

AN ORDINANCE 86747

ADOPTING AMENDMENTS TO CHAPTER 34 OF THE CITY CODE ENTITLED "WATER AND SEWER" PERTAINING TO THE WELL PERMITTING REGULATIONS TO ADMINISTER AND ENFORCE A PERMIT PROCESS FOR EARTH COUPLED HEAT EXCHANGE (GEOTHERMAL) SYSTEMS; AND PROVIDING FOR CIVIL AND CRIMINAL ENFORCEMENT AND PENALTIES; AND DIRECTING PUBLICATION.

* * * * *

WHEREAS, the City Council of the City of San Antonio, upon recommendation by the San Antonio Water System (SAWS), establishes policy concerning the protection of the Edwards Aquifer by prohibiting practices which may pose a risk to the Edwards Aquifer; and

WHEREAS, earth coupled heat exchange (open loop and closed loop geo-thermal wells) systems are currently unregulated by City Code with no requirements for construction standards or monitoring of their installation; and

WHEREAS, SAWS recommends that it is in the best interest of public health, safety and welfare that the City of San Antonio City Council adopt measures to prohibit earth coupled heat exchange (open loop geo-thermal well) systems within the City of San Antonio's jurisdiction and the San Antonio Water System's service area; and

WHEREAS, SAWS recommends it is in the best interest of public health, safety and welfare that the City of San Antonio City Council adopt measures to establish a policy for the design and construction of earth coupled heat exchange (closed loop geo-thermal well) systems in areas other than the recharge and transition zones of the Edwards Aquifer within the City of San Antonio's jurisdiction and the San Antonio Water System's services area; and

WHEREAS, initially, a two hundred (\$200.00) dollar permit fee per system will provide for the implementation of the new regulations; and

WHEREAS, the San Antonio Water System Board of Trustees, by official resolution may amend as needed the fee structures to adequately recover costs related to the earth coupled heat exchange closed loop geo-thermal well program; and

WHEREAS, the regulations concerning earth coupled heat exchange (closed loop geo-thermal well) system shall also be subject to amendment by the San Antonio Water System Board of Trustees and amended regulations of the Texas Natural Resource Conservation Commission in the event that further protection of groundwater is warranted; **NOW THEREFORE:**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:

SECTION 1. The City Code of the City of San Antonio, Chapter 34 Article VI., Water Quality Control and Pollution Prevention, Division 2, Wells, is hereby amended as set forth and provided in Attachment 1, which Attachment 1 is fully incorporated herein verbatim for all purposes, and wherein additional language is noted by underline and deleted language is stricken (~~deleted~~).

SECTION 2. This Ordinance shall be effective ten (10) days from date of passage.

SECTION 3. This Ordinance shall be published by the City Clerk as required by law and the penalty provisions shall not apply until five (5) days after publication.

PASSED AND APPROVED this 2nd day of DECEMBER, 1997.

