiring systems shall be secured and supported in accordance with the applicable cable or conduit article for the cable or conduit type employed. All manufactured wiring system junction boxes shall be grounded in accordance with the manufacturer's instructions and all unused openings shall be covered with a factory supplied cover.

Sec. 10-53. Electrical provisions.

- (a) General. The provisions of this section shall apply to the design, construction, installation, use and maintenance of electrical systems and equipment. Where differences occur between provisions of this code and referenced codes or standards, the provisions of this code shall apply.
- (b) Equipment and door labeling. The disconnecting means for each service, feeder or branch circuit originating in a switchboard or panelboard shall be legibly and durably marked to indicate its purpose unless such purpose is clearly evident to the code official. Doors into electrical panel rooms shall be marked with a plainly visible and legible sign stating ELECTRICAL ROOM or similar approved wording.
- (c) TOPS (Temporary on Permanent Set) Permit. The section outlines the requirements for obtaining a permit to allow the connection of the new or existing electrical service to CPS Energy prior to having all final inspections completed on a project. The issuance of a TOPS permit and the subsequent connection to the utility company service does not allow an owner or the occupants to occupy the building or structure until a C of O has been issued. The above permit does not waive any of the applicable provisions of Articles IV and VIII.
 - (1) Sec. 10-1302.3.1 Permit Application. A licensed electrical contractor registered with the City must make the application for the TOPS permit. The electrical contractor must also request that the TOPS permit be attached to the main building permit in the City's computer system. The TOPS permit is required in addition to the main electrical permit for the project.
 - (2) The following are the general conditions for obtaining a TOPS permit for new construction and may be modified by the code official to suit project specific conditions:
 - a. The electrical service must be complete along with all grounding requirements, and the electrical conductors originating from the service equipment must be terminated in an approved electrical manner.
 - b. The building permit on residential construction shall have an approved foundation and complete frame inspection. The building permit on commercial construction shall have a complete foundation and at minimum a partial frame inspection.
 - c. On residential construction all trade permits must have approved rough-ins and a complete plumbing top out. On commercial construction all trade permits must have a minimum of a partial rough in including a partial plumbing top out.

- d. The plumbing sewer permit shall have an approved final inspection on both commercial and residential.
- (3) **Existing Construction.** The following are the general conditions for obtaining a TOPS permit for existing construction and may be modified by the code official to suit project specific conditions:
 - a. The electrical service must be in good condition and comply with the City electrical code including all grounding requirements.
 - b. The electrical loads originating from the existing service equipment, that will not be utilized for construction power, must be disconnected and safeguarded from accidental contact with an energized electric bus bar.
 - c. Temporary GFCI protected outlets must be provided at the service equipment location to be used during construction related activities.
 - d. All necessary and or required trade permits must be obtained prior to giving a final approval to CPS to energize the service equipment.
- (d) Electrified fences or barriers. Electrified fences or barriers conforming to the following requirements shall be permitted:
 - Electrified fences or barriers shall conform to the requirements of the International Electrotechnical Commission (IEC) Standard IEC 60335-1 -Household and similar electric appliances - Safety - Part 1: General Requirements (Reference number IEC 60335-1:2001+A1:2004(E)) and Standard IEC 60335-2 - Household and similar electric appliances -Safety
 Part 2-76: Particular requirements for electric fence energizers (Reference number CEI/IEC 60335-2-76:2002+A1:2006) or Underwriters Laboratories Inc. (UL) Standard number 60335-2. Safety of Household and Similar Electrical Appliances, Part 1: General Requirements have.
 - (2) Electrified fences or barriers shall be limited to outdoor storage areas only in zoning designations: Light Industrial District (L), General Industrial District (I-1) and Heavy Industrial District (I-2). Unless specifically designated in this subsection, electrified fences or barriers shall not be permitted in any zoning district.
 - (3) The exterior (public side) perimeter of the electrified fence or barrier shall be protected by an additional non-electrified fence or wall and shall be separated by six-inches.

- (4) The height of the non-electrified fence or wall shall be no less than six feet in height and no more than eight feet in height at its highest point.
- (5) The height of the electrified fence or barrier shall be no more than 10 feet in height at its highest point measured at existing grade.
- (6) Electrified fences or barriers shall be clearly marked with warning signs. The warning signs shall be placed at each entrance to the property on the electrified fence or barrier and a maximum of 40 feet on centers thereafter around the entire perimeter of the electrified fence. The warning signs shall be placed above the non-electrified fence or wall and be clearly visible from the ground on both sides of the electrified fence or barrier. The warning signs shall be printed on both sides with the following "WARNING ELECTRIFIED FENCE" and contain the international symbol for an electrical hazard. The wording shall be written in both English and Spanish. In addition each entrance shall have a sign noting: "Electric Barrier registered with the San Antonio Development Services Department - City Code 10-53(e)." These signs will be reflective with a minimum two inch letter height, minimum stroke of 0.5 inch and with a contrasting background. Arabic numbers and alphabetical letters shall be used.
- (7) Electrified fences or barriers may be energized only during the hours when the general public does not have legal access to the protected property.
- (8) Electrified fences or barriers shall not be installed within five feet of a sidewalk or public right-of-way nor shall they be installed within 300 feet of a property line for a residence, or from a public, private, or parochial school, day care facility, church or parkland.
- (9) Electrified fences or barriers must be designed and certified by an authorized representative of the fence or barrier equipment manufacturer. Upon completion of fence or barrier installation, the fence or barrier equipment manufacturer shall certify that the installation meets all of its design and safety requirements.
- (10) Electrified fences or barriers must be permitted with the Development Services Department and on an annual basis with a notarized statement attached to the renewal permit from an authorized representative of the fence or barrier equipment manufacturer that the installation is currently operating in conformity with its safety requirements.
- (11) The owner of the stated security equipment and the commercial property owner(s) are required to carry General Liability Insurance in a minimum amount of one million dollars in the aggregate each. Further, proof of insurance shall be required as a condition precedent to secure a permit as

required in this subsection and upon each subsequent annual renewal. A failure to maintain proof of insurance for the permitted year shall result in a revocation of the issued permit. Proof of minimum coverage amounts maintained for the preceding year must be provided with each application for renewal. Failure to maintain coverage for the entire previous year shall result in a denial of any permit renewal for five years from the date of expiration or revocation. Proof of insurance shall be underwritten by an organization licensed/authorized to do business in the State of Texas.

- A permit holder's decision to appeal acts to modify the provisions of (12)Section 10-14(b), Limitations of authority contained in this chapter and does not require acquiescence of the Building Official to appeal his decision. Procedures outlined in Section 10-14 of this chapter shall be followed unless specifically modified herein. The Building Official shall be authorized to revoke a permit upon the recommendation of the Chief of Police or designee, itself based on and supported by evidence of violation of this Ordinance. The Building Official or designee must send a notice of revocation to the last known address of the permit holder with such notice detailing a time of no more than 10 working days to appeal the Building Official's decision. Notice of appeal must be sent as soon as practical, but no later than 10 working days past the revocation. The Building Official's decision shall be final upon the expiration of the 10 working day period. A filed appeal shall suspend the Building Official's action to revoke the permit. A permit holder shall be entitled to a hearing before the next reasonably available meeting of the Building-related and Fire Codes Appeals and Advisory Board and it shall either affirm or deny the *Building* Official's decision. The board's decision shall be based on the same evidence reviewed by the Building Official and any subsequent information produced. In order to overturn the Building Official's decision, a motion shall be brought in the form of denying the Building Official's decision and require a concurring vote of eight appointed board members.
- (13) Electrified fences or barriers shall have a Knox box installed in a location acceptable to the Police and Fire Departments to de-energize the electrified fence or barrier. The Knox box shall be illuminated to a minimum one foot candle.
- (14) The power source and Knox box for the electrified fence or barrier shall be installed by an electrical contractor. The power source shall consist of, but not be limited to, the energizer, battery, a means of maintaining a charge on the battery and the load side conductors from the energizer to the perimeter fence conductors.

(e) Electrical Inspections Supervisor. The Electrical Inspections Supervisor of the development services department shall also serve as the master of record for electrical work performed by city electricians.

Sec. 10-54 Fee Schedule.

Electrical License and Registration Fees	, , , , , , , , , , , , , , , , , , ,
Master	terine e for the out of the former former of the second second second second second second second second second
Renewal—City license (two-year renewal)	\$300.00
Annual state license registration and renewal	\$85.00
DBA change on master electrical license	\$20.00
Journeyman—Renewal of city license (two-year renewal)	\$200.00
Restricted residential wireman-Renewal of city license (two-year renewal)	\$60.00
Maintenance electrician fee	\$60.00
Maintenance technician—Annual (may only perform work not requiring a permit)	\$35.00
Electrical Inspection Fee	
Electrical inspection permit fee (basic fee)	\$50.00
Service rating:	
0200 amps	\$3.25
201-600 amps	\$6.50
601-1000 amps	\$8.65
1001–2500 amps	\$10.80
Over 2500 amps	\$12.50
Temporary meter loop (TML)	\$2.15
Temporary on permanent set (TOPS)	\$2.15
Work with CPS	\$2.15
Gear items	
Switchboards up to four handles	\$10.25
Switchboards each additional handle	\$1.60
Panelboards/loadcenters	\$4.85
Xmfr 1–50 kva	\$4.30
Xmfr over 50 kva	\$9.70
Safety switch or circuit breaker 30 amps and over	\$1.10
Miscellaneous items	
Underground work per 100 linear ft	\$1.60
Outside overhead work per 100 linear ft	\$1.60
Foundation/concrete encased electrode	\$1.60
Controls/low voltage systems over 50 volts	\$1.60

Commercial/industrial repair	\$9.75
Light fixtures	
HID fixtures	\$1.60
Ceiling fans	\$1.60
Fluorescent fixtures/ballast retrofits	\$.16
Sign circuit	\$1.10
General purpose outlets/devices/equipment less than one hp	\$.16
Dedicated equipment/appliance outlets 20 amps and over	\$1.50
Motors	
1–7.5 hp	\$2.15
7.5–25 hp	\$3.25
25–50 hp	\$8.10
Over 50 hp	\$10.80
UPS/generator/distributed generation/storage batteries	
1–5 kw	\$1.60
5–50 kw	\$3.25
51–300 kw	\$4.85
Over 301 kw	\$6.50
Temporary wiring	
Power/lights (per every ten outlets)	\$3.25
Festival booths	\$5.00
Carnival rides	\$5.00
Special occupancies	
Class 1, 2, or 3, of article 500 (per each circuit)	\$1.00
Medical equipment (MRI, X-ray, scanners, etc.) each circuit	\$1.00
Miscellaneous electrical permits Reconnect	
Reconnect inspection	\$50.00
30-day (cleaning)	\$2.15
180-day (leasing)	\$12.90
Maintenance permit fee (electric only)	
Basic permit fee	\$50.00
Plus per residential apartment unit	\$0.21
Plus per 10,000 sq. ft. of commercial space	\$7.00
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	\$155.00
Appeal to City Council	\$155.00
Special Services for Electrical	

After-hour inspection fee (per hour with one-hour minimum)	\$100.00	
Electrical plan review only (without building plan number)—(per hour with one-hour minimum)	\$100.00	
Inspection for which no fee is specifically indicated (per hour with one-hour minimum)	\$100.00	
Inspection schedule fee (free on-line)	\$3.00	
Permit processing fee	\$10.00	
Permit extension fee	50% of permit (plus cost of permit)	
Re-inspection fee	\$50.00	
Permit refund fee	\$50.00	
Open permit review fee	\$3.00/permit	
Permit amendment fee	\$10.00	
Rental of facility fees: \$125.00/hr (daily min. fee of \$250.00; max fee of \$250.00; max fee of \$250.00/h personnel-\$15.00/hour/staff (with one-hour minimum); DSD staff-\$30.00/h min.); custodian service-\$15.00/hour (with two-hour min.)	1,000.00); security our/staff (with one-hour	

Sec. 10-55 through 10-60. Reserved.

ARTICLE VII. MECHANICAL CODE

Sec. 10-61. Adoption of International Mechanical Code (2012).

The 2012 edition of the *International Mechanical Code*, promulgated by the International Code Council, Chapters 2 through 15 is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-61. Provisions of this article are in addition to the provisions of the *International Mechanical Code*. The following provisions coinciding with the provisions of the *International Mechanical Code* supersede, or delete, when indicated, the corresponding provisions of the *International Mechanical Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-61. Amendments to the adopted chapters of the *International Mechanical Code* (2012).

Additions to the International Mechanical Code (IMC) are shown as <u>underlined</u> text. Deletions of the IMC are shown as bracketed [strikethroughs].

Section 301.10, Electrical, is amended to read as follows:

301.10 Electrical. Electrical wiring, controls and connections to equipment and appliances regulated by this code shall be in accordance with <u>Article VI of this chapter [NFPA 70]</u>. <u>All wiring, including control wiring exposed to weather shall be installed in conduit approved for exterior use.</u>

Section 304 INSTALLATION is amended by adding Section 304.13 as follows:

<u>304.13 Installation at gas valve</u>. Black iron pipe shall be installed at the gas valve and extended a minimum of two inches outside the gas furnace and gas rooftop unit's casing and shall be connected to an approved listed flexible gas connector.

Section 306.3, Appliances in attics, is amended by adding Subsection 306.3.2, Access for cooling or heating appliance, to read as follows:

<u>306.3.2 Access for cooling or heating appliance.</u> For residential applications, the attic space in which any cooling or heating appliance is installed shall be provided with a permanent ladder or fold-away ladder.

Section 307.2.2, Drain pipe materials and sizes, is amended by adding a sentence at the end of the section to read as follows:

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC, or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the *International Plumbing Code* relative to the material type. Condensate waste and drain line size shall be not less than ³/₄-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2. Primary drain lines located in any unconditioned space, except for crawl spaces, shall be insulated with foam plastic rubber based insulation or other approved material with a minimum thickness of 3/8 inch.

Section 307.2.3, Auxiliary and secondary drain systems, is amended by eliminating auxiliary protection methods #2 and #4 as follows:

1. A auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1 ½ inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).

- [2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.]
- 2. [3.] An auxiliary drain pan without a separate drain line shall be provided under the coils on which condensate will occur. Such pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.
- [4. A water level detection device conforming to UL 508 shall be installed that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the *equipment*-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.]

Section 401.2, Ventilation required, is amended to read as follows:

401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. [Where the air infiltration rate in a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch water column (50 Pa) in accordance with Section 402.4.1.2 of the *International Energy Conservation Code*, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403.]

Heating and Air Conditioning (Mechanical)	
Heating and Air Conditioning (Mechanical) License Fees	
Master	
Renewal—City License per year	\$150.00
Annual state license registration	\$85.00
Technician (journeyman) (may only perform work not requiring a permit)-Renewal	\$35.00
Heating and Air Conditioning (Mechanical) Inspection Fees	
Basic Heating and Air Conditioning (Mechanical) Permit (Basic Fee)	\$50.00
Residential (new systems) (includes inspection fee)	\$77.00
Each Additional System (includes inspection fee)	\$55.00
Roof-Top Unit (gas or electric)	\$15.85
Gas furnace; gas wall furnace; gas unit heater; gas radiant heater; gas boiler (steam); gas floor furnace; commercial gas dryer; gas boiler (hot water); gas duct heater (per each item)	\$9.60

Sec. 10-63 Fee Schedule.

Condensing unit; condensing unit/heat pump; indoor condensing unit; cooling coil; commercial exhaust fan; condenser (no compressor); commercial electric dryer; fan coil unit; fan powered box; type II range hood (steam); chiller; absorption unit; reach-in cooler; wall mounted unit; make-up air; heat pump; refrigeration unit; air handler; electric furnace; electric unit heater; electric radiant heater; ventilation fan; variable air volume unit; type I range hood (grease); fume hood; cooling tower; walk-in cooler; icemaker (split system); evaporative cooler (refrigeration equipment); hot water coil; remote condensing unit; condenser (refrigeration equipment); ventilating fan (not on other permitted installation); hood served by mechanical exhaust (including ducts and makeup air systems); condensing unit (mobile homes and manufactured housing); any regulated device for which no specific fee is listed; replacement of any device which originally required a permit (per each item)	\$6.25	
Curtain Fire Damper; Smoke Damper; Duct Outlet; Ceiling Fire Damper; Smoke/Fire Damper (per each item)	\$2.00	
Building-related and Fire Codes Appeals and Advisory Board Fees		
Building-related and Fire Codes Appeal Fee	\$155.00	
Appeal to City Council	\$155.00	
Special Heating and Air Conditioning (Mechanical) Fees		
After-hour Inspection Fee (per hour with 1 hour minimum)	\$100.00	
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	\$100.00	
Permit Processing Fee		
Inspection Schedule Fee (Free on-line)		
Mechanical Plan Review—This fee is charged to review plans without a building permit (per hour with a 1 hour minimum)		
Permit Extension Fee: 50% of permit (plus cost of permit)		
Re-inspection Fee	\$50.00	
Open Permit Review Fee	\$3.00/Permit	
Annual Continuing Education for City Licenses Holder	\$150.00	
Pe rmit Refund Fee	\$50.00	
Permit Amendment Fee	\$10.00	
Rental of Facility Fees: \$125/hr (daily min. fee of \$250; Max fee of \$1000); Security Personnel: \$15/hour/staff (with 1 hour minimum); DSD Staff: \$30/hour/staff (with 1 hour min.); Custodian Service: \$15/hour (with 2 hour min.)		

Sec. 10-64 through 10-70. Reserved.

ARTICLE VIII. GAS CODE

Sec. 10-71. Adoption of International Fuel Gas Code (2012).

The 2012 edition of the *International Fuel Gas Code*, Chapters 2 through 8 and Appendices A through C, promulgated by the International Code Council, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of Section 10-72. Provisions of this article are in addition to the provisions of the *International Fuel Gas Code*. The following provisions coinciding with the provisions of the *International*

Fuel Gas Code supersede, or delete, when indicated, the corresponding provisions of the International Fuel Gas Code.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-72. Amendments to the adopted chapters and appendices of the International Fuel Gas Code (2012).

Additions to the International Fuel Gas Code (IFGC) are shown as <u>underlined</u> text. Deletions of the IFGC are shown as bracketed [strikethroughs].

Section 401.5, Identification, is amended to require tag identification of certain corrugated stainless steel tubing for gas as follows:

401.5 Identification. For other than steel pipe, exposed *piping* shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the *appliance* served.

All medium pressure gas systems shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag at the meter. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped on the tag:

<u>WARNING</u> <u>1-5 psi gas pressure</u> <u>Do Not Remove</u>

SECTION 404 (IFGC) PIPING SYSTEM INSTALLATION, is amended by adding a new exception to Section 404.6, Underground penetration prohibited, by adding Section 404.20, Welded pipe, and Section 404.21, Corrugated stainless steel tubing (CSST), to read as follows:

404.6 Underground penetration prohibited. *Gas piping* shall not penetrate building foundation walls at any point below grade. *Gas piping* shall enter and exit the building at a point above grade and the annular space between the *pipe* and the wall shall be sealed.

Exception: *Gas piping* may penetrate a slab-on-grade foundation, above or below grade, where the installation complies with Section 404.14.

404.20 Welded pipe. All welded joints in piping system shall be welded by a certified *pipe welder* as defined in Article II of this chapter.
404.21 Corrugated stainless steel tubing (CSST).

404.21.1 Meter loop. Steel piping shall be required to provide a rigid connection at the meter loop.

404.21.2 Exterior walls. CSST piping is prohibited in exterior walls.

404.21.3 Grounding. CSST piping shall be grounded per the manufacturer's recommendations.

Section 406.4 Test pressure measurement, is amended by repealing the text of Section 406.4.1, Test pressure, and replacing it with new code language, amending Section 406.4.2, Test duration, and adding a new Section 406.4.3, Test gauges, all to read as follows:

406.4.1 Test pressures. The rough-in piping inspection shall include testing by closing all openings and subjecting the pipes to an air pressure that will support a column of mercury 15 inches (381 mm) in height or a 10 psi air test. For gas systems with pressures in excess of 14 inches of water column, the test pressure shall not be less than 1.5 times the operating pressure for the system and shall hold this pressure for a minimum of 30 minutes.

The final inspection shall include a column of mercury six inches (152 mm) in height or of a five psi air test with appliance shut-off valves attached thereto. For gas systems with pressures in excess of 14 inches of water column, the test pressure shall not be less than 1.5 times the operating pressure for the system and shall hold this pressure for a minimum of 30 minutes.

406.4.2 Test duration. Test duration shall be <u>held for a length of time satisfactory to the</u> code official, but in no case for less than 15 minutes. For welded piping, and for piping carrying gas at a pressure in excess of 14 inches of water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the code official, but in no case for less than 30 minutes. [not less than ½ hour for each 500 cubic feet (14 m³) of pipe volume or fraction thereof. When testing a system having a volume less than 10 cubic feet (0.28 m³) or a system in a single-family dwelling, the test duration shall be not less than 10 minutes.] The duration of the test shall not be required to exceed 24 hours.

406.4.3 Test gauges. Tests gauges shall be a grade 1A or better as per ANSI/ASME B40.100-2005.

Section 409.5 Appliance shutoff valve is amended by adding the following exception:

409.5 Appliance shutoff valve. Each appliance shall be provided with a shutoff valve in accordance with Section 409.5.1, 409.5.2 or 409.5.3.

Exception: An outdoor appliance shall have a shutoff valve at the piping connection to the gas piping system.

Section 409.5.3, Located at manifold, is repealed.

Sec. 10-73 through 10-80. Reserved.

ARTICLE IX. PLUMBING CODE

Sec. 10-81. Adoption of International Plumbing Code (2012).

The 2012 edition of the *International Plumbing Code*, Chapters 2 through 14 and Appendices B through F, promulgated by the International Code Council, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of Section 10-82. Provisions of this article are in addition to the provisions of the *International Plumbing Code*. The following provisions coinciding with the provisions of the *International Plumbing Code* supersede, or delete, when indicated, the corresponding provisions of the *International Plumbing Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-82. Amendments to the adopted chapters and appendices of the International Plumbing Code (2012).

Additions to the International Plumbing Code (IPC) are shown as <u>underlined</u> text. Deletions of the IPC are shown as bracketed [strikethroughs].

Definition of Gravity-type GREASE INTERCEPTOR is amended as follows:

GREASE INTERCEPTOR

Gravity. A plumbing appurtenance of not less than 500 gallons (1893 L) capacity that are installed in the sanitary drainage system to intercept free-floating fats, oils, and grease from waste water discharge. Separation is accomplished by gravity during a retention time of not less than 30 minutes. The appurtenance shall be a double compartment, first compartment 60% and the second compartment 40% with a minimum 20" manhole access to each compartment unless otherwise approved by the code official.

Section 301.8, Accessible openings, and Section 301.9, Separation from electrical lines in ditch, are added to read as follows:

<u>301.8 Accessible openings</u>. When accessible openings are required by this *code*, they shall be a minimum of 12 inches x 12 inches (305 mm x 305 mm) in dimension unless otherwise approved by the *code official*.

<u>**301.9 Separation from electrical lines in ditch.**</u> When outside the footprint of the *building*, no *plumbing*, gas, *sewer* or water piping shall be installed in the same ditch with electric lines unless a separation of 36 inches (914 mm) horizontally is maintained.

Section 305.4.1, Sewer depth, is amended to establish the minimum sewer depths as follows:

305.4.1 Sewer depth. [Building sewers that connect to private sewage disposal systems shall be a minimum of [NUMBER] inches (mm) below finished grade at the point of septic tank connection.] Building sewers shall be a minimum of <u>12 [NUMBER]</u> inches (<u>304 mm</u>) below grade.

Section 312.1.1 Test gauges, is amended to read as follows:

312.1.1 Test Gauges. Gauges used for testing <u>shall be a grade 1A or better as per</u> <u>ANSI/ASME B40.100-2005 and shall be as follows:</u>

- 1. Tests requiring a pressure of 10 pounds per square inch (psi) (69 kPa) or less shall utilize a testing gauge having increments of 0.10 psi (0.69 kPa) or less.
- 2. Tests requiring a pressure of greater than 10 psi (69 kPa) but less than or equal to 100 psi (689 kPa) shall utilize a testing gauge having increments of 1 psi (6.9 kPa) or less.
- 3. Tests requiring a pressure of greater than 100 psi (689 kPa) shall utilize a testing gauge having increments of 2 psi (14 kPa) or less.

Section 312.2, Drainage and vent water test, is amended as follows:

312.2 Drainage and vent water test. <u>Prior to any concealment, a [A]</u> water test <u>and</u> <u>subsequent inspection</u> shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a <u>3.5 - foot (1067 mm) [10-foot (3048 mm)]</u> head of water. In testing successive sections, at least the upper 10 feet (3048 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a <u>3.5 - foot (1067 mm) [10-foot (3048 mm)]</u> head of water. This pressure shall be held for at least 15 minutes. The system shall then be tight at all points. <u>The first floor underground drain, waste and vent piping systems shall be retested to at least slab height and inspected after all backfill is in place and foundation steel installed but prior to placement of concrete.</u>

Section 312.6, Gravity sewer test, is repealed in its entirety.

Section [M] 314.2.1, Condensate disposal, is repealed and replaced as follows:

[M] 314.2.1 Condensate disposal. <u>Condensate disposal shall be in accordance with Chapter</u> 34, Section 34-274 of the City Code of San Antonio.

Section 401.3, Water conservation, is repealed in its entirety and replaced as follows:

401.3 Water conservation. The maximum discharge flow rates for *plumbing fixture* fittings shall be in accordance with applicable standards referenced in Chapter 13 and listed in Table 604.4, but in no case shall they exceed the maximum requirements of the Texas Commission of Environmental Quality (TCEQ), Chapter 372, titled "Environmental Performance Standards for Plumbing Fixtures" and/or the requirements set forth by these amendments.

Note f to Table 403.1, Minimum Number of Required Plumbing Fixtures, is modified as follows:

f. Drinking fountains <u>and services sinks</u> are not required for an occupant load of 15 or fewer <u>or as otherwise approved by the code official</u>.

Section 410.3 Substitution, is amended to read as follows:

410.3 Substitution. Where <u>buildings with a use classification of A-2, B (clinics only), E</u> (day care only), I-1, I-2 (Nursing Homes only), R-3 and R-4 as defined in the *International* <u>Building Code</u> [restaurants] provide drinking water in a container free of charge, drinking fountains shall not be required [in those restaurants]. In other occupancies, where drinking fountains are required, water coolers, [or] bottled water dispensers, or water in other containers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

Section 502.3, Water heaters installed in attics, is amended by adding a new sentence at that reads as follows:

502.3 Water heaters installed in attics. Storage type water heaters shall not be installed in an attic unless accessible from a door opening from the house on the same floor level. Attics containing a water heater shall be provided with an opening an unobstructed passageway large enough to allow removal of the water heater. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater.

Section 502, INSTALLATION, is amended by adding a new Section 502.6, Water heaters installed under stairways and landing, to read as follows:

502.6 Water heaters installed under stairways and landings. An electric water heater is the only type of water heater that may be installed under a stairway or landing.

Section 504.1, Antisiphon devices, is amended to read as follows:

504.1 Antisiphon devices. An *approved means*, such as a [cold water "did" tube with a hole at the top or a] vacuum relief valve installed in the cold water supply line above the top of the heater or tank, shall be provided to prevent siphoning of any storage water heater or tank.

Section 504.6, Requirements for discharge piping, is amended by amending numbers 5 and 7 to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an *air gap* located in the same room as the water heater.
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the *air gap*.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to [the floor, to the pan serving the water heater or storage tank, to] a waste receptor or to the outdoors. Discharge to the floor of a garage or basement will only be allowed if approved by the *code official*. Terminate to the exterior a minimum of six inches (152 mm) and a maximum of 12 inches (304 mm) above the finish grade.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is <u>accessible</u> [readily observable by the building occupants].
- 8. Not be trapped.
- 9. To be installed so as to flow by gravity.
- 10. Not terminate more than 6 inches (152 mm) above the floor or waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 or materials listed, rated and *approved* for such use in accordance with ASME A112.4.1.

Subsection 504.7.3, Water heaters installed in garages, is added as follows:

504.7.3 Water heaters installed in garages. Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor.

Exception: Elevation of the ignition source is not required for appliances that are listed as flammable vapor ignition resistant.

Section 604.4, Maximum flow and water consumption, Exceptions, is amended by deleting Exception 1 to read as follows:

604.4 Maximum flow and water consumption. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table 604.4.

Exceptions:

[1. Blowout design water closets having a maximum water consumption of 3 1/2 gallons (13 L) per flushing cycle.]

- <u>1.</u> [2.] Vegetable sprays.
- 2. [3.] Clinical sinks having a maximum water consumption of 4 ½ gallons (17 L) per flushing cycle.
- <u>3. [4.]</u> Service sinks.
- <u>4. [5.]</u> Emergency showers.

Table 604.4, MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS, is amended as follows:

TABLE 604.4MAXIMUM FLOW RATES AND CONSUMPTION FOR
PLUMBING FIXTURES^d AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY ^b
Lavatory, private	<u>1.5</u> [2.2] gpm at 60 psi
Lavatory, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head ^a	<u>2.0</u> [2.5] gpm at 80 psi
Sink faucet	2.2 gpm at 60 psi
Urinal	0.5 [1.0] gallon per flushing cycle
Water closet ^c	1.6 gallons per flushing cycle

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m. 1 pound per square inch = 6.895 kPa.

- a. A hand-held shower spray is a shower head. <u>All associated heads shall be appropriate</u> for the flow rate.
- b. Consumption tolerances shall be determined from referenced standards.
- c. Gravity flush water closets shall have a maximum average water consumption of 1.28 gallons per flushing cycle.

<u>d.</u> Where the Environmental Protection Agency has accepted that specific plumbing <u>fixtures</u>, by make and model, meet or exceed WaterSense standards, such fixtures installed will be from the most current listing available at the time of installation.

Section 604.9, Water hammer, is amended as follows:

604.9 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer's specifications. Water-hammer arrestors shall conform to ASSE 1010. Water-hammer arrestors shall be installed to protect all washing machines, kitchen sinks, dishwashers, tubs and shower locations from water hammer. A separate tub and shower set back to back may be served by a single set of water-hammer arrestors, provided that the continuation of the water line from one fixture (where the arrestors are located) to the other fixture does not exceed 8 linear feet as measured along the pipe.

Section 605.24.2, Plastic pipe or tubing to other piping material, is amended by adding language to the end of the subsection as follows:

605.24.2 Plastic pipe or tubing to other piping material. Joints between different grades of plastic pipe and other piping material shall be made with an approved adapter fitting. Schedule 40 plastic socket molded (female adapter) fittings are prohibited when connecting to pipe threads.

Tables 605.3, WATER SERVICE PIPE, and 605.4, WATER DISTRIBUTION PIPE, are amended by removing type M and WM copper from both tables under copper or copper-alloy tubing as follows:

TABLE 605.3 WATER SERVICE PIPE

MATERIAL	STANDARD
Copper or copper alloy tubing (Type K, WK, L, <u>or</u>	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447
WL [, M or WM)]	

TABLE 605.4 WATER DISTRIBUTION PIPE

MATERIAL	STANDARD	
Copper or copper alloy tubing (Type K, WK, L, <u>or</u>	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447	

Section 606.2, Location of shutoff valves, of the IPC is amended as follows:

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

- 1. On the fixture supply <u>at [to]</u> each fixture other than bathtubs and showers in one-and two-family residential *occupancies*, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, Boarding houses and similar *occupancies*.
- [2. On the water supply pipe to each sillcock.]

2. [3.] On the water supply pipe to each appliance or mechanical equipment.

Section 607.2, Hot or tempered water supply to fixtures, is amended to read as follows with subsections 607.2.1 and 607.2.1 remaining as published by the IPC:

607.2 Hot or tempered water supply to fixtures. The developed length of hot or tempered water piping, from the source of hot water to the fixtures that require hot or tempered water, shall not exceed 100 [50] feet (30,480 [15 240] mm). Recirculating system piping and heat-traced piping shall be considered sources of hot or tempered water.

Section 607.3, Thermal expansion control, is amended by adding a sentence to the end of that section as follows:

607.3 Thermal expansion control. A means of controlling increased pressure caused by thermal expansion shall be provided where required in accordance with Sections 607.3.1 and 607.3.2. <u>Thermal expansion control is limited to the use of expansion tanks (per water conservation requirements of 1998, Ordinance 89128).</u> Also, see Section 604.8 as amended by the *city*.