ATTEST: 
City Clerk


M A Y O R
Howard W. Peak

APPROVED AS TO FORM: 
CITY ATTORNEY

97-41

MEETING OF THE CITY COUNCIL

ALAMODOME
ARTS & CULTURAL AFFAIRS
ASSET MANAGEMENT
AVIATION
BUDGET & MANAGEMENT ANALYSIS
BUILDING INSPECTIONS
HOUSE NUMBERING
CITY ATTORNEY
/ MUNICIPAL COURT
REAL ESTATE (FASSNIDGE)
REAL ESTATE (WOOD)
RISK MANAGEMENT
CITY MANAGER
SPECIAL PROJECTS - FRANCES GONZALES
CITY PUBLIC SERVICE - GENERAL MANAGER
CITY PUBLIC SERVICE - MAPS AND RECORDS
CODE COMPLIANCE
/ COMMERCIAL RECORDER
COMMUNITY INITIATIVES
COMMUNITY RELATIONS
PUBLIC INFORMATION
CONVENTION AND VISITORS BUREAU
CONVENTION CENTER EXPANSION OFFICE
CONVENTION FACILITIES
ECONOMIC DEVELOPMENT
FINANCE - DIRECTOR
FINANCE - ASSESSOR
FINANCE - CONTROLLER
FINANCE - GRANTS
FINANCE - TREASURY
FIRE DEPARTMENT
HOUSING AND COMMUNITY DEVELOPMENT
HUMAN RESOURCES (PERSONNEL)
INFORMATION SERVICES
INTERGOVERNMENTAL RELATIONS
INTERNAL REVIEW
INTERNATIONAL AFFAIRS
LIBRARY
METROPOLITAN HEALTH DISTRICT
/ MUNICIPAL CODE CORPORATION
/ MUNICIPAL COURT
PARKS AND RECREATION
MARKET SQUARE
PLANNING DEPARTMENT
DISABILITY ACCESS OFFICE
LAND DEVELOPMENT SERVICES
/ POLICE DEPARTMENT
GROUND TRANSPORTATION
PUBLIC WORKS DIRECTOR
CAPITAL PROJECTS
CENTRAL MAPPING
ENGINEERING
PARKING DIVISION
REAL ESTATE DIVISION
SOLID WASTE
TRAFFIC ENGINEERING
PURCHASING AND GENERAL SERVICES
/ SAN ANTONIO WATER SYSTEMS (SAWS)
VIA
YOUTH INITIATIVES

AGENDA ITEM NUMBER:

24

DATE:

OCT 02 1997

MOTION:

Prado

Gonzalez
86747

ORDINANCE NUMBER:

RESOLUTION NUMBER:

ZONING CASE NUMBER:

TRAVEL AUTHORIZATION:

NAME	ROLL	AYE	NAY
ROGER FLORES, II District 1		<i>West</i>	
MARIO SALAS District 2		✓	
DEBRA GUERRERO District 3		- ✓	
RAUL PRADO District 4		✓	
RICK VASQUEZ District 5		✓	
JOSE MENENDEZ District 6		ABSENT	
ED GARZA District 7		✓	
ROBERT MARBUT District 8		✓	
TIM BANNWOLF District 9		<i>Abent</i>	
JEFF S. WEBSTER District 10		ABSENT	
HOWARD W. PEAK Mayor		✓	

AMENDS ~~34~~ NO. 34 OF CITY CODE

FILE "CHAPTER 34"

97-41

San Antonio City Code Chapter 34, Article VI. Water Quality Control and Pollution Prevention, Div. 2 Sec. 34-566. Powers and duties of the SAWS Board.

- (a) The San Antonio Water System (SAWS) Board shall have the following powers:
- (1) To make or have made examinations of all wells, privately owned or otherwise, within the limits of the City of San Antonio or within SAWS service area;
 - (2) To make or have made at any time the necessary analyses or tests of water there from;
 - (3) To go upon the land and property of the owner of a well for any purpose allowed in this Division;
 - (4) To require the owner to furnish all information requested concerning a well, including, in the case of new wells, complete logs of the well showing depth to and depth through all geologic formations encountered;
 - (5) To supervise the construction, repair, and plugging of wells and the operation of such wells. The SAWS Board or its duly authorized agent shall keep a register of all wells within the limits of the City of San Antonio or within SAWS service area. This register shall show for each well the name of the owner, exact location, date of construction, depth and diameter, the purpose for which the well was constructed, and, if applicable, date of plugging.
- (b) It shall be a violation of this division for any person to refuse or otherwise fail to comply with any requirement of this division, or with any order of the SAWS Board made in conformity with and under the authority of this division.

Sec. 34-567. Permit for Drilling New Well Required.

(a) It shall be unlawful for anyone to drill, maintain, or otherwise construct or have constructed, any new water well, or any other artificial excavation to explore for or produce groundwater, or injection wells for the purpose of a earth- coupled heat exchange system, within the City of San Antonio or SAWS service area, without first applying for and securing a well drilling permit from the SAWS Water Quality Division. This section shall not apply to: (1) monitoring wells and test wells with a depth of less than 50 feet; (2) blast holes in quarries and mines; and (3) wells or excavations for the exploration or production of oil, gas, or minerals, unless, without regard to the original purpose, the well is used as a source of water.