Section [E] 607.5. Pipe Insulation, is repealed in its entirety and replaced to read as follows:

[E] 607.5 Pipe Insulation. Hot water system piping shall be insulated as follows:

[E] 607.5.1 Residential buildings. Buildings with a use classification of R-2, R-3, or R-4 as defined in the International Building Code and that are 3 stories or less shall have circulating hot water system piping insulated to at least R-2. Circulating hot water systems shall include an automatic or readily assessable manual switch that can turn off the hot water circulating pump when the system is not in use. All noncirculating hot water piping shall be insulated between the heating element and the end use fixture with R-4 sleeve insulation or with material approved by the code official.

Exceptions:

1. Runs 20 feet (6.1 meters) or less for noncirculating hot water systems.

2. Insulation is not required to be continuous through framing members.

[E] 607.5.2 Commercial buildings. Automatic circulating hot water systems, and automatic temperature maintenance systems for commercial *buildings* (all *buildings* not covered in the use classifications found in Section 607.5.1, above) shall be insulated with 1 inch (25 mm) of insulation having a conductivity not exceeding 0.27 Btu per inch/h x $ft^2 x \ F(1.53 \text{ W per } 25 \text{ mm/m}^2 \text{ x K})$. The first 8 feet (2438 mm) of hot water piping from a hot water source in noncirculating systems served by equipment without integral heat traps shall be insulated with 0.5 inch (12.7 mm) of material having a conductivity not exceeding 0.27 Btu per inch/h x $ft^2 x \ F(1.53 \text{ W per } 25 \text{ mm/m}^2 \text{ x K})$.

Section 608.13, Backflow protection, is amended by adding subsections 608.13.10, 608.13.11 and 608.13.12 as follows:

608.13.10 All backflow prevention assemblies, where not otherwise covered in this *code*, shall conform to listed standards and be acceptable to the *code official*, with jurisdiction over the selection and installation of backflow prevention assemblies.

608.13.11 Where more than one (1) *backflow preventer* is installed on a single premise, and the *backflow preventers* are installed in one location, each separate *backflow preventer* shall be permanently marked in an *approved* manner to identify the location of the system that the backflow preventer serves.

608.13.12 The premise owner or responsible person shall have the *backflow* prevention assembly tested by a state licensed backflow assembly tester at the time of installation, repair, or relocation and tested and inspected at least on an annual schedule thereafter, or more often when required by the public water system that provides water to the property where the backflow prevention assembly is installed. All annual inspection and testing shall be performed in accordance with Chapter 34, Article VI, Division 8, of the City Code of San Antonio, Texas.

Section 608.14, Location of backflow preventers, is amended by adding language to the end of the subsection as follows:

608.14.3 Access. All backflow preventers shall be readily accessible.

Subsections 608.16.1, 608.16.2, and 608.16.5 are amended to read as follows:

608.16.1 Beverage dispensers. The water supply connection to beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE <u>1015</u> [1022] or by an *air gap*. The portion of the backflow preventer device downstream from the second check valve and the piping downstream there from shall not be affected by carbon dioxide gas.

608.16.2 Connections to <u>non-potable</u> boilers. The potable supply to the boiler shall be equipped with a backflow preventer with an intermediate atmospheric vent complying with ASSE <u>1013.</u> [1012 or CAN/CSA B64.3.] Where conditioning chemicals are introduced into the system, the potable water connection shall be protected by an *air gap* or a reduced

pressure principle backflow preventer, complying with ASSE 1013, CAN/CSA B64.4 or AWWA C511.

608.16.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by [an atmospheric type vacuum breaker,] a pressure vacuum breaker assembly, <u>a double-check valve assembly</u> or a reduced pressure principle backflow prevention assembly. [Valves shall not be installed downstream from an atmospheric vacuum breaker.] Where chemicals are introduced into the system or there is an on site sewage facility (OSSF) system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow prevention assembly. The irrigation system shall be designed and installed in accordance with City Ordinance #100322 and #2008-08-07-0653.

Section 702.3 Building sewer pipe, is amended to read as follows:

702.3 Building sewer pipe. <u>Building sewer pipes three inch and four inch shall be a</u> minimum of Schedule 40 PVC. Sewer lines six inch and larger shall be a minimum of SDR 35 PVC. Cast-iron and Stainless steel 316L may also be used for all sizes. [Building sewer pipe shall conform to one of the standards listed in Table 702.3.]

Table 702.3, BUILDING SEWER PIPE, is repealed.

Subsection 705.1.1 is added and reads as follows:

705.1.1 All underground or under slab mechanical joint coupling installations shall be shielded and Wide-Bodied.

Section 706.3, Installation of fittings, is amended to read as follows:

706.3 Installation of fittings. Fittings shall be installed to guide sewage and waste in the direction of flow. Change in directions shall be made by fittings installed in accordance with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of back-to-back water closets, [and] fixtures or appliances with <u>or without</u> pumping action discharge.

Exception: Back-to-back water closet connections to double sanitary tees shall not be permitted where the horizontal *developed length* between the outlet of the water closet and the connection to the double sanitary tee pattern is 18 inches (457 mm) or greater.

Section 706.4, Heel- or side-inlet quarter bends, is amended to read as follows:

706.4 <u>Low-heel</u> [Heel-or side] inlet quarter bends. <u>Low-heel</u> [Heel-] inlet quarter bends, in the upright position, shall be an acceptable means of connection for single fixtures, however, they cannot be used for wet venting. [, except where the quarter bend serves a

water closet. A low heel inlet shall not be used as a wet-vented connection. Side-inlet quarter bends shall be an acceptable means of connection for drainage, wet venting and *stack* venting arrangements.]

SECTION 708, CLEANOUTS, is amended by adding a sentence to Subsection 708.3.2, Building sewers; repealing subsection 708.3.3, Changes of direction, in its entirety and replacing that subsection with new code language; and adding Subsection 708.3.7, Individual fixture. These subsections are to read as follows:

708.3.2 Building sewers. Building sewers shall be provided with cleanouts located not more than 100 feet (30,480 mm) apart measured from the upstream entrance of the cleanout. The required cleanout fitting shall be a directional TEE-Wye drainage type fitting, unless otherwise approved by the *code official*. For building sewers 8 inches (203 mm) and larger, manholes shall be provided and located not more than 200 feet (60,960 mm) from the junction of the *building drain* and *building sewer*, at each change in direction and at intervals of not more than 400 feet (122 m) apart. Manholes and manhole covers shall be of an *approved* type. Manhole covers shall be identified as "SEWER" and shall not indicate a utility company thereon.

708.3.3 Changes of direction. An additional cleanout shall be provided in a drainage line for each aggregate horizontal change of direction exceeding 135 degrees (2.36 rad).

708.3.7 Individual fixture. All washing machines and kitchen sinks shall have an accessible clean out.

Section 712, SUMPS AND EJECTORS, is amended by adding a new Subsection 712.5, Duel pump system, as follows:

712.5 Dual pump system. All sumps shall be automatically discharged and, when in any "public use" occupancy where the sump serves more than four fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure.

Section 903.1, Roof extension, is amended by establishing the minimum number of inches above the roof that a vent will terminate as follows:

903.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least six [NUMBER] inches (152 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

Section 904.3, Vent termination, is amended to read as follows:

904.3 Vent termination. Vent stacks or stack vents shall terminate outdoors to the open air [or to a stack-type air admittance valve in accordance with Section 918].

Section 905.1, Connection, and Section 905.4, Vertical rise of vent, are amended to read as follows:

905.1 Connection. All individual, *branch* and circuit vents shall connect to a *stack*, *stack vent*[, air admittance valve] or extend to the open air.

905.4 Vertical rise of vent. Every dry vent shall rise vertically to a minimum of 6 inches (152 mm) above the flood level rim of the highest trap or trapped fixture being vented. When structural conditions require horizontal vents to be installed below the flood level rim of the fixture they serve, they shall have a cleanout installed on the riser in an accessible location.

Section 915.2.2, Connection, is amended to read as follows:

915.2.2 Connection. The combination waste and vent system shall have a minimum of two vents, one at the start of the system and one at the end of the system before the last fixture [be provided with a dry vent connected at any point within the system or the system shall connect to horizontal drain that is vented in accordance with one of the venting methods described in this chapter]. Combinations waste and vent systems connecting to building drains receiving only the discharge from a stack or stacks shall be provided with a dry vent. The vent connection to the combination waste and vent pipe shall extend vertically to a point not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented before offsetting horizontally. The horizontal length of a combination waste and vent system shall be unlimited.

Section 916.2, Vent connection, and Section 916.3, Vent installation, are amended to read as follows:

916.2 Vent connection. The island fixture vent shall connect to the *fixture drain* as required for an individual or common vent. The vent shall rise vertically to above the drainage outlet of the fixture being vented before offsetting horizontally or vertically downward. The return bend used under the drain board shall be a one piece fitting or an assembly of a 45 degree, 90 degree and a 45 degree elbow in the order named. The vent or *branch* vent for multiple island fixture vents shall extend to a minimum of 6 inches (152 mm) above the highest island fixture being vented before connecting to the outside vent terminal <u>or as approved by the code official.</u>

916.3 Vent installation below the fixture flood level rim. The vent located below the *flood level rim* of the fixture being vented shall be installed as required for drainage piping in accordance with Chapter 7, except for sizing. The vent shall be sized in accordance with Section 916.2. The lowest point of the island fixture vent shall connect full size to the drainage system. The connection shall be to a vertical drain pipe or to the top half of a horizontal drain pipe and shall include a foot vent off of the vertical vent prior to connection to the vertical drain pipe or to the top half of a horizontal drain pipe. The foot vent shall be routed to the nearest wall and either run independently to the atmosphere or connect to another vent. Cleanouts shall be provided in the island fixture vent to permit rodding of all

vent piping located below the *flood level rim* of the fixtures. Rodding in both directions shall be permitted through a cleanout.

SECTION 917, SINGLE STACK VENT SYSTEM, is repealed.

SECTION 918, AIR ADMITTANCE VALVES, is repealed.

Section 1003.2, Approval, is amended by adding a paragraph at the end to read as follows:

1003.2 Approval. The size, type and location of each interceptor shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section based on the anticipated conditions of use. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator. All interceptors shall be stamped or labeled by the manufacturer with an indication of its size in gallons or its full discharge rate in gallons per minute (gpm). The full discharge rate to such an interceptor shall be determined at full flow. Each interceptor shall be rated equal to or greater than the incoming flow.

Section 1003.3.2, Food waste grinders, is amended as follows:

1003.3.2 Food waste grinders and Automatic hood wash/dishwasher units. [Where food waste grinders connect to grease interceptors, a] All commercial food waste grinder/disposal units shall be connected to and discharge directly into a gravity grease interceptor. All commercial Automatic hood wash/dishwasher units shall discharge into a gravity grease interceptor. A solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder.

Section 1003.3.4.1, Grease interceptor capacity, is amended by adding subsection 1003.3.4.1.1, Gravity grease interceptor sizing, to read as follows:

1003.3.4.1.1 Gravity grease interceptor sizing. Gravity grease interceptors shall comply with Table 1003.3.4.1.2.

DFU's	INTERCEPTOR
	(gallons)
<u>8</u>	<u>500</u>
<u>21</u>	<u>750</u>
<u>35</u>	<u>1,000</u>
<u>90</u>	<u>1,250</u>
172	1.500

TABLE 1003.3.4.1.2 GRAVITY GREASE INTERCEPTOR SIZING CHART

<u>216</u>	2,000
<u>307</u>	2,500
<u>342</u>	3,000
<u>428</u>	4,000
<u>576</u>	<u>5,000</u>
<u>720</u>	<u>7,500</u>
2112	10,000
<u>2640</u>	15,000

Section 1003.5, Sand interceptors in commercial establishments, is amended by adding Subsection 1003.5.1, Where required, to read as follows:

1003.5.1 Where required. Sand interceptors shall be installed in the drainage systems of the following establishments: garages, car washes, service stations, or any place of business where heavy solids or solids greater than 0.5 inch may be introduced into the sanitary sewer system. The sizing criteria for a sand interceptor shall be based on the required GPM x 12-minute retention times to obtain the tank size in gallon capacity.

Section 1003.6 Laundries, is amended by adding the following text to the end of the paragraph:

1003.6 Laundries. Laundry facilities not installed within an individual dwelling unit or intended for individual family use shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the drainage system of solids ½ inch (12.7 mm) or larger in size, string, rags, buttons or other materials detrimental to the public sewage system. A professional engineer may design for specific operational requirements; however, the plans must be submitted with a professional engineer's seal for approval. The design shall be based on a 12-minute retention time.

Section 1003.9, Venting of interceptors and separators, is amended by adding the following sentence to the end of the paragraph:

1003.9 Venting of interceptors and separators. Interceptors and separators shall be designed so as not to become air bound where tight covers are utilized. Each interceptor or separator shall be vented where subject to a loss of trap seal. <u>Gravity type interceptors and separators shall have a minimum two-inch relief vent on the tank itself.</u>

SECTION 1003 INTERCEPTORS AND SEPARTATORS, is amended by adding Sections 1003.11, Automatic car washes, and 1003.12, Silver recovery units, 1003.13, Neutralizing devices, and 1003.14, Solid interceptors, to read as follows:

1003.11 Automatic car washes. Automatic car washes (with high pressure sprays and/or brushes) shall install an interceptor no small than 50 gallons per minute for a four-bay vehicle wash. The size of the interceptor shall increase 10 gallons per minute for each additional wash bay over four. Single bay or portable washer type vehicle washes shall install an interceptor no smaller than 20 gallons per minute. The sizing criteria for automatic

car washes shall be based on the flow rate in gallons per minute times a 12-minute retention time.

1003.12 Silver recovery units. Silver recovery units shall be installed in waste line(s) leading from x-ray processing, photographic processing, and/or any procedures in establishments such as medical labs, photo finishers, printers, graphic arts production facilities, hospital, veterinary hospitals, or other establishments where silver may be introduced into the sanitary sewer system.

1003.13 Neutralizing devices. In no case shall corrosive liquids, spent acids, or other harmful chemicals which might destroy or injure a drain, sewer, soil or waste pipe, or which might create noxious fumes, discharge into the sanitary sewer system without being thoroughly neutralized by passing through a properly constructed and *approved* neutralizing medium, consisting of limestone or marble chips, so as to make its contents non-injurious before discharge into the *sanitary sewer* system.

1003.14 Solid interceptors. Solid interceptors shall be installed when pretreatment of waste streams is necessary to prevent solids greater than 0.5 inch (12.7 mm) in diameter, which may cause line stoppage, from entering the *sanitary sewer* system.

SECTION 1004, MATERIALS, JOINTS AND CONNECTIONS, is amended by adding Section 1004.2, Sample well, to read as follows:

1004.2 Sample well. An effluent sampling well for all interceptors shall be required. The sample well shall have a riser a minimum of six inches (153 mm) in diameter and shall be installed after the confluence of all wasted streams from the facility and prior to discharging into the *sanitary sewer* collection system. The well shall be perpendicular to the effluent lateral to allow observation of the flow stream and provide for sampling of waste water.

Section 1302.3, Makeup water, is amended to read as follows:

1302.3 Makeup water. When gray water systems are supplied with makeup water from either a potable source or from a *recycled water* source, the *potable water* makeup shall be protected by both an *air gap* and an *RP device* in accordance with Section 608. [Potable water shall be supplied as a source of makeup water for the gray water system. The potable water supply shall be protected against backflow in accordance with Section 608.] There shall be a full-open valve located on the makeup water supply line to the collection reservoir.

CHAPTER 13, GRAY WATER RECYCLING SYSTEMS, is amended by adding SECTION 1304, Reclaimed/recycled water systems, to read as follows:

1304 Reclaimed/recycled water systems.

1304.1 Scope. The provisions of this section shall govern the materials, design construction and installation of reclaimed/recycled water systems for flushing of water closets and urinals, for trap primers for floor drains and floor sinks and for subsurface landscape irrigation. Use

is limited to those fixtures that are located in nonresidential buildings. Fixtures within residential buildings are excluded from the list of approved uses. The reclaimed/recycled water system shall have no connection to any potable water system, with or without mechanical backflow prevention devices. If reclaimed/recycled water is utilized on the premises, all potable water supplies shall be provided with appropriate backflow protection, as required by the *code official*. Reclaimed/recycled water is allowed in all nonresidential buildings to supply fixtures as specified in this appendix, except where prohibited by statute, regulation, or ordinance.

Exception: Reclaimed water such as rainwater harvesting and A/C condensate shall also be *approved* for residential lawn irrigation applications.

1304.2 Permits. Permits shall be required in accordance with Section 10-6.

1304.3 Installation. Except as provided for in Section 1302, all systems shall comply with the provisions of the *International Plumbing Code*.