(b) All drilling or construction of water wells and injection wells for the purpose of an earth- coupled heat exchange system, shall be done in strict compliance with the terms of the well drilling permit, the SAWS Water Well Permitting Procedures, and 31 30 TAC, Chapter 287 238.

(c) In addition to the requirements of paragraphs (a) and (b) of this section, any water well which will penetrate the Edwards Aquifer shall be drilled and maintained in strict compliance with 31 30 TAC, Sections 313 213 et seq., as amended. This paragraph does not apply to injection wells for the purpose of an earth- coupled heat exchange system.

(d) To preserve the water quality of the aquifer, the construction of any bore-hole, injection well for the purpose of an earth- coupled heat exchange system, or water well for the purpose of an earth coupled heat exchange system located over the Edwards Aquifer Recharge Zone and Transition Zone shall be prohibited.

(e) An open system, geothermal well that draws water from an aquifer and is circulated through

the heat exchange system or geothermal wells which inject water into an aquifer will not be permitted within the limits of the City of San Antonio and within SAWS service area.

Sec. 34-568. Permit for Repair or Closure of Existing Well Required.

It shall be unlawful for any person to reconstruct, repair, correct, or plug a well or injection well for the purpose of an earth-coupled heat exchange system, or to engage upon such work, within the City of San Antonio or the SAWS service area, or to employ anyone else to engage in such work, without first applying for and securing a permit from the SAWS Water Quality Division.

Sec. 34-569. Application for Permit -- Information Required.

Every application for a permit for the drilling, construction, repair, or plugging of a well or the construction of an injection well for the purpose of an earth-coupled heat exchange system, shall be considered incomplete unless all information requested by the SAWS application form has been provided. The SAWS Water Quality Division shall maintain and update permit application terms to request all information necessary to carry out the intent of this division and to assure protection of the ~~Edwards~~ ground water aquifers by detecting and preventing the drilling or use of wells in a manner that may cause damage to or waste of water in the ~~an~~ aquifer.

Sec. 34-570. Inspection Before Issuance of Permit.

It shall be the duty of the SAWS Water Quality Division to consider every permit application submitted under this division, to inspect the property where any well will be drilled, sunk, dug, or bored, and to refuse issuance of a permit when:

- (a) the location or manner of construction of the proposed well does not meet with the SAWS Water Quality Division's approval of drainage and other sanitary conditions; or
- (b) the proposed well would be located on property to which water service is currently available from SAWS or any other recognized water purveyor; or
- (c) water service from existing SAWS water mains or service lines could be established to the property on which the proposed well is located at a cost equal to or less than the cost of drilling the well; or
- (d) the intended use of the water to be produced by the proposed well could be accomplished using reuse water, and reuse water service is available to the property or could be made available at a cost equal to or less than the cost of drilling the proposed well.

(e) Subsection b, c, and d of this section do not apply to injection wells for the purpose of an earth-coupled heat exchange system.

Sec. 34-571. Execution of Permit.

All permits shall be executed in triplicate, one (1) copy to be delivered to the applicant and two (2) copies to be retained in the SAWS Water Quality Division.

Sec. 34-572. Permit fees.

The fees to be paid to the SAWS Board for the permits required by this article shall be as follows:

Permit for closure or repair of existing well	\$ 50.00
Permit for drilling new well	\$ 200.00
<u>Permit for the construction of a geothermal heat exchange system.....</u>	<u>\$ 200.00</u>

The San Antonio Water System Board of Trustees is hereby authorized to amend the fee schedule, as needed, by official resolution, when a change in the amount of fees is required to adequately recover the costs reasonably related to the performance of these functions for which the fee is charged.

Sec. 34-573. Nuisance of Defective or Contaminating Wells, Abatement.

(a) Any defective or contaminating well, as described herein, is hereby found to be a threat to the water supply of the City of San Antonio, a potential source of disease, injurious to the public health, and is hereby declared a nuisance.