1304.3.1 Hose bibbs. Hose bibbs shall not be allowed on reclaimed/recycled water piping systems.

Exception. On reclaimed water systems, a hose bibb may be used when identified with signage in accordance with Section 608.8.

1304.3.2 The reclaimed/recycled water system and the potable water system within the building shall be provided with the required appurtenances (valves, air/vacuum relief valves, etc.) to allow for deactivation or drainage as may be required by Section 1302.

1304.3.3 Reclaimed/recycled water pipes shall not be placed in the same trench as potable water pipes. A two-foot (610 mm) horizontal separation shall be maintained between pressurized, buried reclaimed/recycled water and potable water pipes. Buried potable water pipes crossing pressurized reclaimed/recycled water pipes shall be placed in a minimum of 12 inches (305 mm) above the reclaimed/recycled water pipes and shall have a PVC sleeve that extends a minimum of two feet either side of the pipe crossing. Reclaimed/recycled water pipes placed in the same trench or crossing building sewer or drainage piping shall be installed in compliance with Section 603.2. Reclaimed/recycled water pipes.

1304.3.4 Makeup water. When potable makeup water is needed for a reclaimed/recycle system, the potable water shall be protected by both an air gap and an RP backflow device in accordance with Section 608.

1304.3.5 Sizing. Reclaimed/recycled water piping shall be sized as in accordance with this *code* for the sizing of potable water piping.

1304.4 Pipe materials and identification. Reclaimed/recycled water piping and fittings shall be as required in this code for potable water piping and fittings. All reclaimed/recycled

water pipe and fittings shall be continuously wrapped with purple-colored Mylar tape. The wrapping tape shall have a minimum nominal thickness of 0.0005 inch (0.127 mm) and a minimum width of two inches (51 mm). Tape shall be fabricated of polyvinyl chloride with a synthetic rubber adhesive and a clear polypropylene protective coating or *approved* equal. The tape shall be purple (Pantone color #512) and shall be imprinted in nominal 0.5 inch (12.7 mm) high, black uppercase letters with the words "CAUTION: RECLAIMED WATER, DO NOT DRINK." The lettering shall be imprinted in two parallel lines, such that after wrapping the pipe a full line of text shall be visible. Wrapping tape is not required for buried PVC pipe manufactured with purple color integral to the plastic and marked on opposite sides to read "CAUTION: RECLAIMED WATER, DO NOT DRINK" in intervals not to exceed three feet (914 mm). All valves, except fixture supply control valves, shall be equipped with a locking feature. All mechanical equipment that is appurtenant to the reclaimed/recycled water system shall be painted purple to match the Mylar wrapping tape.

1304.5 Tests and inspections. Reclaimed/recycled water piping shall be tested as outlined in this code for testing of *potable water* piping.

1304.5.1 An initial and subsequent annual *cross connection* inspection and test shall be performed on the potable and reclaimed/recycled water systems and any other water systems as follows:

1304.5.1.1 Visual Dual System Inspection. Prior to commencing the *cross connection* testing, a dual system inspection shall be conducted as follows by the *code official* and other authorities having jurisdiction:

- 1. Meter locations of the recycled water and *potable water* lines shall be checked to verify that no modifications were made, and that no *cross connections* are visible.
- 2. All pumps and equipment, equipment room signs, and exposed piping in the equipment room shall be checked.
- 3. All valves shall be checked to ensure that valve lock seals are still in place and intact. All valve control door signs shall be checked to verify that no signs have been removed.

1304.5.1.2 Cross connection test. The following procedure shall be followed by the applicant in the presence of the *code official* and other authorities having jurisdiction to determine whether a *cross connection* occurred:

- 1. The *potable water* system shall be activated and pressurized. The reclaimed/recycled water system shall be shut down and completely drained.
- 2. The *potable water* system shall remain pressurized for a minimum period of time specified by the *code official* while the reclaimed/recycled water system is empty. The minimum period the reclaimed/recycled water system is to remain depressurized shall be determined on a case-by-case basis, taking into account the

size and complexity of the potable and reclaimed/recycled water distribution systems, but in no case shall that period be less than one hour.

- 3. All fixtures, potable and reclaimed/recycled, shall be tested and inspected for flow. Flow from any reclaimed/recycled water system outlet shall indicate a *cross* connection. No flow from a potable water outlet would indicate that it may be connected to the reclaimed/recycled water system.
- 4. The drain on the reclaimed/recycled water system shall be checked for flow during the test and at the end of the period.
- 5. The *potable water* system shall then be completely drained.
- 6. The reclaimed/recycled water system shall then be activated and pressurized.
- 7. The reclaimed/recycled water system shall remain pressurized for a minimum period of time specified by the *code official* while the *potable water* system is empty. The minimum period the *potable water* system is to remain depressurized shall be determined on a case-by-case basis, but in no case shall that period be less than one hour.
- 8. All fixtures, potable and reclaimed/recycled, shall be tested and inspected for flow. Flow from any *potable water* system outlet shall indicate a *cross connection*. No flow from a reclaimed/recycled water outlet would indicate that it may be connected to the *potable water* system.
- 9. The drain on the *potable water* system shall be checked for flow during the test and at the end of the period.
- 10. If there is no flow detected in any of the fixtures that would have indicated a *cross* connection, the potable water system shall be repressurized.

1304.5.1.3 In the event that a *cross connection* is discovered, the following procedure, in the presence of the *code official*, shall be activated immediately:

- 1. Reclaimed/recycled water piping to the building shall be shut down at the meter, and the reclaimed/recycled water riser shall be drained.
- 2. Potable water piping to the building shall be shut down at the meter.
- 3. The cross connection shall be uncovered and disconnected.
- 4. The building shall be retested following procedures listed in subsections 1304.5.1.1 and 1304.5.1.2 above.
- 5. The potable water system shall be chlorinated with 50 ppm chlorine for 24 hours.

6. The *potable water* system shall be flushed after 24 hours, and a standard bacteriological test shall be performed. If test results are acceptable, the *potable water* system may be recharged.

1304.5.2 An annual inspection of the reclaimed/recycled water system, following the procedures listed in subsection 1304.5.1.1, shall be required. Annual cross connection testing, following the procedures listed in subsection 1304.5.1.2, shall be required by the water purveyor providing the reclaimed/recycled water to the site, unless site conditions do not require it. In no event shall the test occur less often than once in four years. Alternate testing requirements may be allowed for institutional buildings.

1304.6 Approved Uses of Reclaimed/Recycled Water. Reclaimed/recycled water is allowed in all nonresidential buildings to supply fixtures as specified in this appendix, except where prohibited by statute, regulation, or ordinance.

Exception: *Reclaimed water* such as rainwater harvesting and A/C condensate shall also be approved for residential lawn irrigation applications.

1304.7 Signage.

1304.7.1 Room Entrance Signs. All installations using reclaimed/recycled water for water closets and/or urinals shall be identified with the proper signage. Each sign shall contain 0.5 inch (12.7 mm) letters of a highly visible color on a contrasting background. The location of each sign shall be such that the sign shall be visible to all users. The number and location of signs shall be approved by the *code official* and shall contain the following text:

TO CONSERVE WATER, THIS BUILDING USES RECLAIMED WATER TO FLUSH TOILETS AND URINALS.

1304.7.2 Equipment Room Signs. Each equipment room containing reclaimed/recycled water equipment shall have a sign posted with the following wording in one inch (25.4 mm) letters on a purple background and shall contain the following text:

CAUTION - RECLAIMED WATER. DO NOT DRINK. DO NOT CONNECT TO DRINKING WATER SYSTEM.

The following sign shall be posted in a location that is visible to anyone working on or near reclaimed/recycled water equipment:

NOTICE: CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM.

1304.7.3 Valve Access Door Signs. Each reclaimed/recycled water valve within a wall shall have its access door into the wall equipped with a warning sign approximately six inches by six inches (152 mm x 152 mm) with wording in 0.5 inch (12.7 mm) letters on a purple background. The size, shape, and format of the sign shall be substantially the same as that specified in subsection (B) above The signs shall be attached inside the access door frame and shall hang in the center of the access door frame. This sign requirement shall be applicable to any and all access doors, hatches, etc., leading to reclaimed/recycled water piping and appurtenances.

1304.7.4 Valve Seals. Each valve or appurtenance shall be sealed in a manner approved by the Code Official after the reclaimed/recycled water system has been approved and placed into operation. These seals shall either be a crimped lead wire seal or a plastic breakaway seal which, if broken after system approval, shall be deemed conclusive evidence that the reclaimed/recycled water system has been accessed. The seals shall be purple with the words "**RECLAIMED WATER**" and shall be supplied by the reclaimed/recycled water purveyor or by other arrangements acceptable to the *code official*.

Sec. 10-83 Fee Schedule.

Plumbing, Gas, Sewer			
Plumbing License and Registration Fees			
Water Treatment Contractor Annual State License Registration Fee	\$85.00		
Annual Irrigation Contractor Registration Fee	\$85.00		
Plumbing, Gas, Sewer Permit Fees			
Plumbing Inspection (Basic Fee)	\$50.00		
Fixture; Roof Drain; Reverse Osmosis (per unit)	\$7.00		
Grease Trap; Oil Separator; Sand Trap; Lint Trap; Neutralization Tank (or tank receiving discharge of liquid waste from fixtures); Drain, Appurtenance; Appliance			
0—500 gallons	\$12.00		
>500 gallons	\$17.00		
Water Heater, Vent (Gas/electric)	\$8.00		
Back-flow Prevention Device			
1/4" - ¾"	\$15.00		
1"	\$20.00		
1 ¼"	\$45.00		
1 ½"	\$55.00		
2"+	\$75.00		
Water Softener	\$17.00		
Underground Waterline			
0-100ft	\$10.00		

101-250ft	\$15.00
251–500ft	\$25.00
501-1000ft	\$45.00
1001-2000ft	\$75.00
2001-3000ft	\$100.00
Over 3001ft (plus additional \$25 for each 200ft or part thereof over 3001ft)	\$125.00
Irrigation System Inspection Fee	\$50.00
Residential Landscape Irrigation System Permit Fee	\$50.00
Commercial Landscape Irrigation System Permit Fee	\$100.00
Gas Inspection (Basic Fee)	\$50.00
1-5 openings (fee for each of the first five opening)	\$10.00
>5 openings (fee for each opening over five)	\$3.00
Gas Test; Extension (with 1 opening); Replace Gas Line; Split Meter; Move Meter; Butane Conversion (each)	\$8.00
Sewer Inspection (Basic Fee)	\$50.00
060 ft.	\$10.00
61–150 ft	\$20.00
151–300 ft	\$35.00
301–500 ft.	\$50.00
501750 ft.	\$70.00
751–1,000 ft.	\$110.00
>1.000 ft.(plus \$20.00 for each 150ft or part thereof over 1000ft	\$125.00
Reclaim Water Line Openings Inspection	\$50.00
1-4 openings (flat fee)	\$40.00
>4 openings (fee for each opening over four)	\$5.00
	<u></u>
Medical Gas Inspection (Basic Fee) (oxygen - O_2 ; nitrous oxide - N_2O ; medical compress air - MedAir Nitrogen - N_2 ; vacuum - Vac; carbon dioxide - CO_2 ; helium - He)	\$50.00
15 openings (flat fee)	\$13.00
>5 openings (fee for each opening over five)	\$3.00
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	\$155.00
Appeal to City Council	\$155.00
Special Services for Plumbing	
After-hour Inspection Fee (per hour with 1 hour minimum)	\$100.00

Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	\$100.00	
Permit Refund Fee	\$50.00	
Permit Amendment Fee	\$10.00	
Inspection Schedule Fee (Free on-line)	\$3.00	
Re-inspection Fee	\$50.00	
Permit Processing Fee	\$10.00	
Permit extension fee: 50% of permit (plus cost of permit)		
Plumbing Plan Review only (without building plan number)-Per hour/1 hour minimum	\$100.00	
Open Permit Review Fee	\$3.00/Permit	
Rental of Facility Fees: \$125/hr (daily min. fee of \$250; Max fee of \$1000); Security Personnel: \$15/hour/staff (with 1 hour minimum); DSD Staff: \$30/hour/staff (with 1 hour min.); Custodian Service: \$15/hour (with 2 hour min.)		
Commercial Existing Backflow Test and Maintenance Report:		
1–6 reports per address	\$5.00	
6—10 reports per address	\$30.00	
11–20 reports per address	\$35.00	
21–30 reports per address	\$40.00	
31–40 reports per address	\$45.00	
41+ reports per address, plus five dollars (\$5.00) per each group of ten (10) test and maintenance reports or part thereof	\$45.00	
Residential Existing Backflow Test and Maintenance Report (per address)	5.00	

Sec. 10-84 through 10-90. Reserved.

ARTICLE X. ENERGY CONSERVATION CODE

The San Antonio City Council approves and adopts the recommendations of the Mayor's Sustainable Task Force:

The city supports the adoption and implementation of energy provisions that result in energy savings of 15% or greater than the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of 30% energy savings in 2012 over the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of net-zero carbon by 2030 with the intent to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy and to reduce greenhouse gas and ozone precursor emissions in the city and which is not intended to abridge safety, health, or environmental requirements contained in other applicable codes or ordinances.

The city approves the goals of the following recommendations of the sustainable building task force:

- (1) That the planning and development services department, office of public utilities within finance, and the office of environmental policy coordinate with CPS Energy and San Antonio Water System (SAWS) to evaluate a new construction residential and commercial financial incentive program to include the provision of specific rebates or other incentives, with an ultimate goal of achieving net zero carbon by 2030 and be designed to reward improved performance in a scaled fashion, within the current limitations of all applicable laws and regulations.
- (2) That the city create a marketing and education awareness campaign which is a unified comprehensive community-wide outreach effort supporting an advanced sustainable buildings initiative.
- (3) That CPS Energy and SAWS provide existing rebate and incentive information to the city to coordinate and promote incentives to provide one-stop information.
- (4) That the planning and development services department, with assistance from the office of environmental policy, provide information on sustainable building practices and incentives to encourage residential and commercial developers to exceed minimum code requirements and serve as a clearinghouse for green building information from a wide and ever-increasing variety of sources.
- (5) That the city office of environmental policy coordinate education awareness with other agencies or organizations that include workshops, trainings, and seminars which will provide sustainable building practices for residential and commercial buildings that exceed minimum code requirements.
- (6) That the city evaluate the feasibility of offering a property tax exemption for new homes and tax abatement or phase-in for new commercial buildings that achieve high energy performance levels, including participation in a third party verified green rating system addressing residential and commercial building. Such considerations may include a minimum HERS score for residential buildings.
- (7) That the city evaluate the feasibility of offering an additional amount of property tax abatement or phase-in for new homes and commercial buildings that utilize on-site renewable energy.
- (8) That the city office of environmental policy promote an annual San Antonio Green Leadership awards program to recognize all new residential and commercial builders, architects, and others that significantly exceed the minimum code and to post those names on the city's website and through additional public media outlets.
- (9) That CPS Energy and SAWS evaluate incentives and rebates to support energy and water conservation for programs that exceeds code and include such programs in a unified city-wide promotion.

- (10) That the city evaluate the feasibility of funding for incentives through the planning and development services department, which could include fast-track permitting and reimbursement of fees, within the limitations of the current enterprise organization structure.
- (11) That energy incentives be provided to achieve 30% or greater savings above the currently adopted energy code; and
- That a stakeholder sustainable building committee (SSBC) be formed which (12)consists of representatives of architectural, engineering, construction, development, green building and building code professionals. Among other duties, the SSBC would monitor the implementation of the recommendations of the mayor's task force on sustainable buildings and meet as needed but not less often than every three years to review COSA sustainability energy policies and goals. The SSBC would measure periodic progress and recommend the establishment or modification of interim goals to attain agreed long-term goals. Interim and long-term goals would be evaluated and recommended for amendment as required on the basis of sustainable environmental and community benefits, return on investment and practical impact on the regulated community. In 2012 the interim goal would target 30% above the current code in effect in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999); incentives will increase proportionately to achieve greater savings. Finally, should the energy needs/uses of existing buildings be examined in the future, the SSBC would be charged with the responsibility to present recommendations to city council.

Sec. 10-91. Adoption of International Energy Conservation Code (2009).

The 2009 edition of the *International Energy Conservation Code*, promulgated by the International Code Council, Chapters 2 through 5, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of Section 10-92. Provisions of this article are in addition to the provisions of the *International Energy Conservation Code*. The following provisions coinciding with the provisions of the *International Energy Conservation Code* supersede, or delete, when indicated, the corresponding provisions of the *International Energy Conservation Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, or existing building code specifically adopted by reference in Articles II through XIII of this chapter.