(b) For the purpose of this division a contaminating well is considered to be any well or other opening which penetrates the underground water supply and which in any way pollutes or contaminates any other well or the water supply.

(c) For the purpose of this division a Defective Well is considered to be: any well, whether dug or drilled, which for any reason does not completely prevent, or which has the potential to allow, the mixing of water or other liquid from above and below the source of the City's water supply (~~i.e., the Edwards ground water aquifers~~) with the water in the source of the City's water supply; or any water well that was constructed without a permit and associated inspections.

(d) The City of San Antonio acting through the SAWS Board, pursuant to said § 217.042 or § 401.002 of the Texas Local Government Code Ann. (Vernon's 1994), and § 342.001 of the Texas Health & Safety Code Ann. (Vernon's 1994), may require the abatement of such nuisance. The SAWS Water Quality Division may, on its own initiative or upon information or complaint from any source, make an examination of any well suspected of being defective. If such examination indicates in the opinion of the ~~director of SAWS Water Quality Division~~ SAWS Water Quality Division that the well is a contaminating or defective well or that the water from such well is unsafe for human consumption, then the Director, or his authorized representative of the SAWS Water Quality Division shall issue an order or written instructions to the owner or his agent in charge of such well or the property upon which it is situated to plug this well in such a manner as prescribed by the SAWS Board and in compliance with TNRCC regulations and SAWS Water Well Permitting Procedures.

Sec. 34-574. Abandoned wells.

(a) For the purpose of this division a well is considered to be an abandoned well if it has not been used for a period of six (6) consecutive months or longer. A well is considered to be in use in the following cases:

- (i) A non-deteriorated, non-defective or non-contaminating well which contains the casing, pump and pump column in good condition, and which is connected to an active electrical or other power source; or
- (ii) A non-deteriorated, non-defective or non-contaminating well which has been properly

capped, and for which a variance has been granted by the SAWS Water Quality Division.

(b) It is hereby declared that an abandoned well, as defined in subsection (a) above, has the potential to pollute the City's water supply or be otherwise injurious to the public health, and, pursuant to Tex. Loc. Gov't Code Ann. §§ 217.042 and 401.002 (Vernon's 1994), is hereby declared a nuisance, for which the City of San Antonio, acting through the SAWS Board, pursuant to the Code, may require the abatement of such nuisance.

(c) The owner, operator, or agent in charge of an abandoned well shall notify the SAWS Water Quality Division of that condition. Every abandoned well shall be filled and plugged in accordance with all applicable TNRCC regulations and SAWS Water Well Permitting Procedures and with such materials and in such manner as in the judgment of the Director of the SAWS Water Quality Division will prevent the pollution and contamination of the City of San Antonio's water supply or of any other well within the limits of the city or the SAWS service area.

(d) Whenever SAWS shall receive notice from any source of the existence of an abandoned well which has not been plugged and filled in accordance with the provisions of this division, the SAWS Water Quality Division shall notify the owner, operator, or agent in charge of such well or of the property upon which it is situated that such well is abandoned and shall order such person to fill and plug the well in accordance with this division of the Code.

(e) The SAWS Water Quality Division may require any owner of a capped well to take any action necessary or to provide any information or materials necessary to establish that such a capped well is not defective, contaminating, or deteriorated.

Sec. 34-575. Failure To Abate Nuisance, Remedies.

Should the owner, operator, or agent in charge responsible for the contaminating, defective, or abandoned well which has been declared a nuisance, or for the property on which it is situated, fail to abate such nuisance within the prescribed time from the date of issuance of notice of nuisance or order issued pursuant to sections 34-573 or 34-574 hereof, or if, after exercising reasonable diligence, the SAWS Board is unable to locate the owner, operator, or agent in charge, the City of San Antonio, acting through the SAWS Board, pursuant to the Health & Safety Code §§ 342.001 et seq., shall have the right to go on the property upon which the well is situated and abate such nuisance in the manner provided, and the owner thereof shall be liable to the City of San Antonio for the cost of such work and shall pay such cost upon demand, and the City of San Antonio, acting through the SAWS Board, shall have the right to file a lien on the property to secure payment of the costs of such work.