Sec. 10-92. Amendments to the adopted chapters of the *International Energy Conservation Code* (2009).

Additions to the International Energy Conservation Code (IECC) are shown as <u>underlined</u> text. Deletions of the IECC are shown as bracketed [strikethroughs].

Section 402.4.2.2, Visual inspection option, is amended to read as follows:

402.4.2.2 Visual inspection option. Building envelope tightness and insulation shall be considered acceptable when items in Table 402.4.2, applicable to methods of construction, are verified. [When required by the *code official*, an] <u>An</u> approved party independent from the installer of the insulation shall inspect the air barrier and insulation. <u>Insulation letters shall not be submitted to the *Building Official* prior to the inspection being performed and shall be submitted on a form approved by the *Building Official*.</u>

Sec. 10-93 through 10-100. Reserved.

ARTICLE XI. FIRE PREVENTION.

Sec. 10-101. See Chapter 11, San Antonio Code.

Sec. 10-102 through 10-110. Reserved.

ARTICLE XII. LICENSING AND REGISTRATION.

Sec. 10-111. Billboard operator license.

- (a) License required. All persons engaging in the business of erecting, painting, servicing or maintaining billboards or any other off-premises advertising sign shall, for the purposes of this chapter, be considered billboard operators and must be licensed to do business by the city. A license holder supplying his license for a firm or corporation doing business under this chapter shall not supply his license to a second firm or corporation. Any permit issued to the license holder shall be for work being done by the license holder and his firm or corporation. The licensing requirement shall not be applicable to employees or subcontractors performing work under the supervision of the licensed billboard operator.
- (b) **Examination required; application.** Before a billboard operator license may be issued, each person seeking such a license shall take an examination and file an application for the examination with the *Building Official*.
- (c) Qualifications. Prior to taking the examination required by this chapter, each applicant shall demonstrate to the *Building Official* an ability to read and write English, and show proof of at least four years practical experience at the trade working under a billboard operator. The applicant shall also submit to the *Building Official* an affidavit, duly sworn, setting forth his experience. Proof of the applicant's experience shall be included with the affidavit.
- (d) Examination fee; test score; issuance of license. Examinations are administered by an approved third party, and the associated examination fees are paid directly to the approved third party by the applicant. After the *Building Official* has approved the application, the applicant has passed the required examination, and

the applicant has paid the license fee in accordance with the city approved fee schedule, the *Building Official* shall issue the applicant a billboard operator license.

(e) Vehicle identification. Any contractor engaged in erecting, installing, servicing, or maintaining a billboard shall ensure that all vehicles required to be on the job are identified with the contractor/company name and license number. Lettering on the vehicle shall be at least two inches high, and shall be in full view and legible at all times.

Sec. 10-112 Commercial sign operator license.

- (a) License required. Any person engaged in the business of erecting, painting, maintaining or servicing commercial signs must be licensed as a commercial sign operator by the city.
- (b) **Examination required; application.** Before a billboard operator's license may be issued, each person seeking such a license shall take an examination and file an application for the examination with the *Building Official*.
- (c) Qualifications. Prior to taking the examination required by this chapter, each applicant shall demonstrate to the *Building Official* an ability to read and write English, and show proof of at least two years experience in commercial sign installation working under a licensed commercial sign operator, or a licensed commercial sign operator from another city provided that the licensing qualifications and examinations are similar in design and quality to that of the city as determined by the *Building Official*, or can show proof of at least four years experience in commercial sign installation, provided the verification of experience shall be provided to the *Building Official* in a manner established by written policy. The applicant shall also submit to the *Building Official* an affidavit, duly sworn, setting forth his experience. Proof of the applicant's experience shall be included with the affidavit.
- (d) Examination fee; test score; issuance of license. Examinations are administered by an approved third party, and the associated examination fees are paid directly to the approved third party by the applicant. After the *Building Official* has approved the application, the applicant has passed the required examination, and the applicant has paid the license fee in accordance with the city approved fee schedule, the *Building Official* shall issue the applicant a commercial sign operator license.

Sec. 10-113. Electrical contractors and electrical sign contractors, installers, maintenance electricians; licenses and registrations.

(a) Effect of State Licensing. Upon the State's enforcement of House Bill 1487, passed by the 78th session of the Texas Legislature that established the State

licensing of electricians, the City no longer licenses electricians through testing administered by the City.

Exception: The *Building Official* will continue to renew those electrical licenses issued prior to the state's electrical license program.

All provisions and regulations of this chapter referencing a license issued by the City shall also cover a license issued by the State.

(b) State licensed electrical contractors and electrical sign contractors, registration. State licensed electrical contractors and electrical sign contractors shall register with the city before performing any electrical work or electrical sign work regulated by this chapter or Chapter 28, Signs and Billboards. The annual fee for such registration shall be established by city ordinance.

(c) Licensing and Insurance Required

- (1) **Qualifications of electricians.** It shall be a violation of this chapter for a person who does not hold a license to engage in the electrical construction and/or electrical sign construction, for which a permit is required, or to undertake to execute such construction or to cause the undertaking of such construction.
- (2) Misrepresentation. It shall be a violation of this chapter for any person to represent themselves with any class of license or registration set forth in this code or to use the words "electrical contractor", "master electrician", "master sign electrician", "electrician", or words of similar import or meaning on signs, business cards, stationery, or by any other manner whatsoever, unless such person is properly registered/licensed within the meaning of the word used as provided in this chapter.

(3) General liability and completed operation insurance.

a. An electrical contractor, electrical sign contractor, residential appliance installation contractor or the holder of an annual electrical maintenance permit must continuously maintain on file with the *Building Official* in a form of a certificate addressed to the city showing the above referenced persons carrying the following types and amounts of insurance: bodily injury liability insurance of at least three hundred thousand dollars and property damage liability insurance of at least three hundred thousand dollars for both general liability and completed operations insurance. This amount shall equal the same amount as the state, should requirements be changed by the state.

- b. The holder of any contractor's license is responsible for providing evidence of a new or renewal policy of any required insurance coverage upon termination or renewal of any policy.
- c. Any insurance certificate required by this code must be written through a company licensed to issue the insurance in the state of Texas and the insurance must be approved by office of the city attorney.
- d. Terms concurrent with license. Insurance policy terms may be concurrent with the two-year license terms and the insurance policy term may be prorated when it is approved by the code official as other than the two-year term.

(d) Communication, Ready Access, and Vehicle Identification

- (1) Means of communication. Every electrical or electrical sign contractor shall maintain an established place of business, as defined in section 10-113(d)(2) and shall establish a means to receive messages from the *Building Official* during the regular business hours. Acceptable means for receiving communications include, but are not limited to, a person available at the place of business, an answering machine, voice mail, a pager or a cellular telephone.
- (2) Master present for business. Master electricians or master sign electricians, on behalf of an electrical or electrical sign contractor, licensed by the city or the state, shall be present during construction related to that type of license. "Present" shall mean: on site, in the office, or available to be reached during the times of 7:45 AM and 4:30 PM Central Standard time. Upon request of the *Building Official*, master electricians shall make themselves available to meet on the job site.
- (3) Identification of vehicles. Each person engaged in electrical construction work shall identify all vehicles used for the transportation of materials, supplies, equipment or hand tools in the performance of such work with signs showing the name and type of business, the contractor's master electrician's license number and the state contractor's license number, if applicable, under which such electrical construction or electrical sign work is being conducted. For contractors operating with local license numbers, the number should be prefixed with EM or SM and those operating with state licenses shall have the TECL or TSCL. The signs shall be kept current at all times and shall be painted or comprised of permanently affixed decals displayed on each side of the vehicle. All letters and numbers shall be a minimum of two inches in height and shall be in full view and legible at all times. It shall be a violation of this chapter to use vehicles that do not comply with this section.

- (e) Classifications of licenses and registrations. The following are the classifications of licenses and registrations regulated by this code:
 - (1) Licenses:
 - a. Electrical contractor
 - b. Electrical sign contractor
 - c. Residential appliance installation contractor
 - d. Master electrician
 - e. Master sign electrician
 - f. Journeyman electrician
 - g. Journeyman sign electrician
 - h. Electrical apprentice
 - i. Electrical sign apprentice
 - j. Maintenance electrician
 - k. Residential wireman
 - 1. Residential appliance installer

(2) **Registrations:**

- a. Electrical maintenance technician
- b. Electrical sign technician. New electrical sign technician registrations are no longer offered.
- (f) **Documentation.** The *Building Official* shall adopt rules regarding the form of documentation that will be accepted as proof of compliance with any experience, verification of registration or license status, or other pertinent information the *Building Official* feels is relevant for inclusion.
- (g) **Record of issuance.** The *Building Official* shall maintain a record that is available to the general public of all licenses and registrations issued pursuant to this chapter.

(h) Licenses, registration cards and certificates.

- (1) A registration card, bearing the *Building Official*'s signature, shall be issued to each person receiving a City registration or license.
- (2) Each such registration card shall expire at midnight of the renewal date. A new card shall be issued provided that the registration or license holder has complied with the regulations of this code pertaining to renewals.
- (3) Each registration certificate or card, when issued to an electrical contractor, electrical sign contractor, or residential appliance installation contractor shall be issued to a person and registered in the name of the firm by which the person is employed. The firm shall be known as the holder of such registration certificate or card and shall notify the code official if the licensee is no longer in its employment. No further permits will be issued to the firm based upon the previous license holder's name who is no longer employed by the firm.
- (4) It shall be a violation of this code for any person to alter or amend in any manner, lend, rent, or transfer a registration certificate or card, and for any person to make use of any such rights for which the person is not registered or licensed.
- (5) Each electrical contractor, electrical sign contractor, or residential appliance installation contractor shall display the registration certificate in a conspicuous place in the firm's place of business. Each holder of a registration card shall carry the registration card on his person at all times while performing electrical work, electrical sign work or residential appliance installation covered by this code and shall present it to the *Building Official* upon demand.
- (i) License expiration, renewal, and continuing education. A license may be renewed at any time within thirty days before the expiration date, unless such license has been revoked or canceled by the *Building Official*. Applicants shall show proof of having satisfactorily completed an accredited four-hour code study course, approved by the *Building Official*, for each year of renewal within the 24 month immediately preceding such renewal. All electrical and sign licenses shall expire at midnight on the anniversary date of their issuance and shall be subject to renewal for a two year period of time.
- (j) Licenses not transferable. No license shall be transferred and no holder of any license shall allow his name or license to be used by any other person, either for the purpose of doing electrical construction or obtaining a permit under the penalty of forfeiture of license and payment of fines.

- (k) Revocation of licenses. Any license or registration granted under this chapter may be canceled, revoked or suspended by the *Building Official* if the holder of such license or registration violates provisions of this chapter or any ordinance of the city relating to electrical work. When a license or registration is suspended, a new license or registration shall not be granted to the same person in violation of the terms of the suspension. Prior to taking any action identified in this section, the *Building Official* shall give at least 15 days of written notice to the license or registration holder to afford the individual or business an opportunity to present evidence that such action is not warranted. Notice may be personally delivered or deposited postage-paid, certified or registered mail with the United State Postal Service addressed to the last address shown on the records of the department.
- (I) License prerequisite to issuance of permit. A permit for electrical work or electrical sign work shall not be issued to any person unless such person is the holder of a license to perform the class of work described in such permit as provided in this chapter. An annual electrical maintenance permit required by this chapter shall not be issued unless the owner of the property provides evidence that the maintenance work will be performed by individuals qualified in accordance with § 10-6(c) of this chapter.
- (m) Change of name. Upon payment of the fee set by ordinance, posting of any necessary bonds and compliance with any other requirements of this chapter, the holder of a valid license may apply to the *Building Official* for a change on the name of a license.
- (n) Continuation of the business upon death, disability or termination of the business's master. Upon the death, disability or termination of electrical contractor or electrical sign contractor business, such business will be allowed to complete existing work for which permits had been obtained prior to the severance of such master provided insurance is posted, if applicable, and sufficient evidence is submitted to and approved by the *Building Official* as to the ability of the business to complete the work in accordance with the requirements of this chapter. Monthly approval may be granted by the *Building Official* for a period not to exceed six months. On or before the expiration of such period the business shall associate a new master of the appropriate classification or cease operations.

(0) Electrical Contractor, Electrical Sign Contractor and Residential Appliance Installation Contractor; responsibilities.

(1) Every electrical or electrical sign contractor, before engaging in electrical or electrical sign work, must procure a master electrician or master electrician sign license for the conduct of such work. Electrical work is regulated by this code. Electrical sign work is regulated by Chapter 28, Signs and Billboards.

- a. Electrical contractor work shall not include the manufacture of any sign regulated by this code or Chapter 28.
- b. Electrical sign contractor work shall not include the extensions of, or additions to, an existing branch circuit.
- (2) A licensed contractor shall display its name and license number on both sides of each vehicle owned or operated by the business and used in the conduct of his work. Lettering shall be of a contrasting color and at least two inches in height.
 - a. An electrical contractor's license number shall be preceded by the letters "EM" or "TECL" depending on whether the business is operating under a local license or state license.
 - b. An electrical sign contractor's license number shall be preceded by the letters "SM" "TSCL" for City licenses or State of Texas licenses respectively.
 - c. A residential appliance installation contractor's license number shall be preceded by the letters "TICL".
- (3) All of a contractor's non-exempt work shall be performed by licensed or registered individuals. A contractor is responsible for compliance with applicable codes for all such work performed on its behalf.
- (4) The licensed contractor's name, address, phone number, and license number shall appear on all proposals, invoices, and written contracts proposed by the contractor. The following information: "Regulated by The Texas Department of Licensing and Regulation, P. O. Box 12157, Austin, Texas 78711, 1-800-803-9202, 512-463-6599; website: www.license.state.tx.us/complaints shall be listed on invoices and written contracts.
- (5) A licensed contractor shall maintain employee records and records of all work performed on its behalf for a period of four years after completion of the work, and shall make those records available to the code official at the contractor's place of business during normal business hours for inspection and copying.
- (6) A licensed contractor and its designated master electrician or residential appliance installer are responsible for supervision of all licensees or registered persons performing work on behalf of the contractor to assure compliance with applicable statutes and rules and, in particular, standards of conduct set out in these rules.

(p) Master Electrician and Master Sign Electrician.

- (1) **Responsibility.** The master electrician of record shall be liable and responsible for the layout and technical supervision of any work that requires the securing of a permit under the master's license. Failure of the master to properly provide for the supervision and control of work being performed on behalf of the business may cause the work being performed under permit to be discontinued by the *Building Official*.
- (2) Limitation on multiple business affiliations. Any master sign electrician affiliated with a business as herein provided shall not engage in the operation of a second electrical sign business, under the provisions of this code, unless it is under the same name and insurance of the first business. Any permit issued to a business must be for work being done by that business. Any master electrician obtaining permits for any person, business or entity will be notified to appear before the *Building Official* for consideration of a complaint.
- (q) Journeyman Electrician and Journeyman Sign Electrician; performance of work; supervision and ratio. A journeyman electrician may perform electrical or electrical sign work under the general supervision of a master electrician or master sign electrician on behalf of an electrical or electrical sign contractor. A journeyman electrician or journeyman sign electrician may direct and supervise the work of an electrical apprentice provided that a ratio of twelve electrical apprentices to one journeyman electricians is not exceeded.
- (r) Electrical Apprentice and Electrical Sign Apprentice; performance of work. An apprentice may perform electrical under the direct supervision of a master electrician, master sign electrician, journeyman electrician, journeyman sign electrician, residential wireman, or electrical sign technician.
- (s) Maintenance Electrician and Electrical Maintenance Technician; performance of work. A maintenance electrician may perform all of the work under the annual electrical maintenance permit permitted by section 10-6(c). A registered electrical maintenance technician may perform all of the work permitted by section 10-6(c) but may not perform work involving voltages or amperages that exceed the limits described in sections 10-6(c)(2) a. through f.
- (t) **Residential Wireman; supervision and ratio.** A residential wireman may direct and supervise the work of an electrical apprentice provided that a ratio of two electrical apprentices to one residential wireman is not exceeded.
- (u) Registered Sign Technician; performance of work. A sign technician may perform electrical sign work under the general supervision of a master sign electrician on behalf of an electrical sign contractor.

Sec. 10-114. San Antonio Mechanical License. Any person performing any type of mechanical work in the city shall have in his possession a valid and authenticated mechanical license issued by the *Building Official* or a valid mechanical license issued by the state, except as otherwise provided under Section 10-114(g) or as exempted under federal or state law.

- (a) **Contact information.** A licensed contractor must maintain a bona fide company address and telephone to enable the *Building Official* to contact the contractor in case of a job discrepancy. Any person holding a mechanical license and doing work in the city must be registered and shall report to the *Building Official* any change of address and telephone number in order to allow the *Building Official* to maintain accurate license renewal records. All mechanical contractors holding a master's license from the city shall display, on both sides of any vehicles being used for or in connection with mechanical installation or service work, a sign depicting the identity of the person, firm or corporation performing the work and the mechanical master's license number issued by the city. The sign shall have the numbers not less than two inches (50.8 mm) in height.
- (b) Certificate of insurance. Any person applying for a master mechanical license or mechanical permit shall present a certificate of insurance issued by an insurance company authorized to do business in the state of Texas, certifying that the applicant is insured to the limits of at \$300,000 public liability insurance per occurrence and \$300,000 property damage liability insurance per occurrence.
- (c) **Duplicate Licenses.** Any person whose license was_destroyed or lost may obtain a duplicate license upon payment of the fee set forth in the fee schedule adopted by the City of San Antonio.
- (d) Expiration date of license. All city licenses shall expire on December 31 of each year. Licenses shall be renewed prior to the expiration date. Each person holding a valid mechanical license shall renew same in sufficient time to have the license renewal form returned to the Development Services Department with the appropriate renewal fee prior to license expiration date. Any person who does not renew his license prior to expiration date must appear before the Building-related and Fire Codes Board of Appeals and show cause why his license should be renewed.
- (e) Certain acts prohibited. In addition to other provisions of this code, it shall be unlawful for any person to do any of the following acts:
 - (1) To display, cause or permit to be displayed or to have in one's possession any instrument purporting to be licensed for the doing of any mechanical work, knowing such instrument to be fictitious or to have canceled, revoked suspended or altered;

- (2) To lend or knowingly permit the use of any license for the doing of any mechanical work to any person not entitled thereto, under the provisions of this chapter;
- (3) To display or represent as one's own a license for the doing of any mechanical work when such license has not been lawfully issued to the person so displaying the same;
- (4) To fail or refuse to surrender to the *Building Official* on demand any license for the doing of any mechanical work, which has been suspended, canceled or revoked as provided for in this chapter;
- (5) To apply for or have in one's possession more than one current license of the same type provided for in this chapter;
- (6) To use a false or fictitious name or give a false or fictitious address in any application for any license provided for in this chapter, or any renewal or duplicate thereof, or knowingly make a false statement or knowingly conceal a material fact or otherwise commit fraud in making any such application;
- (7) To employ as a master or technician in mechanical work any person not licensed as provided in this chapter;
- (8) To perform any character of mechanical work for which a license is required by this chapter while such license is suspended, canceled or revoked.

(f) Continuing education requirements for state licensed mechanical contractors and San Antonio licensed mechanical contractors.

- (1) Mechanical contractors licensed by the state must maintain the required amount of continuing education mandated by state law in order to perform work in the city.
- (2) Mechanical contractors licensed by the city will be required to attend eight hours of continuing education annually.
 - a, This training is mandatory for maintenance of city license.
 - b. Training curriculum will be established by the *Building Official*, will be in accordance with state law and will be reviewed by the board annually.
 - c. Annual Training will be conducted by the Development Services Department.

- d. A licensee may not receive continuing education credit for attending the same course more than once.
- e. A fee, established by ordinance in the Development Services Department fee schedule, shall be paid by the licensee for each course.
- (g) **HVAC Inspections Supervisor.** The HVAC Inspections Supervisor of the development services department shall also serve as the master of record for mechanical work performed by city HVAC workers.

Sec. 10-115. Residential Building Contractor Registration.

(a) Title and scope of section; definition.

- (1) This section shall be known as the residential building contractor registration section and may be cited as such.
- (2) For the purposes of this section and other sections of this chapter pertinent to registration, the term "employee" shall not apply to consultants, contract labor, or subcontractors employed by the registered residential building contractor. Such individuals or entities shall be considered contractors and, as such, shall be required to obtain their own registrations or licenses as required by the state or the city.
- (3) For the purposes of this section and other sections of this chapter pertinent to licensing, the term "direct employee" shall mean an employee of a registered residential building contractor working on a residential building.
- (b) Registration required; exceptions. Any person who is required to secure a building permit to construct, structurally alter or enlarge any one- or two-family detached dwelling or townhouse including detached accessory buildings in excess of 400 square feet in area thereto as regulated by the IRC in the city shall have in his possession a valid and authenticated residential building contractor certificate of registration issued by the *Building Official* of the city. All such work shall be performed by a registered residential building contractor or by licensed building trade subcontractor(s), not otherwise required to be registered under this section, of the residential building contractor.

Exceptions:

(1) Any person who will own, occupy or rent a detached single family dwelling for a period of 12 months after completion of the building permit
and final inspection for the single family dwelling or accessory building thereto.

- (2) Building trade subcontractors who are performing work for the residential building contractor are not required to be registered under this section (e.g. framing subcontractor, flooring subcontractor, drywall subcontractor, painting subcontractor, etc.).
- (c) Authority; responsibilities. A residential building contractor registration is authority granted to the person, company, association, or other entity to whom it is issued to engage in the business of contracting in accordance with Section 10-115(b). The registered residential building contractor shall be responsible for exercising such supervision and control of his construction operations as is necessary to secure full compliance with the provisions of the IRC and other applicable laws of the City, State and United States.
- (d) **Penalties.** A violation of this section shall constitute a Class C misdemeanor offense with a fine not to exceed \$500 per violation. Each day or portion thereof out of compliance with the registration requirements set above shall constitute a separate offense.

(e) Application procedures; requirements.

- (1) An applicant for an original certificate of registration or renewal must submit an application to the *Building Official* on a form established by the department. Each applicant must fully disclose in the application whether the applicant has:
 - a. Entered a plea of guilty or nolo contendre (no contest) to any felony charge or a misdemeanor involving moral turpitude;
 - b. Been convicted of a felony or a misdemeanor involving moral turpitude and the time for appeal has elapsed or the conviction has been affirmed on appeal;
 - c. Entered a plea of guilty or nolo contendre (no contest) or been convicted of a felony or misdemeanor arising out of a violation of the building code or local amendments thereto in the State of Texas whether or not said violation involves moral turpitude;
 - d. Lost or is suspended from residential building contractor privileges in any jurisdiction in the State.

A failure to disclose under Sec. 10-115(e)(1) shall be sufficient grounds to deny the application.

- (2) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant. Upon receipt of an application, the *Building Official* may conduct a criminal background check on the applicant or any person responsible for the application. The *Building Official* may obtain criminal history record information maintained by the Department of Public Safety, the Federal Bureau of Investigation, or any other local, state, or national government entity.
- (3) A person may not be issued a certificate of registration unless the person:
 - a. Is at least 18 years of age; and
 - b. Is a United States citizen or a lawfully admitted alien; and
 - c. The *Building Official* is satisfied with the person's honesty, integrity, and trustworthiness based on information supplied and discovered in connection with the application.

Commentary: Full disclosure includes an interest in or ownership of any entity engaged in the residential building contractor business that has lost or been suspended from residential building constructor privileges.

- (4) Certificate of insurance. Any person applying for a residential building contractor certificate of registration shall present a certificate of insurance issued by an insurance company authorized to do business in the state of Texas, certifying that the applicant is insured with at least the minimum general liability insurance coverages at all times to satisfy proof of financial responsibility as follows:
 - a. The insurance must be at least \$400,000 per occurrence (combined for property damage and bodily injury);
 - b. be at least one million dollars aggregate (total amount the policy will pay for property damage and bodily injury coverage); and
 - c. be at least \$400,000 aggregate for products and completed operations.
- (5) Expiration date of certificate of registration. All city certificates of registration for residential building contractors shall expire two years after issuance. Certificates of registration shall be renewed prior to expiration date. Each person holding a valid residential building contractor certificate of registration shall renew same in sufficient time to have the certificate renewal form and insurance information returned to the department with the appropriate renewal fee prior to registration expiration date.

(f) Duties and powers of *Building Official*.

- (1) There is hereby vested in the *Building Official* the duty of examining the applications for residential building contractor certificates of registration, including the issuance, reissuance, renewal, suspension, or revocation of such certificates of registration.
- (2) The *Building Official* shall establish procedures consistent with this code for the issuance of certificates of registration for residential building contractors.
- (3) The *Building Official* shall have the duty to keep all registration application records. Such records shall be open to the public for inspection during regular business hours. The Building Official shall further have the power and duty to adopt, amend, or repeal rules and regulations consistent with the provisions of this section as may be necessary for the proper administration and enforcement hereof.

A decision to grant or deny an application for registration shall be made within 10 working days after receiving the completed application. Incomplete applications shall not be considered.

(g) Appealing a Denial of Registration.

- (1) Appeal to Board. If either an original or renewal certificate of registration is denied, the *Building Official* shall furnish the applicant a written statement setting forth the grounds for the refusal within five working days. Such statement shall be by certified mail, return receipt requested, to the mailing address provided in the application unless the applicant is present to receive and acknowledge in writing receipt of such letter. The registered residential building contractor or their representative shall then have 15 working days from receipt of notice to appeal the *Building Official*'s decision in accordance with Section 10-14 of this chapter.
- (2) Nothing in this section shall be interpreted as to deny a subsequent application at the expiration of one year from denial of initial registration.
- (h) Fees; registration period. The application fee for contractor registration shall be one hundred seventy dollars and said registration shall be valid for a period of two years. The certificate holder shall be required to re-register every two-year period of time and pay a fee of one hundred seventy dollars for each two-year period of time to maintain registration.
- (i) Certificates not assignable or transferable. A certificate of registration issued pursuant to this section shall not be assignable or transferable.

- (j) Violations under this section. The following list shall constitute a non-exclusive list of violations under this section. It is unlawful for any registered residential building contractor to:
 - (1) Display or cause a permit to be displayed or to have in one's possession any certificate of registration for doing any construction work, knowing it to be fictitious or to have been canceled, suspended or altered;
 - (2) Lend or permit the use of any certificate of registration for doing any construction work to any person not entitled to it;
 - (3) Allow any person to display or to represent as one's own city certificate of registration for any construction work when the certificate of registration has not been lawfully issued to the person displaying it;
 - (4) Use a false or fictitious name or address in any application for any registration or permit provided for in this chapter or any renewal or make a false statement or conceal a material fact or otherwise commit fraud in making any application;
 - (5) Perform any residential building contractor work for which a registration is required without having the registration or while the registration is suspended, expired or canceled;
 - (6) Perform any construction work for which a permit is required without having the permit or after the permit has been canceled;
 - (7) Fail or refuse to make the necessary repair or changes for code violations as provided in a written notice issued by the *Building Official*. A reasonable amount of time shall be granted in the written notice taking into consideration the work to be completed and the circumstances. A separate violation is deemed to be committed each day after the expiration of the time for correction provided in the notice until the work is corrected;
 - (8) Permit any construction work covered by this section to be performed by any person not properly licensed or registered, while in control of premises covered by this section;
 - (9) Remove, break, change, destroy, tear, mutilate, cover or otherwise deface or injure any official notice or seal posted by the *Building Official*;
 - (10) Place or leave the property in such condition that it injures or endangers persons or property authorized to be on the construction site.

(k) Cancellation and suspension of registration; appeals.

- (1) A contractor's certificate of registration may be cancelled or suspended by the *Building Official* after a hearing before the *Building Official* if the registered residential building contractor is convicted of any penal offense arising out of or related to the performance of a residential building contract or suffers a judgment against them in a civil action predicated upon fraud in connection with the performance of a residential building contract.
- (2) The *Building Official* may also administratively cancel or suspend a certificate of registration after a hearing before the *Building Official* for any one or more of the following reasons:
 - a. Conviction or entering a plea of guilty or nolo contendre (no contest) by the registered person or entity of a felony or misdemeanor involving moral turpitude;
 - b. Conviction or entering a plea of guilty or nolo contendre (no contest) in connection with a violation of any adopted technical construction code or amendments thereto in the state of Texas;
 - c. Making any false statement as to a material matter in an application for registration, renewal or hearing in connection with same;
 - d. Failure to disclose required information under Section 10-115(e);
 - e. Three separate violations as detailed in Section 10-115(j) of this chapter, provided the violations occur within the previous 12-month period;
 - f. Upon judicial determination of an abandonment or willful failure to perform any residential building contract or project in or undertaken by a registered residential building contractor, or willful deviation from or disregard of plans or specifications in any material respect;
 - g. Upon judicial determination that the residential building contractor knowingly made substantial misrepresentation on the part of the residential building contractor in the procurement of a residential building contract;
 - h. Upon judicial determination of fraud on the part of the residential building contractor in the execution of or in the material alteration

of any residential building contract or mortgage, promissory note or other document relating to the contract;

- i. Upon judicial determination that the residential building contractor knowingly prepared or accepted any mortgage, promissory note or other evidence of indebtedness pertaining to a residential building transaction with knowledge that it recited a greater monetary obligation than the agreed consideration for the residential building construction work;
- j. With knowledge, the residential building contractor directly or indirectly published any advertisement relating to residential building construction which contains assertions, representations or statements which are false, deceptive or misleading;
- k. Failure of the residential building contractor to notify the *Building Official* of any change in the ownership, management, or business name;
- 1. Conducting a residential building contractor business in any name other than the one registered;
- m. Obtaining a building permit for an unregistered contractor or for one whose registration has been suspended, cancelled or denied.
- (3) The *Building Official* may take any of the following actions against the holder of the certificate of registration:
 - a. No suspension
 - b. Suspension for 30 days
 - c. Suspension for 60 days
 - d. Suspension for 90 days
 - e. Suspension for 180 days
 - f. Cancellation
- (4) The *Building Official* shall send the registered residential building contractor a written notice of any administrative action to be taken against the registered contractor by certified mail, return receipt requested, at the last known mailing address. The notification shall give not less than ten working days' notice of the hearing. The *Building Official* is authorized to

conduct hearings for the purpose of making findings of fact to assist him in making his decision.

(5) A written decision to cancel or suspend a certificate of registration shall be required and list the reasons for the *Building Official's* decision. This written decision shall be forwarded to the registered contractor by certified mail, return receipt requested to the registered contractor's last known address. This mailing may be waived provided that the registered contractor sign and acknowledge receipt of the written decision from the *Building Official*. The registered contractor shall then have fifteen days from receipt of this notice to appeal the *Building Official's* decision to the Building-related and Fire Codes Board of Appeals. The decision of the *Building Official* shall be final after expiration of this time.

(6) Board appellate process.

- a. A registered contractor shall have the right to appeal the *Building Official's* decision in accordance with Section 10-14 of this chapter.
- b. A perfected appeal tolls the *Building Official's* decision to suspend or cancel the registration until the board renders its decision.
- c. Neither the board nor the *Building Official* shall have any authority to suspend a registration for longer than 180 days.
- A cancellation shall prevent the residential building contractor g. from pulling new permits for a period of at least one year. For purposes of this section, a cancellation of a registration does not alleviate the registered contractor from performing current obligations or absolve them from liability under a residential building contract. In performing currently permitted obligations while cancelled, the residential building contractor shall not be subject to penalty for being unregistered. All other code provisions are applicable. Upon the expiration of a one year period, a residential building contractor may apply for a new certificate of registration. No provision of this section shall be interpreted to mean that a new certificate of registration will be issued after a prior certificate of registration has been cancelled. A denied applicant for a new certificate of registration is required to wait one year before applying again. There shall be no limit on the number of times a denied applicant may reapply.
- h. A suspension shall prevent the registered contractor from pulling new permits in the City for the suspension time period. A suspension of registration does not alleviate the registered contractor from performing currently permitted obligations under

the residential building contract. The residential building contractor shall not be subject to penalty for operating while suspended when performing currently permitted obligations. However, all other code provisions apply. The board's decision to affirm or affirm as modified a suspension of a registration means that the suspension time begins the following working day.

Sec. 10-116. Home Improvement Contractor Registration.

(a) Registration required; penalties.

- (1) A home improvement contractor, prior to entering into a contract with the owner for any home improvement work requiring the issuance of building permits whether or not said person is required to register with the state must file an application for a certificate of registration with the city unless otherwise exempt under section 10-116(3).
- (2) A violation of this article shall constitute a class "C" misdemeanor offense with a fine of not less than one dollar and no more than \$500 per violation. Each day out of compliance with the registration requirements set above shall constitute a separate offense.