Sec. 34-576. Variance and Appeal.

(a) A person who has properly applied for and has been denied a permit by the SAWS Water Quality Division under Sections 34-567 thru 34-570 hereof may request a variance from the application of this Division. All requests for variances shall be made in writing to the SAWS Water Quality Division and shall include:

- (i) the subject of the requested variance, and
- (ii) the justification for granting a variance.

(b) The party requesting a variance has the burden of demonstrating that sufficient evidence exists for the granting of a variance to these rules, and the SAWS Water Quality Division shall consider and provide a written response to all such variances.

(c) If a variance is granted for the construction of a water well, the water well shall be constructed by a State-licensed driller and according to the methods outlined in the SAWS Water Wells Permitting Procedures. This construction shall occur under the authority of the Permit to Drill issued by the SAWS Board and under the inspections associated with the permit.

(d) Any variance granted under this section shall have a term of three (3) years from the date of issuance, and any activity which would otherwise be prohibited by this division except for the existence of a variance may not continue after the expiration of the applicable variance.

(e) Any person who properly requests a variance pursuant to this section which is denied by decision of the SAWS Water Quality Division, may appeal such denial to the President and C.E.O. of SAWS by filing a request for appeal within ten (10) days from the date notice of denial is received. The President and C.E.O. may require additional information from or request a meeting with the person making the appeal, and the decision of the President and C.E.O. on the issuance of a variance or permit under this division shall be considered final.

Section 34-577. Criminal Penalty

(a) The President and C.E.O. of the San Antonio Water System is hereby authorized to designate qualified San Antonio 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) 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 \$200.00 per violation and a maximum amount of not more than \$2000.00 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 ordinance.

Section 34-578. Civil Penalty

A civil penalty in an amount not to exceed \$1,000.00 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 division.

Section 34-579. Additional Enforcement Remedies

In addition to any other remedies provided by this division, the City of San Antonio and SAWS may, at any time, seek legal and/or equitable remedies or file criminal charges against any person, corporation or other entity believed to be in violation of this division. In furtherance thereof, the SAWS Environmental Counsel attorney for SAWS is authorized and instructed to commence any action, in law or in equity, including the filing of criminal charges for the purpose of enforcing this division.

Section 34-580. Conflict

No provision of this division is intended nor shall any part or portion hereof be construed so as to conflict with the Texas Water code, any regulations adopted by the TNRCC, or any other Charter Code provision or Ordinance pertaining to reuse or conservation.

Section 34-581. Severability

If any provision of this division or the application thereof to any person or circumstance shall be held to be void or invalid for any reason, the remainder of this division and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this division would have been enacted without such invalid provision.

Sections 34-582 through 34-590. Reserved.

revised 9/97

SAN ANTONIO WATER SYSTEM

MEMORANDUM

TO: Mayor and City Council

FROM: Michael F. Thuss, P.E. President/Chief Executive Officer

SUBJECT: **REVISIONS TO CITY CODE OF SAN ANTONIO TEXAS, CHAPTER 34, WATER AND SEWERS, ARTICLE VI. WATER QUALITY CONTROL AND POLLUTION PREVENTION, DIVISION 2. WELLS, §§ 34-566 - 34-590**

DATE: October 2, 1997

SUMMARY AND RECOMMENDATIONS:

The attached resolution recommends that the City Council approve amendments to the City Code of San Antonio Texas, Chapter 34, Water and Sewers. New provisions will prohibit earth coupled heat exchange open loop geo-thermal well systems in the SAWS service area including the recharge and transition zones to safeguard against potential contamination of the Edwards Aquifer. Proposed amendments will also provide standards for permitting and tracking of closed loop geo-thermal wells located in areas other than the recharge and transition zone of the Edwards Aquifer.