Exemptions.

- a. An individual who performs labor or services as an employee of a registered contractor or an individual who performs labor or services as an employee or subcontractor of a registered contractor who does not deal directly with the general public as a home improvement contractor;
- b. A homeowner, tenant or an employee of a homeowner or tenant performing work on their own residence;
- c. A plumber, electrician, or other skilled tradesman licensed under the laws of the state, this chapter or other ordinances of the city who is acting exclusively within the scope of the craft for which he or she is currently licensed;
- d. A contractor performing home improvement work where the total amount to be paid does not exceed \$200;
- e. A contractor performing home improvement work not requiring an application for building permit.

(b) Application procedures.

- (1) An applicant for an original certificate of registration or renewal must submit an application to the *Building Official* on a form established by the department.
- (2) Each applicant must fully disclose in the application whether the applicant has:
 - a. Entered a plea of guilty or nolo contendre (no contest) to any felony charge or a misdemeanor involving moral turpitude;
 - b. Been convicted of a felony or a misdemeanor involving moral turpitude and the time for appeal has elapsed or the conviction has been affirmed on appeal;
 - c. Entered a plea of guilty or nolo contendre (no contest) or been convicted of a felony or misdemeanor arising out of a violation of the building code or local amendments thereto in the state whether or not said violation involves moral turpitude;
 - d. Has lost or is suspended from home improvement privileges in any jurisdiction in the state. Full disclosure includes an interest in or ownership of any entity engaged in the business of making home improvements that has lost or been suspended from home improvement privileges.
- (3) A failure to disclose under subsection (b) shall be sufficient grounds to deny the application.
- (4) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant. Upon receipt of an application, the *Building Official* may conduct a criminal background check on the applicant or any person responsible for the application. The *Building Official* may obtain criminal history record information maintained by the department of public safety, the Federal Bureau of Investigation, or any other local, state, or national government entity.
- (5) A person may not be issued a certificate of registration unless the person:
 - a. Is at least 18 years of age; and
 - b. Is a United States citizen or a lawfully admitted alien; and
 - c. The *Building Official* is satisfied with the person's honesty, integrity, and trustworthiness based on information supplied and discovered in connection with the application.
- (c) *Building Official* duties and powers. The *Building Official*, in addition to the powers listed in Section 10-5 of this chapter, shall have the duty to keep all

registration application records. Such records shall be open to the public for inspection during regular business hours. A decision to grant or deny an application for registration shall be made within 10 working days after receiving the completed application. Incomplete applications shall not be considered.

(d) Appealing a denial of registration.

- (1) Appeal to board. If either an original or renewal certificate of registration is denied, the *Building Official* shall furnish the applicant a written statement setting forth the grounds for the refusal within five working days. Such statement shall be by certified mail, return receipt requested, to the mailing address provided in the application unless the applicant is present to receive and acknowledge in writing receipt of such letter. The registered contractor or their representative shall have the right to appeal in accordance with Section 10-14 of this chapter.
- (2) Nothing in this section shall be interpreted as to deny a subsequent application at the expiration of one year from denial of initial registration.

(e) Fees, registration period.

- (1) The application fee for contractor registration shall be seventy-five dollars and said registration shall be valid for a period of one year. The certificate holder shall be required to re-register every successive year and pay a fee of seventy-five dollars to maintain the certification.
- (2) Appeals fees shall be \$75.
- (3) The application and registration fees and appeals fees shall be reflected in the fee schedule of the city.
- (f) Certificate not assignable or transferable. A certificate of registration issued pursuant to this article shall not be assignable or transferable.
- (g) Violations under this article. The following list shall constitute a non-exclusive list of violations under this article. It is unlawful for any registered contractor to:
 - (1) Display or cause a permit to be displayed or to have in one's possession any certificate of registration for doing any construction work, knowing it to be fictitious or to have been canceled, suspended or altered;
 - (2) Lend or permit the use of any certificate of registration for doing any construction work to any person not entitled to it;
 - (3) Display or to represent as one's own city certificate of registration for any construction work when the certificate of registration has not been lawfully issued to the person displaying it;
 - (4) Use a false or fictitious name or address in any application for any registration or permit provided for in this chapter or any renewal or make

a false statement or conceal a material fact or otherwise commit fraud in making any application;

- (5) Perform any home improvement contracting work for which a registration is required without having the registration or while the registration is suspended, expired or canceled;
- (6) Perform any construction work for which a permit is required without having the permit or after the permit has been canceled;
- (7) Fail or refuse to make the necessary repair or changes as provided in a written notice issued by the *Building Official*. A reasonable amount of time shall be granted in the written notice taking into consideration the work to be completed and the circumstances. A separate violation is deemed to be committed each day after the expiration of the time for correction provided in the notice until the work is corrected;
- (8) Permit any construction work covered by this article to be performed by any person not properly licensed or registered, while in control of premises covered by this chapter;
- (9) Remove, break, change, destroy, tear, mutilate, cover or otherwise deface or injure any official notice or seal posted by the *Building Official*; or
- (10) Place or leave the property in such condition that it injures or endangers persons or property.
- (h) Cancellation and suspension of registration; appeals. To the extent not in conflict, processes shall follow Sec. 10-115(k).

Sec. 10-117. Irrigation systems and irrigators

- (a) License required. An irrigation contractor is required to hold a license issued under Chapter 37 of the Texas Water Code and the Texas Occupations Code § 1903.251.
- (b) Registration.
 - (1) All irrigation contractors, prior to doing any irrigation system installation in the territorial limits or extraterritorial jurisdiction (ETJ) of the city shall be required to be registered with the development services department of the city.
 - (2) An irrigation contractor's registration must be submitted on forms available from the development services department and shall include the following information:
 - a. The irrigation contractor's full name;

- b. The irrigation contractor's license number;
- c. The irrigation contractor's business name;
- d. The irrigation contractor's business address;
- e. The irrigation contractor's business telephone number; and
- f. The irrigation contractor's telefax number.
- (3) The irrigation contractor shall provide a certificate of insurance by an insurance company authorized in the state certifying that the irrigation contractor is insured to the limit of at least:
 - a. Three hundred thousand dollars public liability per occurrence; and
 - b. Three hundred thousand dollars property liability per occurrence and product/completed operations.

In lieu of insurance, the irrigation contractor may provide a bond in the amount of \$10,000 conditioned that the irrigation contractor shall faithfully observe all applicable laws.

- (4) The irrigation contractor shall renew registration annually upon submission of the registration form and payment of the fee.
- (5) A licensed plumber may be issued an irrigation permit.
- (c) Permits and inspections. All irrigation contractors, prior to doing any irrigation system installation in the territorial limits or extraterritorial jurisdiction (ETJ) of the city shall apply and be issued permits from the development services department on forms provided by said department.

The irrigation system shall be installed in accordance with the following:

- (1) City Code of San Antonio, Texas;
- (2) Local Government Code;
- (3) Texas Water Code;
- (4) Texas Occupations Code; and.
- (5) Texas Commission on Environmental Quality (TCEQ)

The irrigation system shall be inspected prior to covering the sprinkler heads as requested by the installer.

Any defects in the installation determined during the inspection shall be corrected before the inspection is considered approved. The city plumbing inspector shall document on the inspection records the static pressure and water source of the irrigation system. If the irrigation system is being constructed as part of the building permit, a certificate of occupancy shall not be issued until all inspections have been approved.

(d) Minimum standards and specifications. Texas Occupations Code, § 1903.053 entitled "Standards" and the rules adopted by the Texas Commission on Environmental Quality (TCEQ) Page 1 Chapter 344 - Landscape Irrigation Rule Project No. 2007-027-344-CE are hereby incorporated by reference as minimum standards and specifications for the design, installation, and the operation of irrigation systems.

(e) Violations and enforcement.

(1) It shall be a violation to install an irrigation system in the city without first obtaining an irrigation system permit from the development services department. Any violation of this article shall be a class C misdemeanor punishable by a fine not to exceed \$500 per violation. Each day or portion thereof during which a violation of any of the provisions of this article is committed shall constitute a separate offense. A fine or criminal penalty prescribed by this section does not apply to a violation in the ETJ.

(2) Civil enforcement.

- a. The city may seek civil enforcement against such violators in the corporate limits of the city and in the ETJ. Enforcement in the ETJ is authorized pursuant to and under the authority granted by V.T.C.A. Local Government Code §§ 212.001 et seq.
- b. Any person who commits a violation under this article shall be subject to a civil penalty of up to \$1,000 per violation per day.
- (f) Staffing. The development services department shall employ at least one person who shall hold an irrigation contractor's license issued by the state. Such person shall have a minimum of five years of experience in the installation of irrigation systems. All city plumbing inspectors shall receive a minimum of six hours of irrigation/water conservation instruction per year.
- (g) Fee schedule. Irrigation related fees shall be as set forth in the city fee schedule.

10-118. Responsible Master Plumber license registration.

(a) License. Before any person shall engage in the business of plumbing within the City, said person shall have a current master plumber's license obtained from the state board of plumbing examiners and the required insurance. The license shall be registered with the city by submitting the appropriate registration as required by the City. Where any plumbing is being done, properly licensed individuals shall, at all times, be present on the job and in actual control and in charge of the plumbing being done.

- (b) Contact information. A responsible master plumber doing plumbing work in the city must maintain a bona fide company address and telephone to enable the *Building Official* to contact the master plumber in case of a job discrepancy. Any person holding a master plumber license and doing plumbing work in the city must be registered and shall report to the *Building Official* any change of address and telephone number in order to allow the *Building Official* to maintain accurate license renewal records.
- (c) **Display of license and company name.** All responsible master plumbers holding a master plumber's license registered with the city shall:
 - (1) Display, on both sides of any vehicles being used for or in connection with plumbing installation or service work, a sign depicting the identity of the person, firm or corporation performing the work and the master plumber license number issued by the state. The sign shall be permanent, have the numbers not less than two inches (50.8 mm) in height and be of contrasting colors with the truck, and shall be plainly legible at a distance of not less than 100 feet. A magnetic sign on a vehicle is not a permanent sign.
 - (2) Display the framable certificate of license in their place of business and all licensees shall carry the pocket card license with them while engaged in plumbing work.
- (d) Certificate of insurance. Any person applying for a master plumber license registration or plumbing permit shall present a certificate of insurance. The certificate of insurance must:
 - (1) Be written by a company licensed to do business in the state;
 - (2) Provide for commercial general liability insurance for the master plumber for a claim for property damage or bodily injury, regardless of whether the claim arises from negligence or on a contract; and
 - (3) Provide for coverage of not less than \$300,000 for all claims arising in a one-year period.
- (e) Expiration date of license. All city license registrations shall expire on December 31 of each year. License registrations shall be renewed prior to the expiration date.
- (f) Certain acts prohibited. In addition to other provisions of this code, it shall be unlawful for any person to do any of the following acts:
 - (1) To display, cause or permit to be displayed or to have in one's possession any instrument purporting to be licensed for the doing of any plumbing

work, knowing such instrument to be fictitious or to have canceled, revoked suspended or altered;

- (2) To lend or knowingly permit the use of any license for the doing of any plumbing work to any person not entitled thereto, under the provisions of this chapter;
- (3) To display or represent as one's own a license for the doing of any plumbing work when such license has not been lawfully issued to the person so displaying the same;
- (4) To apply for or have in one's possession more than one current license of the same type provided for in this chapter;
- (5) To use a false or fictitious name or give a false or fictitious address in any application for any license provided for in this chapter, or any renewal or duplicate thereof, or knowingly make a false statement or knowingly conceal a material fact or otherwise commit fraud in making any such application;
- (6) To employ as a master in plumbing work any person not licensed as provided in this chapter;
- (7) To perform any character of plumbing work for which a license is required by this chapter while such license is suspended, canceled or revoked.

10-119. Demolition contractor licenses and bonding; demolition permit requirements.

(a) License required. It shall be unlawful for any person to maintain, own or operate a demolition contracting business, unless a license is first obtained as provided herein. Such licenses, when issued, shall be valid for a period of two years from the date of issuance, shall not be assignable or transferable except as specifically authorized, and shall be posted in a conspicuous place in the office of the licensee.

(b) Rules of construction – computation of time used in this section:

- (1) In computing a period of days, the first day is excluded and the last day is included.
- (2) Days shall mean working days exclusive of federal holidays and weekends unless otherwise stated.

(c) License display; renewals; duplicates.

- (1) All licenses shall be for a period of two years.
- (2) No license shall be assignable or transferable. The owner of a business and all partners of a partnership and all officers of a corporation who are

actively engaged in the demolition business must qualify for a license. Licenses will be issued to the owner of a business, partnership or corporation, or his/her registered agent.

- (3) Each license issued pursuant to this chapter shall be posted and kept in some easily accessible, conspicuous place located in the principal business office as printed in the license.
- (4) Any license, which has not been suspended or revoked, may, upon the payment of the renewal fee prescribed in this chapter, be renewed for an additional period of two years from its expiration, upon filing of an application for such renewal, on a form to be prescribed by the *Building Official*. This provision in no way limits the number of times a license may be renewed.
- (5) A duplicate license may be issued for one lost, destroyed or mutilated upon application on a form prescribed by the *Building Official* and the payment of the fee prescribed by this chapter. Each such duplicate license shall have the word "duplicate" stamped across the face of the instrument and shall bear the same number as the one it replaces.
- (6) All owned vehicles used in business shall have posted on each side in letters of three inches minimum height in contrasting colors stating name of contractor and his demolition contractor's license number.
- (d) **Demolition license requirements and applicable procedures.** Applicants for the licenses required by this chapter shall establish the following requirements in writing to the satisfaction of the *Building Official*:
 - (1) The existence and maintenance of a bona fide office, equipped with telephone, for the conducting of his business;
 - (2) That neither the applicant, nor any partner or corporate officer in the demolition contracting business on whose behalf the application is submitted, has ever been convicted of any penal offense arising out of or related to the performance of demolition contracts nor convicted of a felony or a misdemeanor involving moral turpitude during an eight-year period immediately preceding the date of the applications;
 - (3) That applicant, or the entity upon whose behalf the application is submitted, is qualified by either training or experience to conduct a demolition contracting business;
 - (4) That neither applicant, nor any partner or corporate officer in the demolition business upon whose behalf the application is made, has been convicted of a violation of this chapter.

In addition to the foregoing requirements, the *Building Official* may require that the application include information reasonably pertinent to the determination of the applicant's

fitness to be issued such license, or any renewal thereof. Applications for licensure shall be submitted in a form prescribed by the *Building Official*. The *Building Official* shall investigate and examine the qualifications and fitness of the applicant, and within a period of 30 days from receipt of an application in proper form and the fee, the *Building Official* will issue or refuse a license to the applicant.

Refusal procedures: The *Building Official* shall furnish the applicant a refusal in writing by registered or certified mail to the applicant's last known mailing address, setting forth the grounds for the refusal. Refusal will be justified by any of the minimum license requirements listed above, any outside information calling into question an applicant's fitness to be issued such a license, or a renewal, or any of the reasons contained in section 10-119(f), revocation of licenses.

(e) Appellate procedure when license denied. The applicant or his representative may file a written notice of appeal with the city clerk upon a denial of an application for licensure appealing such determination to the board of adjustment. No specific format is mandated for the written notice of appeal. The notice of appeal shall be filed within 10 days with appropriate copy to the *Building Official*. The postal date stamped on the refusal letter envelope shall govern and control the start of the 10-day period. Judicial review of a board of adjustment decision shall follow § 211.011, Local Government Code.

(f) Revocation of licenses.

- (1) A demolition contractor's license shall be revoked by the *Building Official* after a hearing in the event said licensee, or any proprietor, partner, or corporate officer is convicted of any penal offense arising out of or related to the performance of a contract or suffers a judgment against them in a civil action predicated upon fraud in connection with the performance of a demolition contract.
- (2) The *Building Official* shall, after a hearing, revoke a license for any one or more of the following reasons:
 - a. Conviction of the licensee or any proprietor, partner or corporate officer therein of a felony or misdemeanor involving moral turpitude;
 - b. The making of any false statement as to a material matter in an application for license, renewal thereof or hearing in connection with same;
 - c. Conviction of a violation of the currently adopted building code or local amendments of the city;
 - d. Violation of any provision of this chapter;
 - e. Upon judicial determination of an abandonment or willful failure to perform any demolition contract or project in or undertaken by a

contractor, or willful deviation from or disregard of plans or specifications in any material respect;

- f. Upon judicial determination of substantial misrepresentation on part of contractor in the procurement of a demolition contract;
- g. Upon judicial determination of fraud on the part of a contractor in the execution of or in the material alteration of any contract or mortgage, promissory note or other document relating to said contract;
- h. Failure of contractor to notify the *Building Official* or designee of any change in the ownership, management, business name, or location of their registered business office; or
- i. Licensed contractor obtaining permit(s) for an unlicensed contractor or one whose license has been revoked or denied.
- (3) The hearing shall be in a standard form prescribed by the *Building Official*. Notification to the licensee of said hearing before the *Building Official* shall be mailed to the licensee by certified or registered mail, at licensee's last known mailing address. The notification shall give not less than ten days notice of the hearing.
- (4) A person requesting to appeal the decision of the *Building Official* must submit their appeal request in writing and the fee within ten days of the revocation. Upon receipt of the appeal request and fee, the appeal shall be placed on the first open date of the board of adjustment's docket. If the person makes a written request for a copy of the revocation order from the *Building Official*, such copy shall be issued.
- (5) Judicial review of a board of adjustment decision shall follow § 211.011, Local Government Code.

(g) Demolition permit; In general.

- (1) No person, firm, association or corporation shall demolish any building or structure in the city, or cause the same to be done, without first obtaining a demolition permit for each such building or structure authorized by the city.
- (2) Every demolition permit shall be valid during the time outlined in the permit. If demolition is not complete, the director of development services may extend the permit upon request of the applicant.
- (h) Application requirements. Applications for demolition permits shall require the following information:
 - (1) Name and address of demolition contractor.

- (2) Name and address of building and property owners including a notarized letter authorizing demolition of building or structure.
- (3) Except for single family residence and other single story buildings where it is not possible for debris to fall on public walkways or thoroughfares, the *Building Official* shall require an engineering report, prepared by a qualified registered professional engineer, of the building or structure to be demolished so as to determine the condition of the framing, floors and walls, copy of which is to be filed with the *Building Official*.
- (4) The demolition contractor shall be required to prepare a complete plan and schedule for demolition to be filed with the *Building Official*. Should the plan and schedule be changed at any time, the changes must be approved by the *Building Official* and a copy of such changes must be filed with the *Building Official*.
- (5) The location site of the disposal of debris and the proposed route to be used to disposal site.
- (6) Approval from risk management that insurance and bond are current.
- (7) Applicant shall submit the current demolition license number and bond materials of the demolition contractor who has been hired to perform the work. All demolition contractors, as defined in this chapter, shall be licensed and bonded. Any substitution of contractor listed in the application shall be reported to the *Building Official* with appropriate licensing and bonding materials. A failure to notify the *Building Official* shall result in administrative and/or criminal and/or civil penalties. It shall be an affirmative defense to prosecution that substitute contractor was licensed and bonded at the time.
- (8) Supplemental materials as prescribed by the *Building Official*.
- (i) **Revocation; appeals.** The *Building Official* may revoke a demolition permit required by this chapter when the conditions under which the permit is granted have been violated. Revocation is discretionary on the *Building Official* and contractor shall be afforded an appellate hearing in front of the board of adjustment. A person requesting to appeal the decision of the *Building Official* must submit a written request and the fee within 10 days of the revocation. If the person makes a written request to the director for the decision detailing revocation in writing, such decision shall issue.

(j) Demolition fee schedule.

Demolition	
Demolition License Fees	T
Demolition Contractor	
Initial-City License	\$85.00

Renewal-City License	\$35.00	
Duplicate—City License	\$5.00	
(plus tax)		
Demolition Permit Fees		
Residential	\$75.00	
Commercial		
Single-story	\$100.00	
2—3 stories	\$200.00	
>3 stories	\$650.00	
Recovery of Expenditures for Demolition:		
Non-asbestos	\$600.00	
Residential, per hour		
Asbestos-Residential,	\$800.00	
per hour		
Non-asbestosNon-	\$925.00	
residential, per hour		
Asbestos-Non-	\$1,100.00	
residential, per hour		

- (k) Insurance. Applicant for demolition permits shall maintain and cause to be maintained the following types of insurance:
 - (1) Workmen's compensation insurance—Statutory requirements.
 - (2) Automobile liability insurance with limits of personal injury \$100,000 each person, \$300,000 each accident, property damage \$50,000 each accident.
 - (3) Public liability insurance and insurance coverage for their employees, agents and contractors, from a company authorized to do business in the state, in the following amounts:

Comprehensive general liability insurance:

- a. Public liability (bodily injury) insurance with limits not less than \$300,000 for each occurrence.
- b. Public liability (property damage) insurance with limits of not less than \$100,000 for each accident and \$200,000 in the aggregate.
- c. The policy shall:
 - 1. Include the hazards of explosion and collapse coverage.
 - 2. Provide that the same shall not be cancelled until a 10-day or non-renewal has been served upon the city clerk or the city.

- d. Applicant shall file with the city clerk certificates of insurance executed by the insurance carrier issuing said policies certifying that said insurance is in full force and effect and that the demolition operations are covered by such policies.
- (I) Indemnity bond. Before such permit shall be issued, the person, firm, association or corporation applying therefor shall execute and deliver to the city, to be kept on file in the city clerk's office, a good and sufficient bond of indemnity, issued by a surety company licensed to do business in the state, in the sum of \$5,000 to be approved by the city attorney and conditioned that the person, firm, association or corporation making such application shall promptly pay in and unto the city any and all costs, damages and expenses which said city may incur or suffer, including, but not limited to, damages to streets, sidewalks, utilities, or other public places by reason of carelessness or negligence in the performance of such demolition, or by reason of any defects caused from or arising from careless, negligent or imperfect demolition procedures, or any and all acts and omissions of said applicant, his agents, servants, or subcontractors.

(m) Miscellaneous provisions.

- (1) No structural or load-supporting members, which would affect the stability of the structure, shall be cut or removed from any story until all construction materials above such a story have been completely demolished and removed.
- (2) No material shall be dropped to any point outside the exterior walls of the structure except in enclosed chutes.
- (3) In masonry construction, the demolition of exterior walls and floor construction shall be removed and dropped into the storage space before commencing the removal of exterior walls and floor in the story below.
- (4) In buildings with a structural steel frame member type construction, the steel framing may be left in place during the demolition of masonry. Where this is done, all steel beams girders and similar structural supports shall be cleared of all loose material as the masonry demolition progresses downward.
- (5) No wall, chimney or other structural part shall be left at the end of each shift in such condition that it may collapse due to wind, vibration or any other cause.
- (6) Upon the completion of demolition operations, the site shall be completely cleared of rubbish, brush, weeds and other debris. The site must be left free of ponds and underground tanks shall be removed. Basement slabs shall be broken up to allow drainage and septic tanks, wells, cesspools, and cisterns shall be broken open and filled in.
- (7) Security service during non-working hours shall be provided by the

contractor.

- (8) Where shown to be necessary in the plan for demolition, the city shall coordinate and approve the blocking of walkways, thoroughfares and alleys to protect the public.
- (9) The city council may issue a permit for selective use of explosives for demolition purposes if the contractor has complied with all of the conditions of this chapter and if the plan for selective demolition by the use of explosives is conducted in accordance with §§ 1926.900—1926.914 inclusive of Subpart "U" of the Rules and Regulations of the Occupational Safety and Health Administration of the Department of Labor, 29 CFR, part 1926, subpart U.
- (n) Criminal penalties for violation. It shall be unlawful for any person to demolish any building or structure in the city or cause the same to be done, contrary to or in violation of any of the provisions of this Code or any currently adopted building code. Any person, firm or corporation violating any of these provisions shall be deemed guilty of a separate offense for each day or portion thereof during which any violation is committed, continued, or permitted, and each separate violation shall be punishable by a fine not to exceed five hundred dollars.

Sec. 10-120. Licensed house mover.

- (a) General
 - (1) Compliance with section. No person except a licensed house mover, shall move any building or structure over, across or along any street, public way or public place within the city except as specifically provided in this article.
 - (2) Warning devices. If it becomes temporarily necessary to leave the building on public property, there shall be placed around the building or structure, and all equipment, red lanterns, flares or other warning devices. No building or structure under any condition shall be allowed to remain in or on the streets, public ways or public places for more than twenty-four hours except weekends. Any building or structure which occupies or moves along or across any portion of public property after sundown shall have sufficient lights and flares continually burning for the protection of the public.
 - (3) Escort. No person shall move a building or structure across or along any street, public way or public place within the city unless accompanied or escorted by at least one police officer that has been retained by the person for such service.
 - (4) Violations. Any person duly licensed by the city as a house moving contractor, violating any of the provisions of this section, shall be deemed

guilty of a misdemeanor, and each violation shall be punishable as provided in section 1-5 of the City Code of San Antonio and by the suspension of such person's license for thirty days or both.

(b) License.

- (1) **Required; amount.** Every person before engaging in moving a building or structure, shall have made application to the *Building Official* for a license and such license shall have been approved and issued for the current year. The fee for such license shall be \$50 per year, payable on the first day of January of each year, or at the time of issuance. The fee for issuing a duplicate license for one lost, destroyed or mutilated shall be \$5.
- (2) Surety bond. Before a house mover's license is issued, the applicant shall file with the city clerk a surety bond in the amount of \$2,000, saving and protecting the city harmless from any and all damages and to pay for any and all damages to public property, that may arise from the use of any of the streets, alleys, boulevards or other public places in the moving of any building or structure. Such bond shall contain a provision for a 10-day written notice to the city of cancellation by the surety.
- (3) Liability insurance. Before a house mover's license is issued, the applicant shall file with the city clerk a public liability property damage insurance policy certificate naming the applicant as the assured and providing for the payment of any liability imposed by law upon such applicant to the extent of \$10,000 for each person for bodily injury, \$20,000 for bodily injury liability for each accident, and \$5,000 for property damage liability for each accident.
- (4) Investigation; issuance. Upon execution of the bond and certificate of insurance required in sections (2) and (3), and their approval by the city clerk, the *Building Official* shall inspect, or cause to be inspected, the equipment and facilities to be used by the house-moving contractor and shall determine that the size, design and safety factors of any vehicle and other equipment used in the moving of any building or structure, are such that their operation on public property shall not cause damage to the pavement or other public improvements. Upon the approval of such vehicle and, other equipment, and the payment of the license fee, the license shall be issued to the person applying therefor, and he shall thereafter be known as a licensed house-moving contractor.
- (5) **Transfer or assignment.** It shall be unlawful for any person to lend, rent or transfer his license or any rights therein contained to any person for any person to make use of any such rights which are not actually his own, without the approval of the *Building Official*.
- (6) When not required. Nothing contained in this article shall require a

license or bond for the movement of oversized equipment, or buildings or structures of a temporary nature, when such equipment, building, or structures are within the legal road limit as required by the state statutes; nor shall bond and license be required of one passing through the city enroute between two other incorporated cities, except those cities in the county.

(c) Permits.

- (1) **Required.** No person shall move any building or structure over, across, or along any street, public way or public place within the city until a permit for such work has been issued as provided in this section.
- (2) Application, information. A licensed house mover shall in each case before moving or preparing to move any building or structure, apply to the director of development services by written application for a permit to do so, in which application the building or structure to be moved shall be described with the extreme dimensions of its width, length and height, present location, the place to which it is proposed to be moved, and the location, on the lot at the destination.
- (3) Notice to owners of facilities. Before application for permit is made, the house mover shall notify the public utilities, railroads and other persons whose facilities are involved in such movement.
- (4) Notice to departments. Before application for permit is made, the house mover shall notify the police department, fire department and public works department, and shall obtain proper clearance from each of these departments in writing. This clearance shall specify the day of the week, hour of the day, the moving is to take place. The route to be taken shall be at the discretion of the police department and public works department.

(d) Relocation of buildings.

- (1) Amounts of security as liquidated damages. The amount of the security required by sections (d)(7) and (d)(10) is the liquidated damages payable to the city for failure to comply with sections (d)(6), (d)(7) and (d)(10), it being recognized that the damages to the city and the public occasioned by such failure will be difficult to determine and that the sum named has been agreed to as the amount of such damages.
- (2) Inspections and notice. The *Building Official* shall have periodic inspections made of the relocated building to determine whether the building has been brought into compliance with applicable codes and ordinances. If this is done within the time prescribed in section (d)(7), said director shall release the security required hereby. If such work is not completed within ninety days after the permit mentioned in section (d)(6) was issued, the *Building Official* shall so notify the permittee and the

surety, if any, by United States mails, certified or registered mail.

- (3) **Exceptions.** The security provided for herein shall not be required whenever a building is being moved to a location outside of the city or it is being relocated upon the same platted lot or tract of land, nor shall it be required for temporary location of buildings such as construction sheds and subdivision sales offices under temporary or special permits.
- (4) **Prohibited relocations.** Nothing herein shall be construed to permit nonresidential use of residential or any relocation of buildings in violation of the zoning ordinance, the fire protection code, or other codes or ordinances of the city.
- (5) **Remedy cumulative.** The provisions herein for security and its forfeiture shall be cumulative and not in lieu of any other remedy, penal or otherwise, that the city may have to enforce compliance with pertinent codes and ordinances.

(6) Security required.

- a. Any person applying for a permit under Article I of this chapter to relocate a building on a lot or tract of land located within the city shall furnish security, as provided in section (d)(7), to ensure completion of necessary work, to the *Building Official* before any such permit is issued, such security to be filed with the city clerk. It shall be unlawful to relocate such building without compliance herewith.
- b. The security shall not be required whenever the building has been constructed within twelve months immediately preceding such permit application in accordance with city ordinances and codes, the building having received the required inspections during such construction. This exception does not apply to remodeling, renovations or repairs but only to new construction.

(7) Amount, kind of security, exception.

- a. The amount of security required by section (d)(6) shall be determined and set by the *Building Official* in any even amounts of \$1,000 from \$2,000 to \$5,000 based on the director's estimate of the cost of repairs necessary to comply with city codes and ordinances and any added requirements imposed by the board of adjustment. If the owner of the building being moved provides an executed repair contract with an independent building contractor, the amount stated in the contract shall be the amount of the required security.
- b. However, in no event shall any such security be in an amount less than \$2,000. The security may be in the form of a deposit of cash

or of United States Treasury "bearer" bonds or a surety bond payable to the city. If a surety bond is submitted, it shall be in form approved by the city attorney, issued by a company authorized to do such business in the state, and shall name an agent in the county to receive notices and upon whom service may be had. Such security shall be furnished conditioned upon completion of all work upon such relocated building, necessary to bring it into compliance with the applicable codes and ordinances of the city, within ninety days of issuance of the permit described in section (d)(7), however, an additional period of 30 days may be granted by the *Building Official* if proper justification for such extension is shown.

- (8) Utility service. No utilities shall be provided to a moved building except those necessary for repairs or construction and in no event shall such utilities be provided for a period in excess of 90 days.
- (9) Certificate of occupancy. No moved building may be occupied or used in any manner until a certificate of occupancy has been issued by the *Building Official*.

(10) Temporary removal; security, notices.

- a. **Zones for temporary storage.** A building may be moved to a location in J, K, L, M, I-1 or I-2 Zones for temporary storage or rehabilitation purposes for a period not to exceed six months with no utility connections to be made.
- b. **Security.** Security shall be furnished by the applicant for such moving permit in the amount of \$500 to ensure removal of the building from its temporary location within the six-month period. The security may be in the form of a deposit of cash or of United States Treasury "bearer" bonds or a surety bond payable to the city. If a surety bond is submitted, it shall be in form approved by the city attorney, issued by a company authorized to do such business in the state, and shall name an agent in the county to receive notices and upon whom service may be had. Such security shall be furnished conditioned upon the removal of such building from its temporary location within six months after having been moved thereto.
- c. **Forfeiture of security.** The *Building Official* shall notify the city attorney whenever any person shall have failed to perform the necessary work or removal of a temporary located building, performance of which is the condition of the security required. Thereupon the city attorney shall prepare an appropriate ordinance or resolution for submission to the city council declaring forfeited the security furnished pursuant hereto.

d. **Notices.** If the building moved to a temporary location has been removed from the premises within the six-month period, the *Building Official* shall release the required surety. If such removal has not been completed within such period, the *Building Official* shall notify the permittee and the surety by certified or registered mail.

Sec. 10-121 through 10-129. Reserved.

ARTICLE XIII. SIGNS AND BILLBOARDS.

Sec. 10-130. Signs and billboards. See Chapter 28, San Antonio Code and Articles I, II, III and XII of this chapter.

Sec. 10-131 through 10-150. Reserved.

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