- Geo-thermal wells circulate water, other fluids, or gases through the earth as a heat source or heat sink. There are open loop and closed loop geo-thermal wells. An open loop geo-thermal well draws water from an aquifer for circulation throughout the system. This circulated water is then injected into the aquifer or discharged to waste. A closed loop geo-thermal well uses distilled water. Closed loop geo-thermal wells recirculate fluids that are not injected or discharged to waste.
- These provisions prohibit the construction of an open loop system geo-thermal well that draws water from an aquifer and is circulated through the heat exchange system and is injected into the aquifer or discharged as waste including but not limited to sanitary sewers, storm drains and surface lakes.
- Chapter 34 provisions will allow permitting and installation of closed loop geo-thermal wells in areas other than the recharge and transition zones of the Edwards Aquifer. Chapter 34 provisions will also document and track closed loop geo-thermal wells to ensure proper installation throughout the City of San Antonio and San Antonio Water System service area.
- Permit fees for the construction of closed loop geo-thermal wells will be initially \$200.00 per system. The City Code contains provisions authorizing the San Antonio Water System Board of Trustees to amend the fee schedule as needed, by official resolution, to adequately recover the costs reasonably related to the performance of these functions for which the fee is charged.

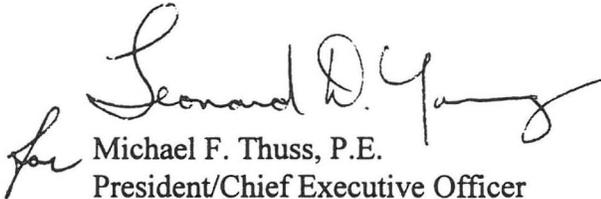
Mayor and City Council
October 2, 1997
Page 2

The San Antonio Water System Board of Trustees approved this item at its regular Board meeting on September 2, 1997.

FINANCIAL IMPACT:

The anticipated number of inspections is estimated at thirty (30) per year. With the standard system, the recovery of costs is expected to be made with the setting of permit fees at two hundred dollars (\$200.00) per system. Analysis of the fee structure will be conducted annually to insure adequate cost recovery.


John German, P.E.,
Director of Public Works


for Michael F. Thuss, P.E.
President/Chief Executive Officer

APPROVED:


Alexander E. Briseno
City Manager

Affidavit of Publisher

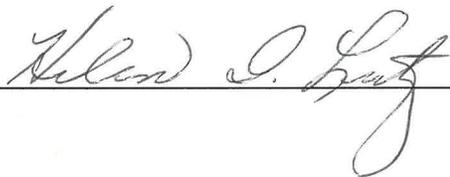
STATE OF TEXAS,

COUNTY OF BEXAR

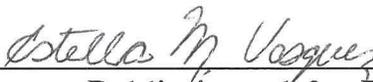
CITY OF SAN ANTONIO

PUBLIC NOTICE
AN ORDINANCE #86747
ADOPTING AMENDMENTS TO CHAPTER 34 OF THE CITY CODE ENTITLED "WATER AND SEWER" PERTAINING TO THE WELL PERMITTING REGULATIONS TO ADMINISTER AND ENFORCE A PERMIT PROCESS FOR EARTH COUPLED HEAT EXCHANGE (GEOTHERMAL) SYSTEMS; AND PROVIDING FOR CIVIL AND CRIMINAL ENFORCEMENT AND PENALTIES; AND DIRECTING PUBLICATION.
PASSED AND APPROVED this 2nd day of October, 1997.
/s/HOWARD W. PEAK
Mayor
ATTEST:
/s/ RICHARD C. PORTER
Assistant City Clerk
10/8

Before me, the undersigned authority, on this day personally appeared Helen I. Lutz, who being by me duly sworn, says on oath that she is Publisher of the Commercial Recorder, a newspaper of general circulation in the City of San Antonio, in the State and County aforesaid, and that the Public Notice - An Ordinance #86747 hereto attached has been published in every issue of said newspaper on the following days, to-wit: October 8, 1997.



Sworn to and subscribed before me this 8th day of October, 1997.



Notary Public in and for Bexar County, Texas

